LIVE VIRTUAL BOARD MEETING

DECEMBER 8, 2021 AT 9:00 AM
BOARD OF INVESTMENTS MEETING





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TO PROVIDE PUBLIC COMMENT

You may submit a request to speak during Public Comment or provide a written comment by emailing PublicComment@lacera.com. If you 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.

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, CALIFORNIA 91101

9:00 A.M., WEDNESDAY, DECEMBER 8, 2021*

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

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

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

- I. CALL TO ORDER
- II. APPROVAL OF MINUTES
 - A. Approval of the Minutes of the Special Meeting of November 17, 2021
- III. REPORT ON CLOSED SESSION ITEMS
- IV. PUBLIC COMMENT

(Written Public Comment - You may submit written public comments by email to PublicComment@lacera.com. Correspondence will be made part of the official record of the meeting. Please submit your written public comments or documentation as soon as possible and up to the close of the meeting.

Verbal Public Comment - You may also request to address the Board. A request to speak may be submitted via email to 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.)

- V. CHIEF EXECUTIVE OFFICER'S REPORT (Memo dated November 22, 2021)
- VI. CHIEF INVESTMENT OFFICER'S REPORT (Presentation dated December 8, 2021)

VII. 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 Investments consider whether to find that the Governor's COVID-19 State of Emergency continues to directly impact the ability of the 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 the Board and its Committees shall hold teleconference meetings for the next 30 days, and if so, direct staff to comply with the agenda and public comment requirements of the statute. (Memo dated November 23, 2021)
- B. Recommendation as submitted by Alan Bernstein, Chair, Corporate Governance Committee: That the Board approve LACERA's nomination of Scott Zdrazil for re-election to the Council of Institutional Investors Board in the 2022 annual Board elections. (Memo dated November 22, 2021)
- C. Recommendation as submitted by Shawn Kehoe, Chair, Joint Organizational Governance Committee: That the Board adopt the FY 2021-2022 Mid-Year Budget Amendments for the LACERA Administrative Budget. (Memo dated November 24, 2021)

VIII. NON-CONSENT ITEMS

- A. Recommendation as submitted by Jude Perez, Principal Investment Officer: That the Board approve the Proposed Custody Bank Search Minimum Qualifications, Evaluation Criteria, and Scope of Work.

 (Memo dated November 22, 2021)
- B. Recommendation as submitted by Santos H. Kreimann, Chief Executive Officer: That the Board review the 2022 meeting calendar and consider rescheduling meeting dates that conflict with a holiday and/or the potential of a lack of quorum. (Memo dated November 16, 2021)
- C. Recommendation as submitted that the Board approve attendance of Trustees at the Institutional ESG Investing Conference North America on April 20, 2022 in New York, New York and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated November 14, 2021) (Placed on the agenda at the request of Trustee Sanchez)

VIII. NON-CONSENT ITEMS (Continued)

D. Recommendation as submitted by Santos H. Kreimann, Chief Executive Officer and Ted Granger, Interim Chief Financial Officer:

It is recommended that the Board of Investments:

- 1. Accept the June 30, 2021 Actuarial Valuation of Retirement Benefits as submitted by the plan actuary, Milliman.
- 2. Adopt recommended employer contribution rates (all plan tiers) and employee contribution rates (plan tiers General Plan G and Safety Plan C).
- 3. Delegate authority to the Chief Executive Officer to communicate the results of the 2021 Actuarial Valuation of Retirement Benefits to the Board of Supervisors by May 15, 2022, with a recommendation to implement the employer and employee rates no later than September 29, 2022.

(Memo dated November 22, 2021)

IX. REPORTS

- A. Annual Update and Review of LACERA Towards Inclusion, Diversity, and Equity (LACERA TIDE)

 Jonathan Grabel, Chief Investment Officer
 (Memo dated November 29, 2021)
- B. Assembly Bill 2833 Report Fiscal Year 2021 Calvin Chang, Senior Investment Analyst Noah Damsky, Senior Investment Analyst Terra Elijah, Investment Analyst (Memo date November 23, 2021)
- C. LACERA Quarterly Performance Book
 Meketa Fund Evaluation Report
 Jude Perez, Principal Investment Officer
 (For Information Only) (Memo dated November 22, 2021)

IX. REPORTS (Continued)

D. OPEB Quarterly Performance Book
Meketa OPEB Fund Evaluation Report
Jude Perez, Principal Investment Officer
(For Information Only) (Memo dated November 23, 2021)

E. Fiduciary Counsel Annual Self-Assessments
 Steven P. Rice, Chief Counsel
 (For Information Only) (Memo dated November 22, 2021/Attachments are Privileged and Confidential Attorney-Client Communications/Attorney Work Product)

F. 2021 Year-End Legislative Report
Barry W. Lew, Legislative Affairs Officer
(For Information Only) (Memo dated November 18, 2021)

G. Legal Projects
Christine Roseland, Senior Staff Counsel
(For Information Only) (Memo dated November 19, 2021)

H. Monthly Travel & Education Report – October 2021
 Ted Granger, Interim Chief Financial Officer
 Comprehensive Monthly Travel & Education Report – September 2021
 (Public Memo dated November 17, 2021)
 (Confidential Memo dated November 17, 2021– Includes Anticipated Travel)

1st Quarter Trustee Travel & Education Reports (Memo dated November 17, 2021)

I. November 2021 Fiduciary Counsel Contact and Billing Report Steven P. Rice, Chief Counsel (For Information Only) (Privileged and Confidential) (Attorney-Client Communication/Attorney Work Product) (For Information Only) (Memo dated November 22, 2021)

X. ITEMS FOR STAFF REVIEW

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

XII. 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)
 - Silver Rock Tactical Allocation Strategy Dedicated Managed Account
 Vache Mahseredjian, Principal Investment Officer
 Chad Timko, Senior Investment Officer
 Quoc Nguyen, Investment Officer
 (Memo dated November 24, 2021)
 - 2. Partners Group Direct Infrastructure 2020, L.P. Jim Rice, Principal Investment Officer Daniel Joye, Investment Officer (Memo dated November 23, 2021)
 - 3. Private Equity Investment Update
 David Chu, Senior Investment Officer
 Cheryl Lu, Investment Officer
 (For Information Only) (Memo dated November 15, 2021)
- B. Conference with Legal Counsel Existing Litigation (Pursuant to Paragraph (1) of Subdivision (d) of California Government Code Section 54956.9).
 - Iowa Public Employees' Retirement System, et al. v. Bank of America Corporation, et al., etc.
 U.S.D.C., Southern District of New York, Case No. 17 CV 6221
 - In re Interest Rate Swaps Antitrust Litigation,
 U.S.D.C., Southern District of New York, Case No. 16 MD 02704
- C. Public Employee Performance Evaluation (Pursuant to Paragraph (1) of Subdivision (b) of California Government Code Section 54957)

Title: Chief Investment Officer

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

*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, but no later than 48 hours prior to the time the meeting is to commence.

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF INVESTMENTS

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

300 N. LAKE AVENUE, PASADENA, CALIFORNIA 91101

9:00 A.M., WEDNESDAY, NOVEMBER 17, 2021*

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

PRESENT: Joseph Kelly, Vice Chair

Alan Bernstein, Secretary

Elizabeth B. Ginsberg (Chief Deputy to Keith Knox)

David Green

Patrick Jones (Joined meeting at 9:17 a.m.)

Gina V. Sanchez

Herman Santos

ABSENT: Elizabeth Greenwood

Keith Knox

Shawn Kehoe

STAFF ADVISORS AND PARTICIPANTS

Jonathan Grabel, Chief Investment Officer

Santos Kreimann, Chief Executive Officer

Steven P. Rice, Chief Counsel

JJ Popowich, Assistant Executive Officer

Laura Guglielmo, Assistant Executive Officer

STAFF ADVISORS AND PARTICIPANTS (Continued)

Christine Roseland, Senior Staff Counsel

Christopher Wagner, Principal Investment Officer

Vache Mahseredjian, Principal Investment Officer

James Rice, Principal Investment Officer

Esmeralda del Bosque, Interim Principal Investment Officer

Scott Zdrazil, Senior Investment Officer

Dale Johnson, Investment Officer

Cheryl Lu, Investment Officer

Jeff Jia, Senior Investment Analyst

Magdalia Armstrong, Senior Investment Analyst

Carly Ntoya, Ph.D., Human Resources Director

Ted Granger, Interim Chief Financial Officer

Barry W. Lew, Legislative Affairs Officer

Meketa Investment Group (General Investment Consultants)
Stephen McCourt, Partner
Leandro Festino, Managing Principal
Timothy Filla, Managing Principal

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

Mark White, Head of Real Assets James Walsh, Partner Steven Kennedy, Partner

STAFF ADVISORS AND PARTICIPANTS (Continued)

StepStone Group LP (Private Equity Consultants)
Jose Fernandez, Partner
Natalie Walker, Partner

I. CALL TO ORDER

The meeting was called to order virtually by Vice Chair Kelly at 9:15 a.m.

II. APPROVAL OF MINUTES

A. Approval of the Minutes of the Regular Meeting of October 13, 2021

Mr. Bernstein made a motion, Mr. Green seconded, to approve the revised minutes of the regular meeting of October 13, 2021, with addition of trustee absences for all votes. The motion passed (roll call) with Messrs. Green, Santos, Bernstein, Kelly, and Mses. Sanchez and Ginsberg voting yes. Messrs. Jones and Kehoe and Ms. Greenwood were absent for the vote.

III. REPORT ON CLOSED SESSION ITEMS

There was nothing to report.

IV. PUBLIC COMMENT

There were no requests from the public to speak.

V. CHIEF EXECUTIVE OFFICER'S REPORT (Mr. Jones joined the meeting at 9:17 a.m.)

(Memo dated October 26, 2021)

Mr. Kreimann provided a brief presentation on the Chief Executive Officer's

Report.

VI. CHIEF INVESTMENT OFFICER'S REPORT (Presentation dated November 17, 2021)

Mr. Grabel provided a brief presentation on the Chief Investment Officer's

Report.

VII. CONSENT ITEMS

Mr. Bernstein made a motion, Mr. Kelly seconded, to approve the following consent items. The motion passed (roll call) with Messrs. Green, Jones, Santos, Bernstein, Kelly, and Mses. Sanchez and Ginsberg voting yes. Mr. Kehoe and Ms. Greenwood were absent for 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 Investments consider whether to find that the Governor's COVID-19 State of Emergency continues to directly impact the ability of the 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 the Board and its Committees shall hold teleconference meetings for the next 30 days, and if so, direct staff to comply with the agenda and public comment requirements of the statute. (Memo dated October 25, 2021)
- B. Recommendation as submitted by Scott Zdrazil, Senior Investment Officer and Dale Johnson, Investment Officer: That the Board approve LACERA's ballot for Principles for Responsible Investment (PRI) 2021 board elections. (Memo date November 1, 2021)
- C. Recommendation as submitted by Shawn Kehoe, Chair, Joint Organizational Governance Committee: That the Board approve the revised Code of Ethical Conduct. (Memo dated October 22, 2021)
- D. Recommendation as submitted by Shawn Kehoe, Chair, Joint Organizational Governance Committee: That the Board approve the revised Media Policy. (Memo dated October 22, 2021)

VIII. NON-CONSENT ITEMS

A. Recommendation as submitted by Richard P. Bendall, Chief Audit Executive and Ted Granger, Interim Chief Financial Officer: That the Board approve the contract extensions for Milliman Inc. to provide actuarial consulting services and Cavanaugh Macdonald Consulting for actuarial review services related to the two additional fiscal years ending, June 30, 2022 and June 30, 2023. (Memo dated October 29, 2021)

Messrs. Granger and Bendall were present and answered questions from the Board.

Ms. Sanchez made a motion, Mr. Kelly seconded, to approve staff's recommendation. The motion passed (roll call) with Messrs. Green, Jones, Santos, Bernstein, Kelly, and Mses. Sanchez and Ginsberg voting yes. Mr. Kehoe and Ms. Greenwood were absent for the vote.

B. Recommendation as submitted by Barry W. Lew, Legislative Affairs Officer: That the Board approve the Board Officer Rotation Policy. (Memo dated November 5, 2021)

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

Mr. Kelly made a motion to approve staff recommendation, with the addition that the Board of Retirement Chair and Vice Chair may not serve as Chair and Vice Chair of this Board in the same year and that officers in the first year of the policy will be determined by random draw. The motion did not receive a second.

Mr. Bernstein made a motion, Mr. Santos seconded, to approve staff's recommendation with the seniority of the current officers going to 1 year at the end of their term.

VIII. NON-CONSENT ITEMS (Continued)

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

C. Recommendation as submitted that the Board approve attendance of Trustees at the Yale School of Management - Women on Boards Program on June 13 – 17, 2022 in New Haven, Connecticut and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies. (Memo dated October 24, 2021) (Placed on the agenda at the request of Trustee Greenwood)

Messrs. Kreimann and Rice were present and answered questions from the

Board.

Mr. Green made a motion, Ms. Sanchez seconded, to approve staff's recommendation. The motion passed (roll call) with Messrs. Green, Jones, Santos, Kelly, and Mses. Sanchez and Ginsberg voting yes and Mr. Bernstein voting no. Mr. Kehoe and Ms. Greenwood were absent for the vote.

IX. REPORTS

A. LACERA Letter to U.S House of Representatives Financial Services Committee Leadership Regarding Draft Corporate Governance Legislation Scott Zdrazil, Senior Investment Officer (For Information Only) (Memo dated October 20, 2021)

This item was received and filed.

IX. REPORTS (Continued)

B. Joint Investor Letter to The U.S. Securities and Exchange Commission Regarding Fee Transparency

Scott Zdrazil, Senior Investment Officer

(For Information Only) (Memo dated October 27, 2021)

This item was received and filed.

C. Blackrock Incident Report – July 2021 Esmeralda del Bosque, Acting Principal Investment Officer Mel Tsao, Senior Investment Analyst (For Information Only) (Memo dated November 9, 2021)

This item was received and filed.

D. Semi-Annual Interest Crediting for Reserves as of June 30, 2021 (AUDITED)

Ted Granger, Interim Chief Financial Officer (For Information Only) (Memo dated October 29, 2021)

This item was received and filed.

E. Legal Projects

Christine Roseland, Senior Staff Counsel (For Information Only) (Memo dated November 6, 2021)

Mr. Rice and Ms. Roseland were present and answered questions from the

Board. The item was received and filed.

F. Monthly Travel & Education Report – September 2021
Ted Granger, Interim Chief Financial Officer
Comprehensive Monthly Travel & Education Report – September 2021
(Public Memo dated October 20, 2021)
(Confidential Memo dated October 20, 2021– Includes Anticipated Travel)

This item was received and filed.

IX. REPORTS (Continued)

G. October 2021 Fiduciary Counsel Contact and Billing Report Steven P. Rice, Chief Counsel (For Information Only) (Privileged and Confidential) (Attorney-Client Communication/Attorney Work Product) (For Information Only) (Memo dated October 22, 2021)

This item was received and filed.

X. ITEMS FOR STAFF REVIEW

The Board requested an update on the investment staff recruitment efforts.

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

There was nothing to report.

XII. 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. Secondary Purchase of 2 Funds
 James Rice, Principal Investment Officer
 Pushpam Jain, Investment Officer
 (Memo dated October 28, 2021)

Messrs. James Rice and Jain and Messrs. Kennedy, Walsh and White of Albourne provided a presentation and answered questions from the Board.

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

XII. EXECUTIVE SESSION (Continued)

PGIM Quantitative Solutions
 (Formerly Quantitative Management Association, LLC)
 Esmeralda del Bosque, Acting Principal Investment Officer
 Jeff Jia, Senior Investment Analyst
 Magdalia Armstrong, Senior Investment Analyst
 (Memo dated November 4, 2021)

Mses. del Bosque and Armstrong and Mr. Jia provided a presentation and answered questions from the Board.

Mr. Santos made a motion, seconded by Ms. Sanchez, that the Board terminate LACERA's Investment Management **Ouantitative** Agreement with PGIM (formerly Solutions **Ouantitative** Management Association, LLC). motion passed (roll call), with Messrs. Bernstein, Green, Jones, Kelly, and Santos and Mses. Ginsberg and Sanchez voting yes. Mr. Kehoe and Ms. Greenwood were absent from the vote.

3. Revelstoke Capital Partners Fund III, L.P. Christopher J. Wagner, Principal Investment Officer Cheryl Lu, Investment Officer (Memo dated October 25, 2021)

Mr. Wagner and Ms. Lu and Messrs. Fernandez and Krikorian provided a presentation and answered question from the Board.

Ms. Sanchez made a motion, seconded by Mr. Green, that the Board approve a commitment of up to \$100 million to Revelstoke Capital Partners Fund III, L.P.

XII. EXECUTIVE SESSION (Continued)

This investment is a middle market private equity fund with a focus in U.S. healthcare services and healthcare-related businesses. The motion passed 7-0 (roll call), with Messrs. Bernstein, Green, Jones, Kelly, and Santos and Mses. Ginsberg and Sanchez voting yes. Mr. Kehoe and Ms. Greenwood were absent from the vote.

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

Title: Chief Investment Officer

There was nothing to report.

XIII. ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 11:44 a.m.

ALAN BERNSTEIN, SECRETARY
KEITH KNOX, CHAIR



November 22, 2021

TO: Each Trustee,

Board of Retirement Board of Investments

FROM: Santos H. Kreimann 5th

Chief Executive Officer

SUBJECT: CHIEF EXECUTIVE OFFICER'S REPORT – DECEMBER 2021

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

Our Ongoing COVID-19 Response and Return to Office

The Executive Team continues to monitor the COVID-19 landscape, both locally and nationally. The COVID-19 Pandemic continues to be an unfolding and fast-moving event that continues to change how public service organizations are responding to protect members of the public and public service employees.

As part of LACERA's health and safety requirements, the Executive Team reported at the September 1, 2021 Board of Retirement (BOR) meeting, that vaccinations would be required for all LACERA staff by October 1, 2021. Staff members were able to request an exception from the vaccination requirement due to (1) credible religious reasons, or (2) medical reasons.

Approximately 378 staff members (permanent and temporary) are fully vaccinated resulting in 92.4% of LACERA staff being vaccinated, excluding those on leave; 17 staff members are on leave of absence and we do not know their vaccination status; and approximately 31 staff members are unvaccinated (these staff members have either an approved religious or medical exception, or are pending their final vaccination). The number of vaccinated staff members will continue to be adjusted pending sufficient proof of full vaccination or religious/medical exceptions requests.

We have finalized a contract to administer at home tests and securely capture and report test results, which will allow us to implement LACERA's Return-to-Office plan after the New Year. Human Resources, Executive Office, and Systems Division, along with the vendor (Fulgent) will work collaboratively on executing the implementation and rollout plan to all LACERA staff. The vendor (Fulgent) has already developed great instructional videos on how to perform at home COVID-19 testing using their home test kits. We continue to take a proactive approach in maintaining the health and safety of our staff members and members. Our staff members continue to follow established safety protocols when visiting our building, allowing us to continue to meet member expectations and deliver the high level of service we strive to always provide.

LACERA COVID-19 Incidents

As of the date of this memo, there were four (4) incidents of staff member exposure and zero (0) COVID-19 positive staff members between October 19, 2021 and November 15, 2021. Staff

member exposures are LACERA staff members who had direct close contact to a person outside the office who tested positive for COVID-19.

LACERA continues to follow the Public Health guidelines as they change and evolve, including the City of Pasadena's requirement to use masks indoors. Management continues to limit the number of staff members physically in our offices daily. Based on the most recent numbers, we are averaging approximately 16% of our staff in the office on any given day. The number of staff on site will steadily rise in January 2022 once the return to office plan is implemented.

Strategic Planning Consultant Update

The Strategic Planning Consultant Request for Proposal (RFP) closed on October 15, 2021. The selection committee is composed of four Trustees and three LACERA staff members. The committee will begin to review vendor proposals and schedule interviews in the coming weeks. The committee anticipates recommending a final selection to the Board of Retirement meeting in January 2022.

Recruitment Updates

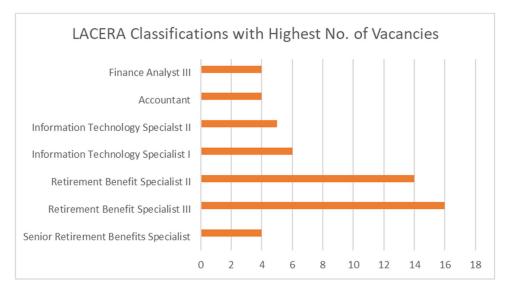
Vacancies and Hiring

Filling vacant positions continues to be a high priority. Executive and Senior Management, in collaboration with Human Resources, will be developing a hiring plan that reflects our priorities, such as filling member facing positions to ensure a positive member experience. The plan will be reviewed by Executive Management at least quarterly to ensure the priorities are still appropriate given attrition that may have occurred in the prior quarter.

The following summary provides an update of LACERA's vacancies, recruitment, and hiring efforts to reduce the number of vacancies.

LACERA has 508 budgeted positions, of which 113 are vacant (22% vacancy rate). The Divisions with the highest number of vacancies, and the classifications with the highest number of vacancies are shown below.





Development

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

Classification	Vacancies	Division
Principal Investment Officer	2	Investments
Data Systems Analyst I	3	Systems
Retirement Systems Specialist	1	Systems
Information Technology Specialist I	6	Systems & Exec
Information Technology Specialist II	5	Systems & Exec
Document Processing Assistant	2	Admin. Services
Administrative Services Analyst I	1	Admin. Services
Administrative Services Analyst II	2	Admin. Services
Administrative Services Analyst III	2	Admin Services
Human Resources Analyst	2	Human Resources

Recruiting & Assessment

The Human Resources Team is recruiting qualified internal and external candidates to fill vacancies in our Legal Division. Qualified applicants are encouraged to apply for Staff Counsel and Senior Staff Counsel. There are currently no examinations in the assessment phase.

Hiring

Recent eligible lists/registers have been promulgated for Retirement Benefits Specialist I (Trainee Class) and the hiring departments have made initial selections to hire twenty-seven (27) candidates. A hiring decision was made to fill an Administrative Services Officer vacancy. Promotional offers were made to fill two Data Systems Specialist II vacancies. Hiring and promotional decisions are pending for Management Secretary, Retirement Benefits Specialist III, Senior Accountant, Procurement and Supply Clerk, Media Artist, and Senior Disability Retirement Specialist. These hiring actions, if used to fill the full number of vacancies in each classification, will decrease the number of vacancies by 55; resulting in 58 vacancies (11% vacancy rate).

Once the above phases are complete, HR staff will have the capacity to start the development process for other recruitments/assessments in accordance with the hiring plan.

Member Operations Group

CEO Dashboard Update

We have made additional updates to the CEO Dashboard for the December edition. The "Member Snapshot" section of the report has been expanded to include the following reports:

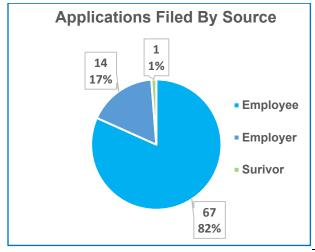
- Retirements By Year Report (improved): This report will show the retirements by each year, including the current year. These numbers will change every month as we add new members to the retirement roles.
- **Annual Retirements by Type**: This is a new report which shows the annual retirements broken down between General and Safety.
- General vs Safety Retirements for Fire and Sheriff: This report shows the number of retirements for the Fire Department and the Sherriff's Department by membership type. We often get inquiries about how many safety members in either of these departments have retired.

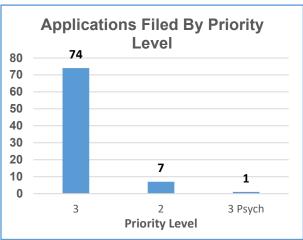
We are working on finalizing a more detailed membership by status report for general and safety members and hope to have this update in the next few months

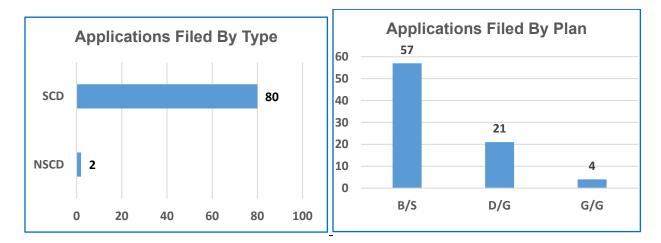
Disability Retirement Services Sees a Record Number of New Cases

We have been reporting an increase in the number of retirement counseling calls and inquiries in Member Services and Benefits for the last few months. This trend continues indicating this will be a busy "March Madness" period.

We are now seeing the first sign of a corresponding increase in Disability Retirement Services (DRS). DRS saw a record-breaking 82 new disability applications received in October. This is a significant increase over our normal intake rate of around 50 cases per month during this time of the year. We looked at the incoming applications and put together some informative graphs to help dissect what was submitted:







Of the 57 Safety applications received, 54 were from the Sheriff Department. We are working on putting together statistics of applications received per month over the last 12 months for comparison. This is obviously a significant number of new applications and will have an impact on our processing rates. The Disability Retirement Services team have been working on ideas on how we can help "boost" the number of cases processed. We will keep the Trustees up to date as we move forward.

Communications - Intranet Redesign

LACERA is committed to improving the way we interact, communicate, and share information internally throughout the organization. It's important to have a "hub" of information and knowledge that's easy to access. LACERA's intranet redesign will serve as a catalyst in improving our overall internal communications. The project is progressing according to schedule. Like the new website, we have chosen a modular design that will be flexible and easy to use. The brand and appearance developed for the new website will also be reflected on the new intranet including color, schemes, and functionality. In addition, we are incorporating a robust search function that will identify and find specific documents.

Finally, we are excited to announce the name that has been selected as part of the redesign and rebrand process, the new intranet will be called "LACERA Connect", our new tool to organize our documents, collaborate on projects, and communicate effectively across departments internally.

Retiree Healthcare (RHC) Update

On November 13, 2021, Kaiser Permanente and the Alliance of Health Care Unions reached a tentative agreement on a 4-year contract, covering nearly 50,000 Kaiser Permanente health care employees in 22 local unions. LACERA is pleased with this outcome, as the strike would've impacted our retirees, active membership, and employees. Our Retiree Healthcare team did an excellent job keeping us apprised of the situation and ensuring we had a plan in place to support any retiree inquiries.

2022 Medicare Part B Premiums

On November 12, 2021, the Centers for Medicare & Medicaid Services (CMS) announced the Medicare Parts A & B premium and coinsurance rates for 2022. The standard Part B premium will

increase to \$170.10 compared to \$148.50 for 2021; an increase of \$21.60. Members will pay the standard premium amount (or higher) if any of the following apply:

- they become newly eligible,
- do not receive Social Security benefits and are being directly billed for their Part B premiums,
- have Medicare and Medicaid (the state pays their standard premium of \$170.10), or
- they have a modified adjusted gross income as reported on their last two years IRS tax return that is above a certain amount. If so, they will pay the standard premium amount and an Income Related Monthly Adjustment Amount (IRMAA).

Segal provided the 2021-2022 Part B Premium Reimbursement Analysis and staff has forwarded this to the plan sponsor for the Board of Supervisor's (BOS) consideration in continuing the Medicare Part B Reimbursement Program. The analysis confirmed that it is in the best interest of the County to approve and continue the program.

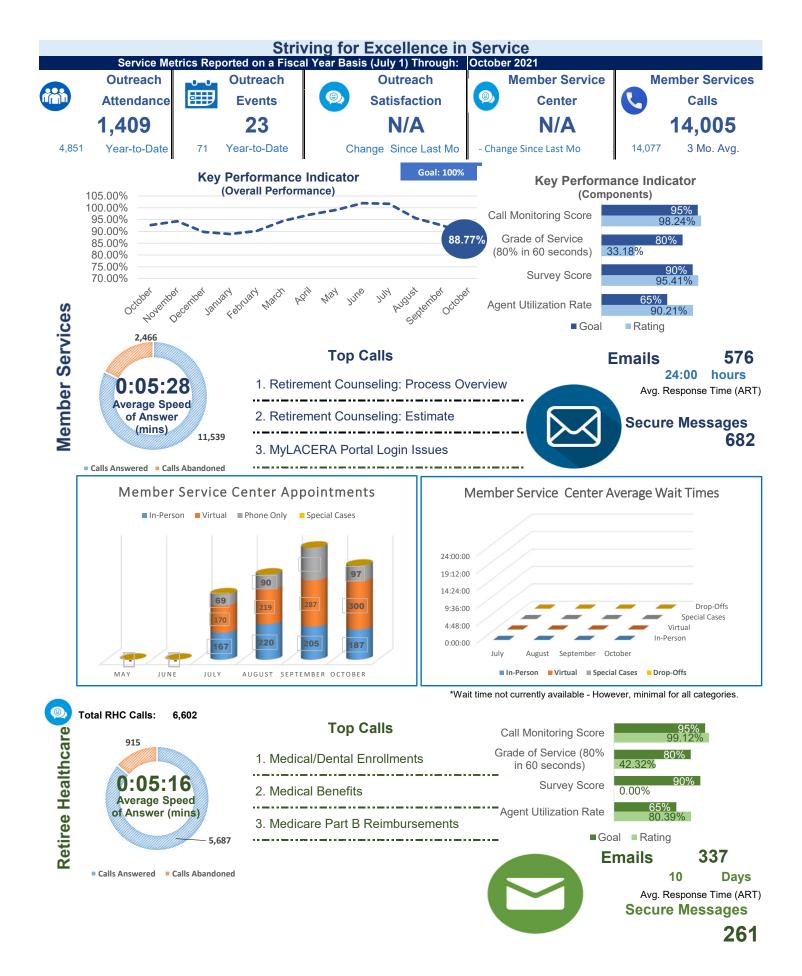
However, due to CMS' late notification this year, staff is hopeful that we will be able to get this on the Board of Supervisor's December 21, 2021 board agenda, which will be the last board meeting of the year. If the County is unable to agendize this for the December 21st BOS meeting, it will not get it approved until January 2022 which will further delay RHC's ability to update the current reimbursement amount. Upon BOS approval, be it December 21st or January 2022, staff and the team will be ready to handle accordingly. We will keep you updated with the status of this project.

Lifetime Maximum Benefit (LMB) Update

LACERA has finalized its analysis of eliminating the Lifetime Maximum Benefit ("LMB") of \$1 million from all Anthem Blue Cross Non-Medicare plans. On November 15, 2021, LACERA provided its letter and actuarial analysis to the County of Los Angeles Chief Executive Officer, Fesia Davenport. We expect to have productive engagements with the County of Los Angeles in the coming weeks.

SHK CEO report Dec.2021.doc

Attachments



Striving for Excellence in Service (Continued)

Applications 737

In Process As Of: 10/31/2021

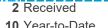
Disability

Appeals

90

9/30/2021

In Process As Of: 10/31/2021



92 Pending on:

10 Year-to-Date

2 Admin Closed/Rule 32 12 Year-to-Date

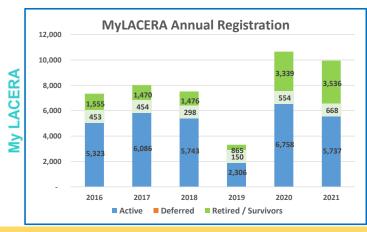
2 Referee Recommended

4 Year-to-Date

0 Revised/Reconsidered for Granting

9/30/2021

0 Year-to-Date



705 Pending on:

207 Year-to-Date

0 Re-Opened

0 Year-to-Date

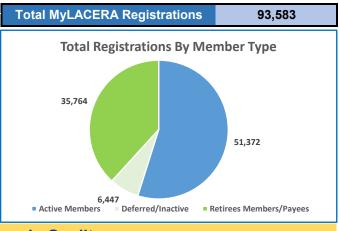
166 Year-to-Date

15 Year-to-Date

7 Closed

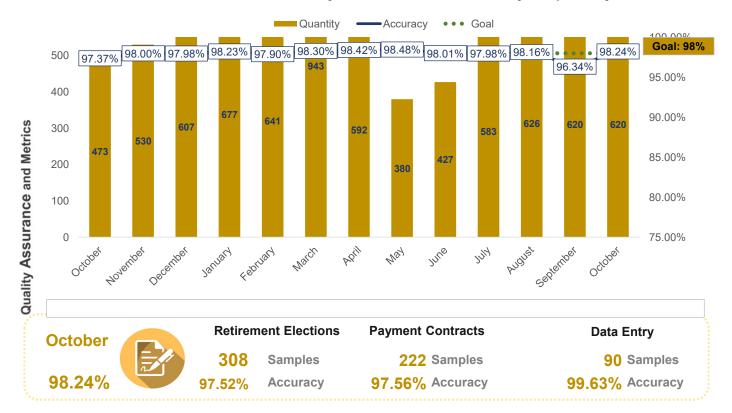
39 To Board - Initial

78 Received



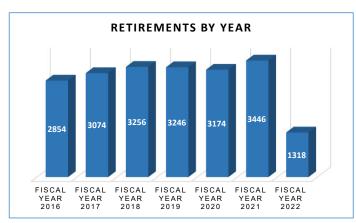
Striving for Excellence in Quality

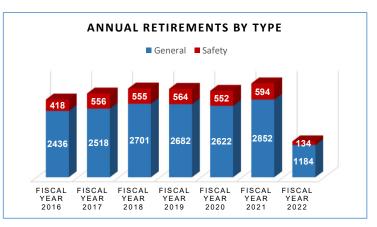
Audits of Retirement Elections, Payment Contracts, and Data Entry Completed by QA

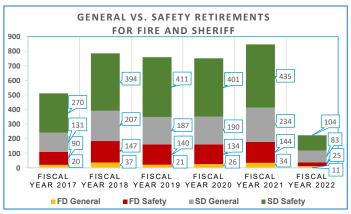


MEMBER SNAPSHOT

		Memb	ers as of 11	/15/2021	
	Plan	Active	Retired	Survivors	Total
	Plan A	66	14,549	4,216	18,831
<u>to</u>	Plan B	19	652	67	738
Genera	Plan C	20	422	65	507
g	Plan D	37,537	18,707	1,729	57,973
	Plan E	14,822	14,462	1,436	30,720
	Plan G	32,609	136	11	32,756
	Total Genera	85,073	48,928	7,524	141,525
	Plan A	2	4,708	1,640	6,350
e	Plan B	8,520	7,028	360	15,908
Safety	Plan C	4,532	16	1	4,549
	Total Safety	13,054	11,752	2,001	26,807
TO	TAL MEMBERS	98,127	60,680	9,525	168,332
%	by Category	58%	36%	6%	100%



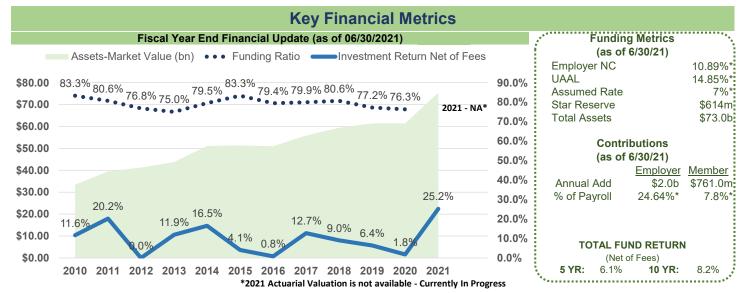




SPACE AVAILABLE FOR FUTURE EXPANSION

Average Monthly Benefit Allowance Distribution November 19, 2021							
General Safety Total %							
\$0 to \$3,999	30,045	1,699	31,744	52.48%			
\$4,000 to \$7,999	13,561	3,465	17,026	28.15%			
\$8,000 to \$11,999	3,676	4,270	7,946	13.14%			
\$12,000 to \$15,999	1,002	1,803	2,805	4.64%			
\$16,000 to \$19,999	326	350	676	1.12%			
\$20,000 to \$23,999	100	115	215	0.36%			
\$24,000 to \$27,999	25	28	53	0.09%			
> \$28,000	20	3	23	0.04%			
Totals	48.755	11.733	60.488	100%			

Average I	Monthly Benef	\$	4,603.00	
ı	Healthcare Pro		hcare ments	
	(Mo. Ending: 10/31/2021) Employer Member			53,219
Medical	\$194.0	\$14.4	Medical Dental	54,815
Dental	\$15.5	\$1.5	Part B	36,547
Part B	\$26.8	\$0.0	LTC	559
Total	\$236.3	\$15.9	Total	145,140



Retired Members Payroll						
(As of 10/31/2021)						
Monthly Payroll	\$334.40m					
Payroll YTD	\$1.3b					
New Retired Payees Added	367					
Seamless %	95.91%					
New Seamless Payees Added	1,427					
Seamless YTD	95.23%					
By Check %	2.00%					
*By Direct Deposit %	98.00%					





QUIET PERIOD LIST Current Active Quiet Period List for Non-Investments

RFP/RFI Name	Issuing Division	RFP Issued	Status*	Quiet Period for RFP Respondents*
Search for Classification and Compensation Study Services (HR)	Human Resources	May 24, 2021	Bid Review	 Koff and Associates Magnova Consultant Grant Thornton Reward Strategy Group
Search for Classification and Compensation Study Services (RHC)	Human Resources	May 24, 2021	Bid Review	 Koff and Associates Magnova Consultant Grant Thornton Reward Strategy Group
Agenda Management, Livestream, Recording, and Archiving	Board Offices	April 16, 2021	Vendor Selection	 Granicus Diligent iCompass PrimeGov eSCRIBE Hyland Provox Systems
Contract Lifecycle Management Application	Administrative Services/ Systems	February 16, 2021	RFP Development	IcertisCobblestoneAgiloftIron CladSmartSheet
External Quality Assessment	Internal Audit	August 9, 2021	Vendor Selection	 IIA Quality Services, LLC LLC; Mitchell& Titus, LLP. TAP International. Inc, Armanino LLP, Sjoberg Evashenk Consulting That Audit Guy, LLC.



RFP/RFI Name	Issuing Division	RFP Issued	Status*	Quiet Period for RFP Respondents*
Strategic Planning Consultant	Board Offices	August 23, 2021	Solicitation Process	 Academy for Leadership and Training Bellatrix Group The Segal Group Athenian Group KH Consulting TBM & Associates
Case Management Software Solution	Systems Division	October 6, 2021	Solicitation Process	 RGB Projects Aeon Nexus Oracle CrossFuze Incapsulate Main Street Computing MERP Systems Eightcloud Accenture Solutions CyanGate MTX Group Inovar Salesforce Klearai Eccentex

^{*}Subject to change
**Does not include Investments related vendor searches

Date	Conference
December, 2021	
13-14	2021 Global Investors Annual Meeting New York, NY
January, 2022 23-25	NCPERS (National Conference on Public Employee Retirement Systems) Legislative Conference Washington, D.C. CANCELLED
31-February 2	IFEBP (International Foundation of Employment Benefit Plans) Health Benefits Conference Clearwater Beach, FL
February, 2022 23-25	Pacific Pension Institute (PPI) Winter Roundtable Westlake Village, CA
March, 2022 2-3	National Association of Securities Professionals (NASP) Women's Forum Philadelphia, PA
5-8	CALAPRS (California Association of Public Retirement Systems) General Assembly Meeting TBD
7-9	Council of Institutional Investors (CII) Spring Conference Washington D.C.
7-9	National Association of Corporate Directors (NACD) Master Class Laguna Beach, CA
14-17	AHIP (America's Health Insurance Plans) National Health Policy Conference Washington D.C.
23-24	PREA (Pension Real Estate Association) Spring Conference Beverly Hills, CA
24	NASP 12 th Annual "Day of Education in Private Equity" for Trustees and Staff
30 – April 1	CALAPRS (California Association of Public Retirement Systems) Advanced Principles of Pension Governance for Trustees at UCLA Los Angeles, CA
April, 2022 4-8	Investment Strategies & Portfolio Management Wharton School, University of Pennsylvania Live Online

Chief Investment Officer Monthly Report



Board of Investments

December 8, 2021

Jonathan Grabel
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Table of Contents

- 1. Market Environment
- 2. Portfolio Performance and Risk Updates
- 3. Portfolio Structural Updates
- 4. Key Initiatives and Operational Updates
- 5. Commentary
- 6. Appendix
 - 1. Quite Period for Search Respondents



Market Environment



Global Market Performance as of November 30, 2021

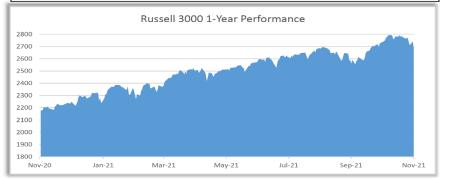
MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Aı	nnualized	Returns (9	%)	
1-month	3-month	YTD	1Y	3 Y	5Y	10Y	
-2.7	-2.0	13.7	19.4	15.7	13.7	11.4	



Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			А	nnualized	Returns (%)	
1-month	3-month	YTD	1Y	3Y	5Y	10Y	
-1.5	0.4	20.9	26.3	20.2	17.5	16.0	



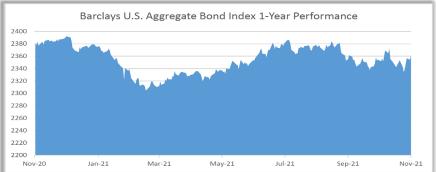
MSCI Emerging Market Index

Trail	ing Returns	Annualized Returns (%)				
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-4.1	-7.0	-4.3	2.7	9.3	9.5	5.2



Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Ar	nualized	%)		
1-month	3-month	YTD	1Y	3Y	5Y	10Y	
0.3	-0.6	-1.3	-1.2	5.5	3.7	3.0	

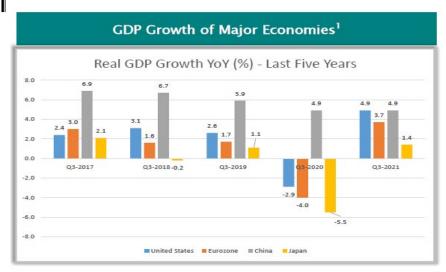


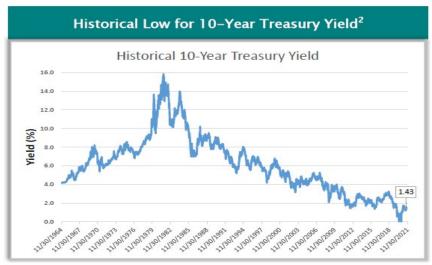
*Global Equity Policy Benchmark - MSCI ACWI IMI Index

Source: Bloomberg

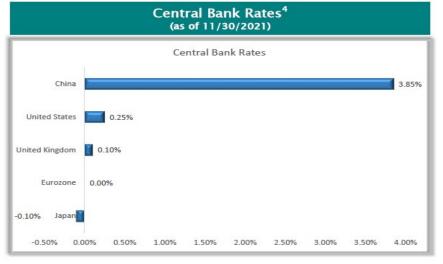
^{**}Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

Key Macro Indicators*









^{*}The information on the "Key Macro Indicators" charts is the best available data as of 11/30/21 and may not reflect the current market and economic environment.

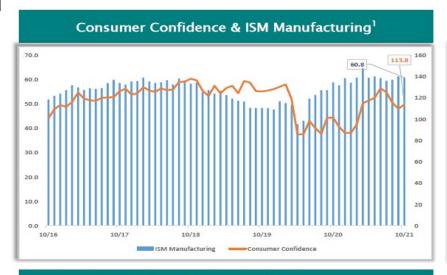
Sources: 1. Bloomberg 2. St. Louis Federal Reserve

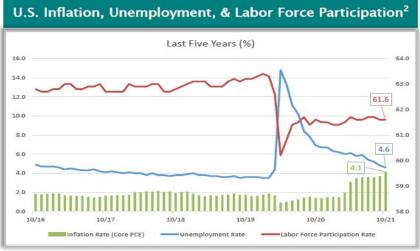
3. FactSet

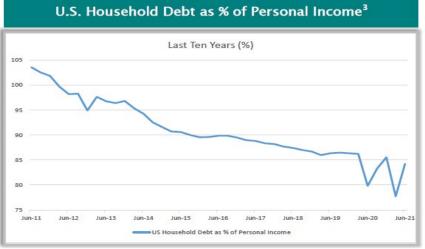
4. FactSet

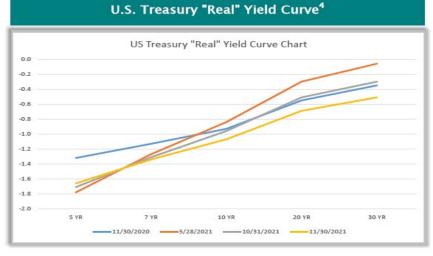


Key Macro Indicators*









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 11/30/21 and may not reflect the current market and economic environment.



Market Themes and Notable Items to Watch

Recent Themes

- Covid-19
 - More than 263 million cases, 5.2 million deaths, and 8.0 billion vaccine doses administered worldwide
- The U.S. 10-year treasury yield ended November at 1.43%, up from 0.93% at the end of 2020 and below 1.74% at the end of March 2021
- Global equities (MSCI All Country World Investable Market Index) declined 2.7% in November
- Federal Reserve Chairman Jerome Powell mentioned ceasing to describe inflation as "transitory" and said the U.S. central bank will discuss speeding up the tapering of its bond purchasing program.
- A new Omicron Covid variant with reportedly increased transmissibility emerged and dampened investor sentiment for risk assets

What to Watch

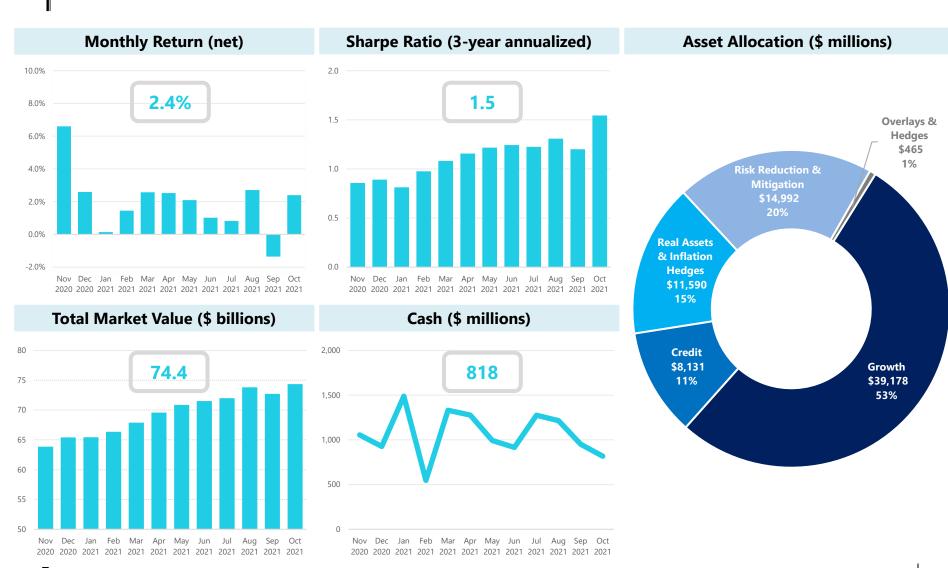
- Covid-19
 - Economic and consumer behavior impacts
 - Evolution of Covid variants such as Omicron, transmissibility, and vaccine efforts
- Environmental, social, governance
 - SEC new regulation enables investors to vote on combined proxy in contested director elections
 - COP26 Climate Summit agreements on carbon and methane emissions and deforestation
 - Proposed federal SEC rules on private equity fee transparency anticipated in 2022Q1
- Economic data and trends
 - Transitory versus persistent inflation, labor market developments such as composition of newly added jobs, and infrastructure legislation
- Changing macro conditions
 - Central bank actions and geopolitical risks

Portfolio Performance & Risk Updates



Total Fund Summary

as of October 2021



Historical Net Performance

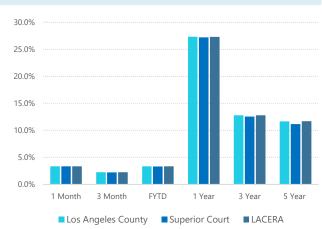
as of October 2021

					LAC	ERA	Pensi	on Fu	ınd		
	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year	3
Total Fund Total Fund Policy BM 7% Annual Hurdle Rate	74,355	100.0%	100.0%	2.4% 2.3% 0.6%	3.7% 2.2% 2.3%	4.6% 3.3% 1.7%	26.0% 21.0% 7.0%	12.9% 12.4% 7.0%	11.1% 10.5% 7.0%	9.5% 9.8% 7.0%	2
Growth Growth Policy BM	39,178	52.7%	51.0%	3.7% 3.4%	6.1% 3.0%	6.9% 4.4%	43.9% 36.6%				1
Credit Credit Policy BM	8,131	10.9%	11.0%	0.3% 1.1%	1.0% 1.7%	1.6% 2.1%	13.6% 7.8%				1
Real Assets & Inflation Hedges Real Assets & Inflation Hedges Policy BM	11,590	15.6%	17.0%	2.6% 2.1%	4.0% 3.2%	5.2% 4.6%	20.3% 20.3%				
Risk Reduction & Mitigation Risk Reduction & Mitigation Policy BM	14,992	20.2%	21.0%	0.1% 0.2%	-0.6% -0.6%	0.3% 0.4%	1.4% 0.2%				
Overlays & Hedges	465	0.6%									



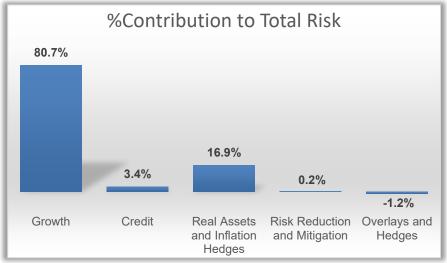
OPEB Master Trust¹

	Market Value	% of	Interim						
	(\$ millions)	Master Trust	Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB MASTER TRUST	2,480			3.4%	2.2%	3.3%	27.3%	12.8%	11.6%
Los Angeles County	2,406	97.0%	_	3.4%	2.2%	3.3%	27.3%	12.8%	11.7%
Superior Court	64	2.6%	_	3.4%	2.2%	3.3%	27.2%	12.6%	11.2%
LACERA	10	0.4%	_	3.4%	2.2%	3.4%	27.3%	12.8%	11.7%
OPEB Growth	1,253	50.5%	50.0%	4.9%	3.2%	3.7%	38.4%	17.6%	14.9%
OPEB MT Growth Policy BM				4.9%	3.2%	3.7%	38.2%	17.3%	14.6%
OPEB Credit	482	19.4%	20.0%	-0.2%	-0.1%	-0.2%	6.8%	4.7%	
OPEB MT Credit Policy BM				0.0%	0.1%	0.2%	7.7%	5.2%	
OPEB Real Assets & Inflation Hedges	505	20.4%	20.0%	4.9%	3.6%	7.5%	37.3%	10.9%	
OPEB MT RA & IH Policy BM				4.9%	3.7%	7.6%	37.7%	10.9%	
OPEB Risk Reduction & Mitigation	240	9.7%	10.0%	0.0%	-0.9%	0.0%	-0.4%	4.8%	3.3%
Custom OPEB MT RR & M Policy BM				0.0%	-0.9%	0.0%	-0.4%	4.7%	3.1%
Operational Cash	0	0.0%							



Total Fund Forecast Risk*

as of October 2021





	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
Total Fund			12.0	12.6
Growth	52.6%	80.7%	18.5	18.5
Global Equity	36.8%	53.6%	18.0	18.0
Private Equity	14.5%	25.4%	24.3	24.7
Non-Core Private Real Estate	1.3%	1.6%	20.8	18.6
Credit	10.9%	3.4%	4.6	5.3
Liquid Credit	7.0%	2.6%	5.7	5.3
Illiquid Credit	4.0%	0.8%	3.9	5.3
Real Assets & Inflation Hedges	16.0%	16.9%	14.1	14.2
Core Private Real Estate	5.6%	6.9%	22.1	18.6
Natural Resources & Commodities	4.3%	4.8%	15.9	22.3
Infrastructure	3.3%	4.8%	18.9	19.1
TIPS	2.8%	0.4%	4.6	4.6
Risk Reduction and Mitigation	19.9%	0.2%	2.9	1.9
Investment Grade Bonds	14.7%	-0.1%	3.6	3.5
Diversified Hedge Funds	4.2%	0.3%	3.9	0.1
Long-Term Government Bonds	0.0%	0.0%	-	-
Cash	1.1%	0.0%	-	-
Overlays and Hedges	0.6%	-1.2%	-	-

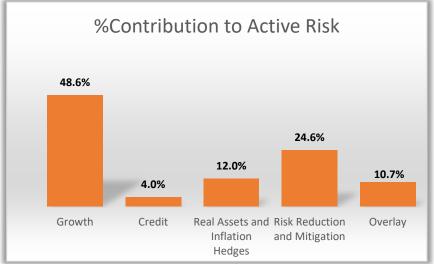
^{*}Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 6/30/2021

^{**}BMK Risk stands for Benchmark Risk



Total Fund Forecast Active Risk*

as of October 2021





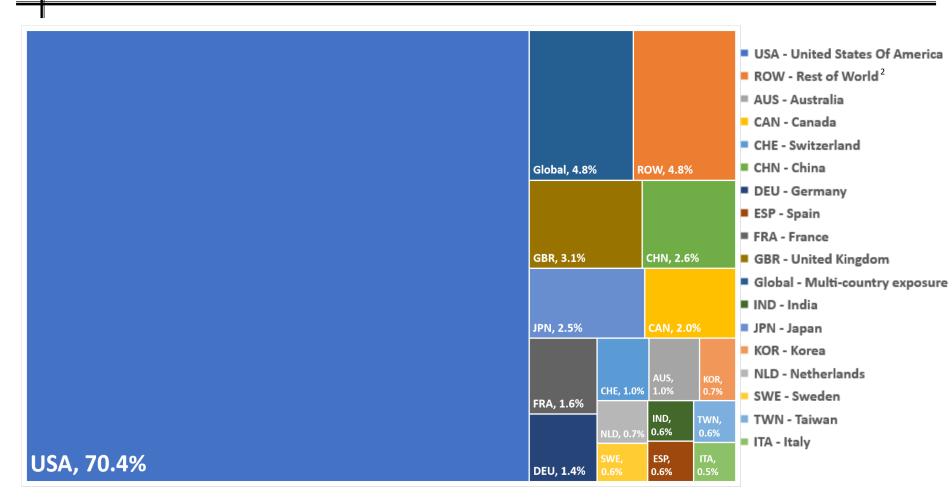
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			1.08	0.21	0.88
Growth	52.6%	-0.44%	0.53	0.01	0.51
Global Equity	36.8%				
Private Equity	14.5%				
Non-Core Private Real Estate	1.3%				
Credit	10.9%	-0.09%	0.04	0.00	0.05
Liquid Credit	7.0%				
Illiquid Credit	4.0%				
Real Assets & Inflation Hedges	16.0%	-1.05%	0.13	0.01	0.12
Core Private Real Estate	5.6%				
Natural Resources & Commodities	4.3%				
Infrastructure	3.3%				
TIPS	2.8%				
Risk Reduction and Mitigation	19.9%	0.94%	0.27	0.07	0.20
Investment Grade Bonds	14.7%				
Diversified Hedge Funds	4.2%				
Long-Term Government Bonds	0.0%				
Cash	1.1%				
Overlays and Hedges	0.6%	0.63%	0.12	0.12	0.00

*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 6/30/2021



Geographic Exposures by AUM* - Total Fund

as of October 2021 ex-overlay



^{*}AUM = assets under management

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



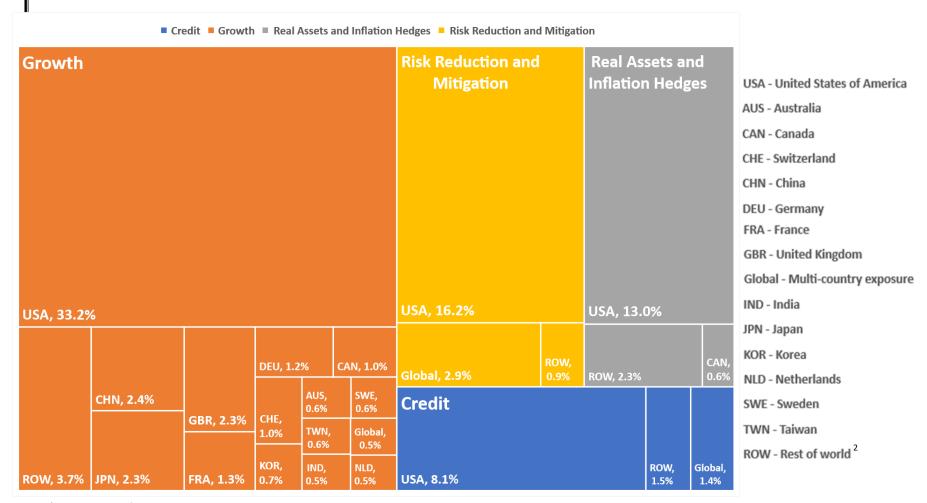
13

^{1 *}Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 6/30/2021

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

Geographic Exposures by AUM* - Asset Categories

as of October 2021 ex-overlay



^{*}AUM = assets under management

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

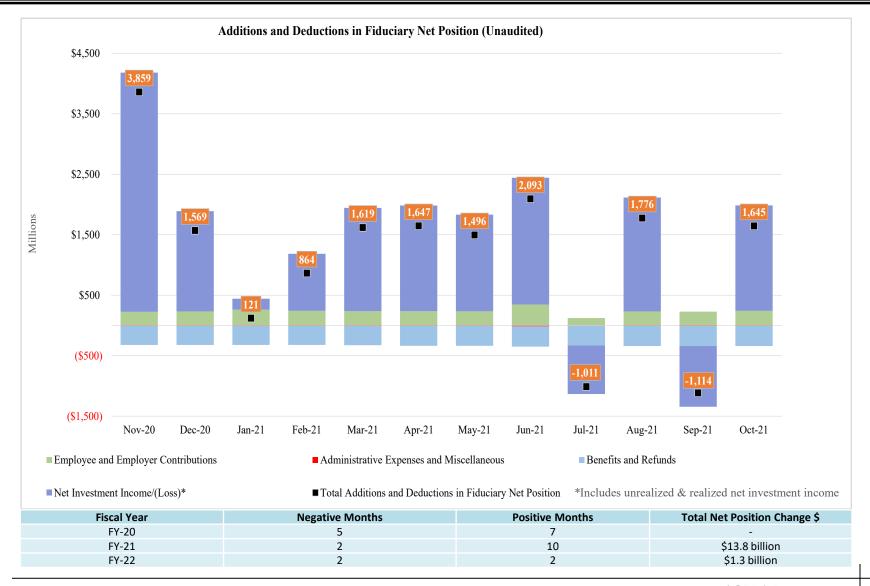


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¹*Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 6/30/2021

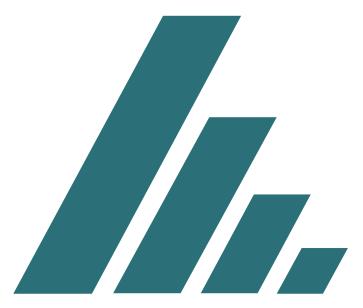
² "ROW - Rest of World" is sum of countries with weight below 0.5%

Change In Fiduciary Net Position





Portfolio Structural Updates



Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity



Hedges and Overlays

Program	October Return	October Gain/Loss	Inception [*] Gain/Loss
Currency Hedge**	-0.2%	\$12.0 Million	\$918.7 Million
Cash/Rebalance Overlay***	0.4%	\$18.0 Million	-\$11.9 Million

Current Search Activity

Status of Active Searches – Subject to Change

Name	RFP Issued	Due Diligence	BOI Review
Global Equity Emerging Manager Search	•	_	Anticipated Late 2021
Private Equity Emerging Manager Discretionary Separate Account Search	•		Anticipated Early 2022
General Consultant Search	•	—	Anticipated Early 2022
Long-Term U.S. Treasury Bonds Manager Search	•	-	Anticipated Mid 2022
Illiquid Credit Emerging Manager Program Search	•		Anticipated Mid 2022

Quiet Period for Search Respondents

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



Key Initiatives and Operational Updates



Notable Initiatives and Operational Updates

Key Initiative Updates

- Ongoing development of 2022 Work Plan
- The new strategic asset allocation implementation began on October 1 with interim policy targets and benchmarks
- Hedge Fund emerging manager program completed its first capital contribution

Operational Updates

- Annual contract compliance review underway
- Completed AB2833 fee reporting

Completed Actions

 Implemented the global equity overlay with Parametric for geographic and market-cap exposure

Team Searches and Open Positions

- New hires
 - Financial Analyst III Credit
 - Started December 1, 2021
- Interns Started October 1, 2021

Manager/Consultant Updates

StepStone (Private Equity & Real Estate) – has announced that Co-CEO Scott Hart will become StepStone's sole Chief Executive Officer, effective January 1, 2022. Co-Founder and Co-CEO Monte Brem will become Executive Chairman of the Company and remain Chairman of the Board, completing a planned leadership transition that began when Mr. Hart was named Co-CEO in 2019. Mr. Hart remains Head of Private Equity.



Commentary



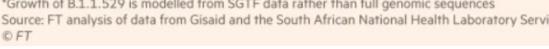
Staff Chart of the Month*

Emergence of Omicron Variant

A new variant is spreading rapidly in South Africa, and appears to be outcompeting other variants much faster than previous variants of concern did

Share of all sequenced cases* in South Africa accounted for by each variant, by number of days since it passed 1%

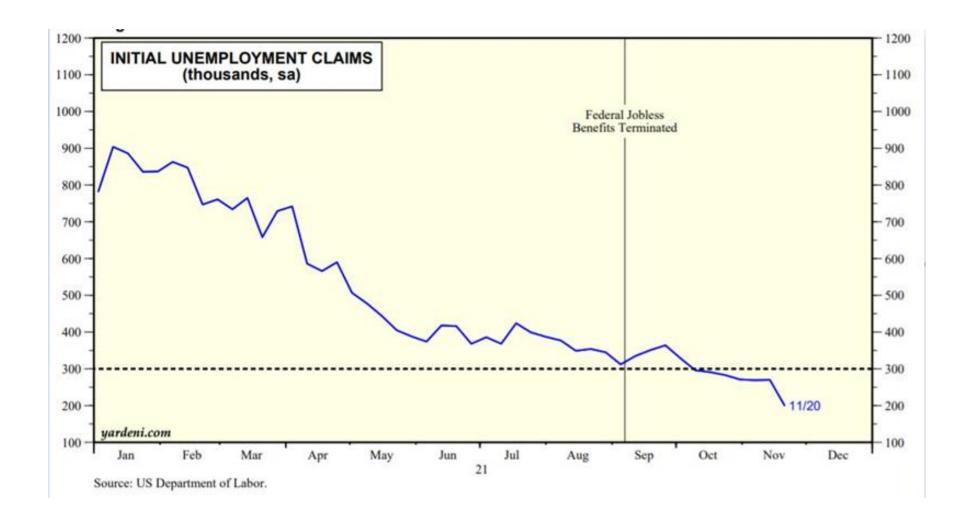






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Staff Chart of the Month* U.S. Initial Unemployment Claims Continue to Fall





Quiet Period for Search Respondents

Private Equity Emerging Manager Discretionary Separate Account Search

- √ 50 South Capital Advisors
- ✓ AlpInvest
- ✓ Barings
- ✓ Cambridge Associates
- ✓ Commonfund Capital
- √ Fairview Capital
- √ HamiltonLane
- ✓ HarbourVest
- ✓ Invesco
- ✓ JP Morgan
- ✓ Morgan Stanley
- ✓ Neuberger Berman
- ✓ PineBridge Investments
- ✓ Sango Capital
- ✓ Unigestion
- ✓ Wilshire

Global Equity Emerging Manager Search

- ✓ Advisory Research Investment Management
- ✓ Akiya Investment Management
- ✓ Applied Research Investments, LLC
- ✓ Blackcrane Capital, LLC
- ✓ Brasil Capital
- ✓ Bridge City Capital
- ✓ Cartica Management, LLC
- ✓ CDAM (UK) Limited
- ✓ Cedar Street Asset Management
- ✓ Centerstone Investors, LLC
- ✓ Columbus Point LLP
- ✓ Cove Street Capital, LLC
- ✓ Dundas Partners LLP
- ✓ EAM Investors, LLC
- Emerge Capital Management
- Evolutionary Tree Capital Management
- Foresight Global Investors, Inc.
- FountainCap Research & Investment
- Frontier Global PartnersLegion Partners Asset Management, LLC
- ✓ MayTech Global Investments, LLC
- ✓ Metis Global Partners, LLC
- ✓ Nipun Capital, LP
- ✓ NZS Capital, LLC
- ✓ Port Capital, LLC
- Redwood Investments, LLC
- ✓ Sustainable Insight Capital Management
- ✓ Taylor Frigon Capital Management, LLC
- ✓ Trinity Alps Capital Partners, LP

General Investment Consultant Search

- ✓ Callan LLC
- Meketa Investment Group, INC
- ✓ NEPC, LLC

Long-Term U.S. Treasury Manager Search

- ✓ BlackRock Investments, LLC
- ✓ State Street Global Advisors (SSgA)





November 22, 2021

TO: Each Trustee,

Board of Retirement Board of Investments

FROM: Steven P. Rice PR

Chief Counsel

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: Approval of Teleconference Meetings Under AB 361 and Government Code

Section 54953(e)

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 the County of Los Angeles and other agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days, and if so, direct staff to comply with the agenda and public comment requirements of the statute. Action taken by each Board will only apply to that Board and its Committees.

LEGAL AUTHORITY

Under Article XVI, Section 17 of the California Constitution, the Boards have plenary authority and exclusive fiduciary responsibility for the fund's investments, actuarial matters, and related issues. This authority includes the ability of each Board to manage their own Board and Committee meetings and evaluate and act on legal options for the conduct of such meetings, such as whether to invoke teleconferencing of meetings under the terms and conditions provided in 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 Board of Retirement previously took this action at its October 6, 2021 and November 3, 2021 meetings, and the Board of Investments took this action at its October 13, 2021 and November 17, 2021 meetings. Findings made under this memo will be effective for meetings held during the next 30 days.

DISCUSSION

A. Summary of Law.

On September 16, 2021, the Governor signed AB 361 which enacted new Government

Re: Approval of Teleconference Meetings Under AB 361 and Gov't Code § 54953(e)

November 22, 2021

Page 2 of 3

Code Section 54953(e) of the Brown Act to put in place, effective immediately and through December 31, 2023, new relaxed 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 remains active 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;
- (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;
 - (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.

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.

The Los Angeles County Department of Public Health maintains guidance to "Keep your distance. Use two arms lengths as your guide (about 6 feet) for social distancing with people outside your household when you are not sure that they are vaccinated." http://publichealth.lacounty.gov/acd/ncorona2019/reducingrisk/. The County Public Health Department also maintains guidance that employers should, "Implement policies and practices that support physical distancing: Whenever possible, take steps to reduce crowding indoors and enable employees and customers to physically distance from each

Re: Approval of Teleconference Meetings Under AB 361 and Gov't Code § 54953(e) November 22, 2021

Page 3 of 3

other. Generally, at least 6 feet of distance (2 arm lengths) is recommended, although this is not a guarantee of safety, especially in enclosed or poorly ventilated spaces." http://publichealth.lacounty.gov/acd/ncorona2019/bestpractices/

The Centers for Disease Control and Prevention (CDC) still advise the public that, "Outside your home: Put 6 feet of distance between yourself and people who don't live in your household." https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html#stay6ft%20.

The pandemic continues to present a significant health risk, as the virus presents itself in different variants. LACERA has not yet returned to the office. Management is preparing return to office vaccination and testing protocols to ensure the safety of LACERA employees, members, and others, including Trustees.

Under these circumstances, the Boards may reasonably conclude and find that teleconferencing under Section 54953(e) is appropriate for Board and Committee meetings during the next 30 days because (1) the state of emergency continues to directly impact the ability of the Trustees to meet safely in person, and (2) the County and other authorities continue to recommend measures to promote social distancing, as required by the statute.

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.

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 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 Committees to meet safely in person and that the County of Los Angeles and other agencies still recommend social distancing such that each Board and its Committees shall hold teleconference meetings for the next 30 days, and if so, direct staff to comply with the agenda and public comment requirements of the statute. Action taken by each Board will only apply to that Board and its Committees.

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



November 22, 2021

TO: Trustees - Board of Investments

FROM: Corporate Governance Committee

Jonathan Grabel

Chief Investment Officer

FOR: December 8, 2021, Board of Investments Meeting

SUBJECT: COUNCIL OF INSTITUTIONAL INVESTORS DIRECTOR RE-

NOMINATION

RECOMMENDATION

Approve LACERA's nomination of Scott Zdrazil for re-election to the Council of Institutional Investors ("CII") 2022 annual board elections.

BACKGROUND

On November 17, 2021, the Corporate Governance Committee ("Committee") unanimously approved a recommendation that the Board of Investments approve Mr. Zdrazil's re-nomination to the CII board elections, per LACERA policy. Annual elections for all CII directors will be held in March 2022, with re-nominations anticipated to be due in January 2022, as outlined in the attached Committee memo (**Attachment**).

Scott Zdrazil, Senior Investment Officer, currently serves as a director on CII's board and was elected this past year as CII board chair. CII board directors are subject to annual elections and generally serve five eligible consecutive terms to provide long-term vision and oversight. Mr. Zdrazil is currently in his fourth year of CII board service.

OPTIONS AVAILABLE TO THE BOARD

The Board may wish to approve, modify, or reject the recommendation.

DELIBERATIONS AND OPINIONS EXPRESSED BY THE COMMITTEE

The Committee expressed general comfort with staff's recommendation and unanimously approved the motion for LACERA to nominate Mr. Zdrazil for re-election to the CII board.

RISKS OF ACTION AND INACTION

LACERA's representation on the boards of outside associations, such as CII, may associate LACERA with public actions of the organization that may or may not be aligned with LACERA

Trustees - Board of Investments November 22, 2021 Page 2 of 2

policy. Staff notes that CII is a longstanding investor association with a 37-year track record working with its institutional investor members to define its guiding policies and actions. LACERA participation on the CII board provides the opportunity to guide and have input into CII policies and programming.

The risk of inaction is namely that, absent a nomination from LACERA, LACERA will voluntarily vacate its current representation on CII's board. LACERA collaborates with other institutional investors to advance investors' interests in financial market policy and promote sound governance practices at companies in which LACERA invests. CII is the primary investor association in the U.S. market focused on corporate governance matters and advocacy.

CONCLUSION

The Committee unanimously approved this recommendation that LACERA nominate Scott Zdrazil for reelection to the CII 2022 annual board elections.

Attachment





ATTACHMENT

October 20, 2021

TO: Each Trustee

Corporate Governance Committee

FROM: Jonathan Grab

Chief Investment Officer

FOR: November 17, 2021, Corporate Governance Committee Meeting

SUBJECT: Council of Institutional Investors Director Re-Nomination

RECOMMENDATION

Advance to the Board of Investments for approval LACERA's nomination of Scott Zdrazil for reelection to the Council of Institutional Investors ("CII") 2022 annual board elections.

BACKGROUND

Scott Zdrazil, Senior Investment Officer, currently serves as chair of the CII board of directors. All CII board directors are subject to annual elections and generally serve five eligible consecutive terms to provide long-term vision and oversight. Mr. Zdrazil is currently in his fourth year of CII board service and is eligible for re-election to one additional term. We anticipate that CII will open nominations for board candidates in January 2022 with elections for all CII directors to be held in March 2022. CII has respectfully requested six-month notice from any incumbent member of the board who will not be nominated for re-election.

LACERA's *Corporate Governance and Stewardship Policy* provides that the Board of Investments approve, upon recommendation from this Committee, any LACERA nomination to a governing board of corporate governance associations (such as CII) to which LACERA is formally affiliated. This item is being presented for Committee consideration to allow for timely Board of Investments consideration.



November 24, 2021

TO: Each Trustee

Board of Retirement Board of Investments

FROM: Joint Organization Governance Committee

Shawn R. Kehoe, Chair

Elizabeth Greenwood, Vice Chair

Alan J. Bernstein Vivian H. Gray Joseph Kelly Keith Knox Les Robbins

Herman B. Santos

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: FY 2021-2022 PROPOSED MID-YEAR BUDGET AMENDMENTS

RECOMMENDATION

That the Board of Retirement and Board of Investments adopt the FY 2021-2022 Mid-Year Budget Amendments for the LACERA Administrative Budget. No changes are recommended for the Retiree Health Care Benefits Program Budget.

DISCUSSION

The FY 2021-2022 Budget was intended to maintain LACERA operations under the unprecedented COVID-19 pandemic, without interruption, until a much deeper dive into the administrative support functions could be completed. This included additional staffing and services and supplies resources.

At that time, we shared our plan to conduct a mid-year budget review and to present a supplemental budget request for unanticipated and critical projects and additional resources. The Budget Team collaborated with the Executive Office and the Management Team to re-assess the organizational goals and priorities. We identified critical projects and funding needs that support improving operations and streamlining processes. To address these interim needs, we have identified salary savings and reassessed some of our lower priority projects.

As such, we are not requesting increases to our budget. We are, instead, providing the Boards with our proposed internal transfers to better align the budgeted resources to our current needs.

Each Trustee, Board of Retirement and Board of Investments Re: FY 2021-2022 Mid-Year Budget Amendments Adoption November 24, 2021 Page 2

We are pleased to present the FY 2021-2022 Proposed Mid-Year Budget Amendments.

Proposed Mid-Year Budget Amendments for FY 2021-2022

The proposed Mid-Year Budget Amendments for FY 2021-2022 will result in a net zero increase to the overall budget of \$114.8M.

Services and Supplies (S&S) amendments totaling \$1.2M will be offset by savings of \$1.2M in Salaries and Employee Benefits (S&EB).

Detailed below are the changes to the various areas that make up the necessary budget amendments, including funding for unanticipated information technology (IT) related projects, COVID-19 testing, insurance premium increases, and legal fees. Other budget amendments include a reallocation of permanent salaries, variable benefits, and temporary staff funding to reflect LACERA's adjusted hiring plans due to the COVID-19 pandemic and to offset some of the costs of the additional funding requested.

See overall and division financial summaries on Exhibit A and Exhibit B. See budget-to-actuals ending September 30, 2021 on Exhibit C.

Salaries and Employee Benefit Changes

There are no requests to add additional positions at this time. Our goal is to focus on filling as many of the current vacancies as possible, on a prioritized basis.

During the budget development process, we calculate a salary savings for the number of months that a position will be vacant during the fiscal year. Due to the COVID-19 pandemic, hiring plans were delayed, and timelines have shifted. We worked with the Management Team and Human Resources to reassess the vacancy estimates. Based on this examination, it was determined that positions would remain vacant for several months longer than what was originally planned and that we would retain temporary staff for an extended period. To account for vacancies in the budget, we propose to reallocate funding by reducing Permanent Salaries and Variable Benefits by \$2.1M and increasing Temporary staff salaries by \$0.9M. The net effect is a decrease in S&EB of \$1.2M for a revised total of \$87.2M, a 1.4% decrease in the S&EB budget.

In line with these salary surpluses, we are in the process of reviewing the recruitment and hiring plan, as presented to the JOGC and Boards in May.

Each Trustee, Board of Retirement and Board of Investments Re: FY 2021-2022 Mid-Year Budget Amendments Adoption

November 24, 2021

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Services and Supplies Budget Modifications

A closer examination of the ongoing needs of the office and the previous funding allocations resulted in a proposal to increase the overall S&S Budget by \$1.2M from an aggregate budget amount of \$26.4M for a revised total of \$27.6M. This represents, a 4.6% increase in the S&S budget. This increase will be completely absorbed by salary savings.

The recommended S&S Budget adjustments for your consideration are highlighted below.

Insurance Requirements

An increase in the Cyber Liability insurance premium of \$315,600 has been offset by savings in other insurance line items. Savings in Fiduciary Liability, Earthquake, and Employment Practice Liability insurance offset the unanticipated increase in the Cyber Liability insurance premium for a total net increase of \$202,600, 22.2% over the original Insurance budget of \$911,600.

COVID-19 Testing

Organizational programs in Human Resources are required for COVID-19 testing due to workplace exposures and weekly testing for staff members who are not vaccinated. These programs will result in an increase of \$150,000, up from the original budget of \$25,000. This cost reflects initial setup costs and approximately 7-months of testing. The full-year cost for FY 2022-2023 is estimated to be approximately \$225,000.

Legal Fees & Services

Outside Legal Counsel in Legal Services will increase the budget by \$655,000. The addition of two to three special Executive Office and Board level legal projects necessitate this amendment over the original budget of \$400,000.

Information Technology (IT) Related Projects

As the fiscal year progresses, the Systems Division review of its technology needs requires additional funding with a net total of \$212,000 and is detailed below. This addition represents a 2.7% increase over the current approved IT budget of \$7,840,400.

Amazon Web Services (AWS) Hosting

Enterprise Data Processing (EDP) charges include AWS Hosting and are leveraged with LA County ISD. Recently received billing dictates that an additional \$90,000 is required, for a total amended budget of \$99,500 for EDP.

Centera Replacement

\$300,000 was budgeted in the prior fiscal year for replacing our Write Once Read Many (WORM) devices that store our member archives such as document images, phone call recording, and microfiche images. There was a delay in receiving the new devices due to the COVID-19 pandemic, and we received the devices after the close of FY 2020-2021, however, the budget was not carried over into FY2021-2022. These funds are needed to complete the upgrade of the WORM devices.

Each Trustee, Board of Retirement and Board of Investments Re: FY 2021-2022 Mid-Year Budget Amendments Adoption November 24, 2021

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Cloud Migration

Several critical cloud migration projects were budgeted and started last fiscal year. However, these projects are still in progress, and the services have not been billed to LACERA. Projects include Intranet 2.0 (\$80,000), Power BI Implementation (\$82,000), and Knowledgebase replacement projects (\$100,000), totaling \$262,000. This amendment will be an increase to the \$150,000 currently budgeted bringing the new total to \$412,000.

Microsoft Tenant Migration

\$180,000 is required for professional services, hardware, and software related to the Microsoft Tenant Migration. We originally planned to use all internal LACERA resources for this migration. However, after planning the project, we realized that we could reduce the migration time by 12 months and improve the end-user experience if we retained outside assistance. This amendment increases the budget by 16.6% from the original budget of \$1,085,000

Docking Stations

Additional funds of \$50,000 are required for docking stations which will allow staff to transition seamlessly to our hybrid return-to-work plan. The amended budget for computer peripherals will be \$60,000.

Telephone Systems and Equipment

The selection and procurement of a new system budgeted for this year will be pushed and funded in FY 2022-2023.

The replacement of LACERA's Avaya desk phones may no longer be necessary based on the new phone system selected. However, if new phones are required, the purchase will be made in FY 2022-2023.

The result of this push into the next fiscal year is a reduction of \$295,000 to the current budget of \$460,000, a 64% reduction.

LAN Hardware Maintenance

In assessing our first quarter expenditures, we anticipate the ability to reduce the budget funds in half, to \$75,000.

Equipment Maintenance – UPS Server Room

Our Uninterruptable Power Supply (UPS) equipment is at the end of life. The FY 2021-2022 budget anticipated replacing equipment, located in the 7th floor data center, network operations center, and the 6th floor network operations center. However, we are rapidly retiring on-site hardware and will only need to consider the 6th floor network operations center when replacing the UPS, which should result in current year savings of \$100,000, a 37.8% reduction from the current budget of \$264,500.

Each Trustee, Board of Retirement and Board of Investments Re: FY 2021-2022 Mid-Year Budget Amendments Adoption November 24, 2021 Page 5

Hot Site Services

LACERA has a disaster recovery (DR) site in Boulder, CO, used for the mainframe recovery. Now that we are migrating the mainframe to Phoenix, AZ, we no longer need the DR site in Boulder, CO. We included the funding for the site in the budget as a contingency should the mainframe hosting project be delayed. Based on work completed to date, we anticipate being able to retire our Boulder DR site by the end of the calendar year 2021, resulting in a budgetary savings of \$100,000 or 71.4% of the original budget of \$140,000.

Mainframe Software and Licensing

We are in the process of migrating our on-site mainframe to a hosted solution in Phoenix, AZ. At the time the FY 2021-2022 Budget was developed, the exact timing of the migration was unknown. The migration is planned to complete by the end of the calendar year 2021, enabling us to realize licensing cost savings of \$100,000, an 8.9% reduction from the current budget of \$1,125,000. Going forward the mainframe annual licensing expenses will be significantly less.

CONCLUSION

The proposed amendments to the Administrative Budget results in a total amended budget of net zero.

The proposed adjustments were well considered and represent funding necessary to maintain operations at peak levels and support the achievement of our strategic goals and initiatives.

IT IS THEREFORE RECOMMENDED THAT THE BOARD:

Adopt the FY 2021-2022 Mid-Year Budget Amendments for the LACERA Administrative and Retiree Health Care Benefits Program Budgets.

Attachments

SHK:LL:LKG:ks

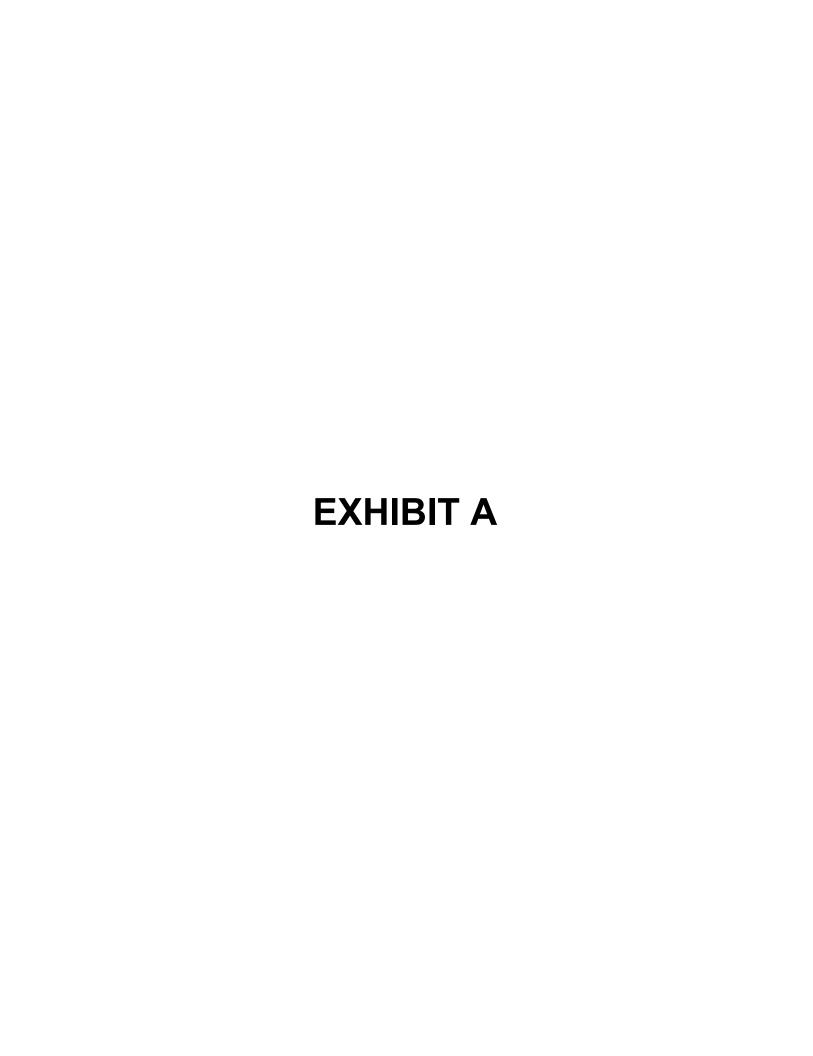
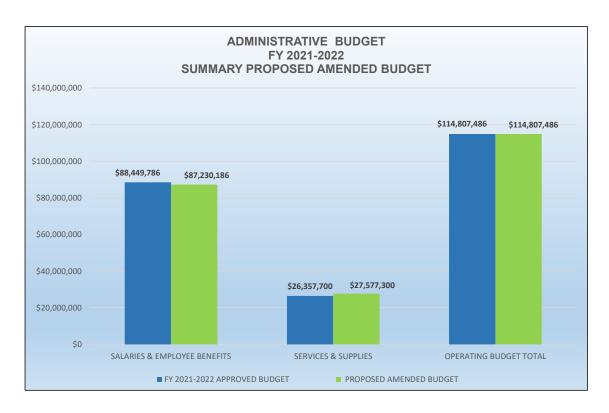


Exhibit A

FY 2021-2022 PROPOSED MID-YEAR BUDGET AMENDMENT FINANCIAL SUMMARIES

ADMINISTRATIVE BUDGET	FY 2021-2022 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
SALARIES & EMPLOYEE BENEFITS	\$88,449,786	(\$1,219,600)	\$87,230,186	-1.4%
SERVICES & SUPPLIES	\$26,357,700	\$1,219,600	\$27,577,300	4.6%
OPERATING BUDGET TOTAL	\$114,807,486	\$0	\$114,807,486	0.0%



PROPOSED AMENDED BUDGET BY DIVISION

DIVISION	FY 2021-2022 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
Administrative Services	\$13,946,034	(\$13,897)	\$13,932,137	-0.1%
Benefits	11,357,046	(253,203)	11,103,844	-2.2%
Board of Retirement	214,000	0	214,000	0.0%
Board of Investments	436,000	0	436,000	0.0%
Communications	3,295,291	0	3,295,291	0.0%
Disability Litigation	2,193,630	0	2,193,630	0.0%
Disability Retirement	9,897,398	0	9,897,398	0.0%
Executive Office	3,809,234	(246,288)	3,562,946	-6.5%
Financial & Accounting Services	4,340,488	0	4,340,488	0.0%
Human Resources	4,545,603	150,000	4,695,603	3.3%
Internal Audit	3,154,313	0	3,154,313	0.0%
Investment Office	16,458,019	0	16,458,019	0.0%
Legal Services	6,949,055	798,969	7,748,024	11.5%
Member Services	10,386,805	(359,675)	10,027,130	-3.5%
Quality Assurance	3,418,839	(223,523)	3,195,316	-6.5%
Systems	20,405,731	147,620	20,553,351	0.7%
TOTAL	\$114,807,486	\$0	\$114,807,486	0.0%

PROPOSED AMENDED BUDGET BY S&EB CATEGORY

S&EB CATEGORY	FY 2021-2022 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
SALARIES & OTHER PAYS				
Permanent / County Temporary	\$50,631,648	(\$1,251,255)	\$49,380,393	-2.5%
Agency Temporary	3,121,500	880,200	4,001,700	28.2%
LACERA Intern Program	312,000	0	312,000	0.0%
Stipends	65,000	0	65,000	0.0%
Overtime	877,000	11,900	888,900	1.4%
Bilingual Bonus	21,600	0	21,600	0.0%
Transportation Allowance	7,200	7,200	14,400	100.0%
Rideshare Allowance	70,300	0	70,300	0.0%
Sickleave Buyback	68,800	0	68,800	0.0%
Reserve For Remuneration	0	0	0	0.0%
TOTAL SALARIES & OTHER PAYS	\$55,175,048	(\$351,955)	\$54,823,093	-0.6%
VARIABLE BENEFITS				
Retirement	10,759,292	(201,113)	10,558,179	-1.9%
Fica Contribution	884,997	(18,146)	866,851	-2.1%
County Subsidy - Insurance	2,983,542	(130,440)	2,853,102	-4.4%
Options Plan	4,601,103	(179,069)	4,422,034	-3.9%
Life Insurance	18,341	(159)	18,182	-0.9%
Health Insurance Temps	353,089	(133,317)	219,772	-37.8%
Flexible Benefit Plan	26,074	(9,896)	16,178	-38.0%
Thrift Plan / Horizons	1,732,245	(50,059)	1,682,186	-2.9%
Savings Plan	1,253,606	(27,816)	1,225,790	-2.2%
Pension Savings Plan	37,462	0	37,462	0.0%
Megaflex	6,113,559	(117,628)	5,995,931	-1.9%
TOTAL VARIABLE BENEFITS	\$28,763,309	(\$867,643)	\$27,895,666	-3.0%
OPEB CONTRIBUTION	\$1,485,427	\$0	\$1,485,427	0.0%
OTHER BENEFITS	\$3,026,000	\$0	\$3,026,000	0.0%
TOTAL EMPLOYEE BENEFITS	\$33,274,736	(\$867,643)	\$32,407,093	-2.6%
TOTAL SALARIES & EMPLOYEE BENEFITS	\$88,449,786	(\$1,219,600)	\$87,230,186	-1.4%

PROPOSED AMENDED BUDGET BY S&S CATEGORY

S&S CATEGORY	FY 2021-2022 APPROVED BUDGET	MID-YEAR ADJUSTMENT AMOUNT	PROPOSED AMENDED BUDGET	% CHANGE
Auto Expenses	\$131,200	\$0	\$131,200	0.0%
Communications	925,000	(295,000)	630,000	-31.9%
Transportation & Travel	604,500	0	604,500	0.0%
Postage	991,400	0	991,400	0.0%
Stationery & Forms	645,300	0	645,300	0.0%
Office Supplies & Equipment	696,500	50,000	746,500	7.2%
Insurance	911,600	202,600	1,114,200	22.2%
Equipment Maintenance	612,800	(175,000)	437,800	-28.6%
Equipment Rents & Leases	277,000	0	277,000	0.0%
Building Costs	7,472,400	0	7,472,400	0.0%
Parking Fees	377,000	0	377,000	0.0%
Professional & Specialized Services	3,142,200	702,000	3,844,200	22.3%
Bank Services	200,500	0	200,500	0.0%
Legal Fees & Services	472,500	655,000	1,127,500	138.6%
Disability Fees & Services	2,665,500	0	2,665,500	0.0%
Computer Services & Support	4,609,100	80,000	4,689,100	1.7%
Educational Expenses	1,225,400	0	1,225,400	0.0%
Miscellaneous	397,800	0	397,800	0.0%
TOTAL	\$26,357,700	\$1,219,600	\$27,577,300	4.6%



FY 2021-2022 Mid-Year Administrative Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Mid-Year Amended Budget S&EB Grand Total	Change	% Change
Gross Salary (1)	\$ 50,631,648	\$ 49,380,393	\$ (1,251,255)	-2.5%
Salary Differential	-	-	-	
Permanent Salaries	\$ 50,631,648	\$ 49,380,393	\$ (1,251,255)	-2.5%
Outside Agency Temporary Staffing (2)	\$ 3,121,500	\$ 4,001,700	\$ 880,200	28.2%
LACERA Intern Program	\$ 312,000	\$ 312,000	\$ -	0.0%
Variable Benefits (3) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 10,759,292 884,997 2,983,542 4,601,103 18,341 353,089 26,074 1,732,245 1,253,606 37,462 6,113,559 28,763,309	\$ 10,558,179 866,851 2,853,102 4,422,034 18,182 219,772 16,178 1,682,186 1,225,790 37,462 5,995,931 27,895,666	\$ (201,113) (18,146) (130,440) (179,069) (159) (133,317) (9,896) (50,059) (27,816) - (117,628) (867,643)	-1.9% -2.1% -4.4% -3.9% -0.9% -37.8% -38.0% -2.9% -2.2% 0.0% -1.9% -3.0%
Other Benefits	\$ 3,026,000	\$ 3,026,000	\$ -	0.0%
OPEB Contribution	\$ 1,485,427	\$ 1,485,427	\$ -	0.0%
Stipends	\$ 65,000	\$ 65,000	\$ -	0.0%
Overtime (4)	\$ 877,000	\$ 888,900	\$ 11,900	1.4%
Bilingual Bonus	\$ 21,600	\$ 21,600	\$ -	0.0%
Reserves for Remuneration	\$ -	\$ -	\$ -	0.0%
Sickleave Buyback	\$ 68,800	\$ 68,800	\$ -	0.0%
Rideshare Allowance	\$ 70,300	\$ 70,300	\$ -	0.0%
Transportation Allowance (5)	\$ 7,200	\$ 14,400	\$ 7,200	100.0%
S&EB GRAND TOTAL	\$ 88,449,786	\$ 87,230,186	\$ (1,219,600)	-1.4%

- Reflects a reduction in the use of Permanent Salaries due to salary savings from hiring plan changes/recruitment delays.

 Reflects an addition in the use of Agency Temporary staff due to recruitment delays. The reliance of temporary staff is critical to mitigate any 2 interruption of LACERA operations.
- 3 Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.
- Reflects an addition in the use of Overtime to cover the workload during the periods before a temp is hired due to additional staff on leave.
- Reflects an addition in the use of Transportation Allowance for the Chief Executive Officer for not utilizing a LACERA vehicle.

FY 2021-2022 Mid-Year Administrative Budget Adjustment Services and Supplies

Description		FY 2021-2022 Approved Budget		Mid-Year Amended Budget S&S Grand Total		Change	% Change
Auto Expenses	¢.	131,200	\$	131,200	œ		0.0%
Communications (1)	φ	925,000	\$	630,000	\$	(295,000)	-31.9%
Transportation and Travel	φ	604,500	\$	604,500		(293,000)	0.0%
Postage	φ	991,400	\$	991,400		-	0.0%
Stationery and Forms	φ	645,300	\$	645,300		-	0.0%
Office Supplies and Equipment (2)	φ	696,500	\$	746,500	\$	50,000	7.2%
Insurance (3)	φ	911,600	\$	1,114,200	\$	202,600	22.2%
Equipment Maintenance (4)	φ	612,800		437,800	-	(175,000)	-28.6%
	φ	,	\$,		(175,000)	0.0%
Equipment Rents and Leases	ф	277,000	\$	277,000	\$	-	
Building Costs	\$	7,472,400	\$	7,472,400		-	0.0%
Parking Fees	\$	377,000	\$	377,000	\$	-	0.0%
Professional and Specialized Services (5)	\$	3,142,200	\$	3,844,200	\$	702,000	22.3%
Bank Services	\$	200,500	\$	200,500	\$	-	0.0%
Legal Fees and Services (6)	\$	472,500	\$	1,127,500	\$	655,000	138.6%
Disability Fees and Services	\$	2,665,500	\$	2,665,500	\$	· <u>-</u>	0.0%
Computer Services and Support (7)	\$	4,609,100	\$	4,689,100		80,000	1.7%
Educational Expenses	\$	1,225,400	\$	1,225,400	\$	-	0.0%
Miscellaneous	\$	397,800		397,800	\$	-	0.0%
S&S GRAND TOTAL	\$	26,357,700	-	27,577,300	\$	1,219,600	4.6%

- Reflects a reduction in Communications for Telephone System Supplies and Maintenance.
- 2 Reflects an addition in Office Supplies and Equipment for docking stations.
- Reflects an addition in Insurance due to Cyber Liability insurance premium increase.
- 4 Reflects a reduction in Equipment Maintenance for LAN Hardware Maintenance and Equipment Maintenance-UPS-Server Room.
- 5 Reflects an addition in Professional and Specialized Services for COVID testing, Centera Upgrade (LACERA Write Once Read Many storage replacement), AWS Connect Hosting, and Cloud Migration.
- 6 Reflects an addition in Legal Fees and Services for Outside Legal Counsel due to addition of 2-3 special Executive Office and Board level
- 7 Reflects an addition in Computer Services and Support for Microsoft Tenant Migration.

Summary of FY 2021-2022 Mid-Year Administrative Budget Adjustment

	F	Y 2021-2022	Mid-Year		
		Approved	Amended Budget		%
Description		Budget	Grand Total	Change	Change
Salaries and Employee Benefits	\$	88,449,786	\$ 87,230,186	\$ (1,219,600)	-1.4%
Services and Supplies	\$	26,357,700	\$ 27,577,300	\$ 1,219,600	4.6%
	\$	114,807,486	\$ 114,807,486	\$ 0	0.0%

Summary of FY 2021-2022 Mid-Year Administrative Budget Adjustment **Budgeted Positions**

Budgeted Positions	FY 2021-2022 Approved Budget	Mid-Year Amended Budget Grand Total # of Pos.	Change	% Change
Approved	474.0	474.0	0.0	0.0%

^{*}All amounts rounded to the nearest dollar.

Board of Retirement FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget		oposed ar Adjustment	Proposed d Budget Amount	% Change
Gross Salary	\$	-	\$ -	\$ -	0.0%
Salary Differential		-	-	-	0.0%
Permanent Salaries	\$	-	\$ -	\$ -	0.0%
Outside Agency Temporary Staffing	\$	-	\$ -	\$ -	0.0%
LACERA Intern Program	\$	-	\$ -	\$ -	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$		\$ - - - - - - - -	\$ - - - - - - - - - -	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$	-	\$ -	\$ -	0.0%
OPEB Contribution	\$	-	\$ -	\$ -	0.0%
Stipends	\$	-	\$ -	\$ -	0.0%
Overtime	\$	-	\$ -	\$ -	0.0%
Bilingual Bonus	\$	-	\$ -	\$ -	0.0%
Reserves for Remuneration	\$	-	\$ -	\$ -	0.0%
Sickleave Buyback	\$	-	\$ -	\$ -	0.0%
Rideshare Allowance	\$	-	\$ -	\$ -	0.0%
Transportation Allowance	\$	-	\$ -	\$ -	0.0%
S&EB GRAND TOTAL	\$	-	\$ -	\$ -	0.0%

Board of Retirement FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Mid-Year Adjustment Budget Description Amended Budget Amount Change 0.0% Auto Expenses \$ \$ \$ Communications \$ \$ \$ 0.0% Transportation and Travel \$ 85,000 \$ \$ 85,000 0.0% \$ 0.0% Postage \$ \$ Stationery and Forms \$ \$ \$ 0.0% Office Supplies and Equipment 0.0% \$ \$ \$ Insurance \$ \$ \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ \$ \$ 0.0% Building Costs \$ \$ \$ 0.0% 0.0% Parking Fees \$ \$ \$ Professional and Specialized Services \$ \$ \$ 0.0% **Bank Services** \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% Computer Services and Support \$ \$ 0.0% \$ **Educational Expenses** \$ 82,000 \$ 82,000 0.0% Miscellaneous 47,000 \$ 47,000 0.0%

Board of Retirement Summary of FY 2021-2022 Mid-Year Budget Adjustment

214,000 \$

\$

\$

214,000

0.0%

FY 2021-2022

\$

\$

Description	Approved Budget	Proposed Year Adjustment	Amend	Proposed ded Budget Amount	% Change
Salaries and Employee Benefits	\$ -	\$ -	\$	-	0.0%
Services and Supplies	\$ 214,000	\$ -	\$	214,000	0.0%
	\$ 214,000	\$ -	\$	214,000	0.0%

^{*}All amounts rounded to the nearest dollar.

S&S GRAND TOTAL

Board of Investments FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget		Proposed Mid-Year Adjust	ment	Proposed Amended Budget	Amount	% Change
Gross Salary	\$	-	\$	-	\$	-	0.0%
Salary Differential		-		-		-	0.0%
Permanent Salaries	\$	-	\$	-	\$	-	0.0%
Outside Agency Temporary Staffing	\$	-	\$	-	\$	-	0.0%
LACERA Intern Program	\$	-	\$	-	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$		\$	-	\$	-	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$	-	\$	-	\$	-	0.0%
OPEB Contribution	\$	-	\$	-	\$	-	0.0%
Stipends	\$	-	\$	-	\$	-	0.0%
Overtime	\$	-	\$	-	\$	-	0.0%
Bilingual Bonus	\$	-	\$	-	\$	-	0.0%
Reserves for Remuneration	\$	-	\$	-	\$	-	0.0%
Sickleave Buyback	\$	-	\$	-	\$	-	0.0%
Rideshare Allowance	\$	-	\$	-	\$	-	0.0%
Transportation Allowance	\$	-	\$	-	\$	-	0.0%
S&EB GRAND TOTAL	\$	-	\$	-	\$	-	0.0%

Board of Investments FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Mid-Year Adjustment Amended Budget Amount Budget Change Description Auto Expenses 0.0% \$ \$ \$ 0.0% Communications \$ \$ \$ Transportation and Travel \$ 220,000 \$ \$ 220,000 0.0% \$ \$ 0.0% Postage \$ Stationery and Forms \$ \$ \$ 0.0% 0.0% Office Supplies and Equipment \$ \$ \$ Insurance \$ \$ \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ 0.0% \$ \$ Building Costs \$ \$ \$ 0.0% Parking Fees 0.0% \$ \$ \$ Professional and Specialized Services \$ \$ \$ 0.0% **Bank Services** \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% Computer Services and Support \$ \$ 0.0% \$ **Educational Expenses** \$ 150,000 \$ 150,000 0.0% Miscellaneous 66,000 66,000 0.0% \$ \$ \$

Board of Investments Summary of FY 2020-21 Mid-Year Budget Adjustment

\$

436,000

0.0%

436,000 \$

FY 2021-2022

\$

Description	Approved Budget	Mic	Proposed d-Year Adjustment	Ame	Proposed ended Budget Amount	% Change
Salaries and Employee Benefits	\$ -	\$	-	\$	-	0.0%
Services and Supplies	\$ 436,000	\$	-	\$	436,000	0.0%
	\$ 436,000	\$	-	\$	436,000	0.0%

^{*}All amounts rounded to the nearest dollar.

S&S GRAND TOTAL

Administrative Services FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Ar	Proposed mended Budget Amount	% Change
Gross Salary (1)	\$ 2,477,204	\$ (370,924)	\$	2,106,280	-15.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 2,477,204	\$ (370,924)	\$	2,106,280	-15.0%
Outside Agency Temporary Staffing (2)	\$ 202,000	\$ 385,000	\$	587,000	190.6%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (3) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 501,641 35,578 65,106 582,272 1,525 - 26,074 73,610 17,419 - 58,980	\$ (59,517) (5,370) (37,036) (83,073) (83) - (9,896) (14,815) (3,959) - (16,824) (230,574)		442,123 30,208 28,069 499,198 1,442 - 16,178 58,795 13,461 - 42,157	-11.9% -15.1% -56.9% -14.3% -5.5% 0.0% -38.0% -20.1% -22.7% 0.0% -28.5% -16.9%
Other Benefits	\$ 148,050	\$ -	\$	148,050	0.0%
OPEB Contribution	\$ 72,676	\$ -	\$	72,676	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 50,000	\$ -	\$	50,000	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 7,300	\$ -	\$	7,300	0.0%
Rideshare Allowance	\$ 6,900	\$ -	\$	6,900	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 4,326,334	\$ (216,497)	\$	4,109,837	-5.0%

¹ Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

Reflects an addition in the use of Outside Agency Temporary staff for current vacant positions due to recruitment delays. The reliance of temporary staff is critical and essential to Administrative Services' current operation in order to mitigate any delays in projects, document processing for members, etc. during this fiscal year.

Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Administrative Services FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022

	Approved	Proposed		Proposed	%	
Description	Budget	Mid-Year Adjustment	Am	nended Budget Amount	Change	
Auto Expenses	\$ 111,500	\$ -	\$	111,500		0.0%
Communications	\$ -	\$ -	\$	-		0.0%
Transportation and Travel	\$ 8,000	\$ -	\$	8,000		0.0%
Postage	\$ 301,400	\$ -	\$	301,400		0.0%
Stationery and Forms	\$ 3,800	\$ -	\$	3,800		0.0%
Office Supplies and Equipment	\$ 288,500	\$ -	\$	288,500		0.0%
Insurance (1)	\$ 911,600	\$ 202,600	\$	1,114,200	2	22.2%
Equipment Maintenance	\$ 3,300	\$ -	\$	3,300		0.0%
Equipment Rents and Leases	\$ 277,000	\$ -	\$	277,000		0.0%
Building Costs	\$ 7,472,400	\$ -	\$	7,472,400		0.0%
Parking Fees	\$ -	\$ -	\$	-		0.0%
Professional and Specialized Services	\$ 221,000	\$ -	\$	221,000		0.0%
Bank Services	\$ -	\$ -	\$	-		0.0%
Legal Fees and Services	\$ -	\$ -	\$	-		0.0%
Disability Fees and Services	\$ -	\$ -	\$	-		0.0%
Computer Services and Support	\$ -	\$ -	\$	-		0.0%
Educational Expenses	\$ 7,700	\$ -	\$	7,700		0.0%
Miscellaneous	\$ 13,500	\$ -	\$	13,500		0.0%
S&S GRAND TOTAL	\$ 9,619,700	\$ 202,600	\$	9,822,300		2.1%

Reflects an addition for Insurance due to Cyber Liability insurance premium increase.

Administrative Services Summary of FY 2021-2022 Mid-Year Budget Adjustment

FY 2021-2022

Description	Approved Budget	١	Proposed Mid-Year Adjustment	Amend	Proposed led Budget Amount	% Change
Salaries and Employee Benefits	\$ 4,326,334	\$	(216,497)	\$	4,109,837	-5.0%
Services and Supplies	\$ 9,619,700	\$	202,600	\$	9,822,300	2.1%
	\$ 13,946,034	\$	(13,897)	\$	13,932,137	-0.1%

Budgeted Positions	Administrative Services
Approved	37.0
Addition/(Deletion)	
Final Budgeted Positions Requested	37.0

^{*}All amounts rounded to the nearest dollar.

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Benefits Division FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary (1)	\$ 6,264,311	\$ (109,331)	\$	6,154,980	-1.7%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 6,264,311	\$ (109,331)	\$	6,154,980	-1.7%
Outside Agency Temporary Staffing	\$ 71,900	\$ -	\$	71,900	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (2) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 1,529,224 112,150 193,180 1,447,638 6,959 164,713 - 238,839 33,650 14,954 220,659 3,961,966	(17,569) (1,585) (17,493) (36,921) (29) (65,900) - (4,373) - - (143,872)		1,511,654 110,565 175,687 1,410,717 6,929 98,813 - 234,466 33,650 14,954 220,659 3,818,095	-1.1% -1.4% -9.1% -2.6% -0.4% -40.0% 0.0% -1.8% 0.0% 0.0% -3.6%
Other Benefits	\$ 374,387	\$ -	\$	374,387	0.0%
OPEB Contribution	\$ 183,782	\$ -	\$	183,782	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 398,000	\$ -	\$	398,000	0.0%
Bilingual Bonus	\$ 2,400	\$ -	\$	2,400	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 12,000	\$ -	\$	12,000	0.0%
Rideshare Allowance	\$ 16,300	\$ -	\$	16,300	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 11,285,046	\$ (253,203)	\$	11,031,844	-2.2%

¹ Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

² Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Benefits Division FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Budget Mid-Year Adjustment Amended Budget Amount Change Description \$ \$ 0.0% Auto Expenses \$ 0.0% Communications \$ \$ \$ Transportation and Travel \$ 6.500 \$ \$ 6,500 0.0% \$ \$ 0.0% Postage \$ Stationery and Forms \$ \$ \$ 0.0% 3,400 3,400 0.0% Office Supplies and Equipment \$ \$ \$ Insurance \$ \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ 0.0% \$ \$ Building Costs \$ \$ \$ 0.0% Parking Fees 0.0% \$ \$ \$ Professional and Specialized Services \$ 46,000 \$ \$ 46,000 0.0% Bank Services \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% Computer Services and Support \$ \$ \$ 0.0% **Educational Expenses** \$ 14,600 \$ \$ 14,600 0.0% Miscellaneous 1,500 1,500 0.0% \$ \$ 72,000 S&S GRAND TOTAL \$ 72,000 0.0%

Benefits Division Summary of FY 2021-2022 Mid-Year Budget Adjustment

Description	Approved Budget	١	Proposed Mid-Year Adjustment	Am	Proposed ended Budget Amount	% Change	
Salaries and Employee Benefits	\$ 11,285,046	\$	(253,203)	\$	11,031,844	-2.2	2%
Services and Supplies	\$ 72,000	\$	-	\$	72,000	0.0	0%
	\$ 11,357,046	\$	(253,203)	\$	11,103,844	-2.2	2%

Budgeted Positions	Benefits
Approved	78.0
Addition/(Deletion)	
Final Budgeted Positions Requested	78.0

^{*}All amounts rounded to the nearest dollar.

Communications FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary	\$ 1,290,318	\$ -	\$	1,290,318	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,290,318	\$ -	\$	1,290,318	0.0%
Outside Agency Temporary Staffing	\$ 79,600	\$ -	\$	79,600	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 273,130 20,337 100,031 194,905 126 - - 40,215 20,557 - 111,000 760,302	- - - - - - -	\$	273,130 20,337 100,031 194,905 126 - - 40,215 20,557 - 111,000 760,302	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 77,116	\$ -	\$	77,116	0.0%
OPEB Contribution	\$ 37,855	\$ -	\$	37,855	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 4,100	\$ -	\$	4,100	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 3,500	\$ -	\$	3,500	0.0%
Rideshare Allowance	\$ 1,000	\$ -	\$	1,000	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 2,253,791	\$ -	\$	2,253,791	0.0%

Communications FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-202

	Approved	Proposed		Proposed	%	
Description	Budget	Mid-Year Adjustment	Α	mended Budget Amoun	t Change	
Auto Expenses	\$ -	\$ -	\$	-		0.0%
Communications	\$ -	\$ -	\$	-		0.0%
Transportation and Travel	\$ 7,500	\$ -	\$	7,500)	0.0%
Postage	\$ 300,000	\$ -	\$	300,000)	0.0%
Stationery and Forms	\$ 641,500	\$ -	\$	641,500)	0.0%
Office Supplies and Equipment	\$ 5,000	\$ -	\$	5,000)	0.0%
Insurance	\$ -	\$ -	\$	-		0.0%
Equipment Maintenance	\$ -	\$ -	\$	-		0.0%
Equipment Rents and Leases	\$ -	\$ -	\$	-		0.0%
Building Costs	\$ -	\$ -	\$	-		0.0%
Parking Fees	\$ -	\$ -	\$	-		0.0%
Professional and Specialized Services	\$ 62,000	\$ -	\$	62,000)	0.0%
Bank Services	\$ -	\$ -	\$	-		0.0%
Legal Fees and Services	\$ -	\$ -	\$	-		0.0%
Disability Fees and Services	\$ -	\$ -	\$	-		0.0%
Computer Services and Support	\$ 14,500	\$ -	\$	14,500)	0.0%
Educational Expenses	\$ 10,400	\$ -	\$	10,400)	0.0%
Miscellaneous	\$ 600	\$ -	\$	600)	0.0%
S&S GRAND TOTAL	\$ 1,041,500	\$ -	\$	1,041,500		0.0%

Communications Summary of FY 2021-2022 Mid-Year Budget Adjustment

Description	Approved Budget	Mid	Proposed -Year Adjustment	Amer	Proposed oded Budget Amount	% Change	
Salaries and Employee Benefits	\$ 2,253,791	\$	-	\$	2,253,791		0.0%
Services and Supplies	\$ 1,041,500	\$	-	\$	1,041,500		0.0%
	\$ 3,295,291	\$	-	\$	3,295,291		0.0%

Budgeted Positions	Communications
Approved	14.0
Addition/(Deletion)	
Final Budgeted Positions Requested	14.0

^{*}All amounts rounded to the nearest dollar.

Disability Litigation FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary	\$ 1,294,960	\$ -	\$	1,294,960	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,294,960	\$ -	\$	1,294,960	0.0%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 284,511 21,408 89,703 - - - 53,535 63,497 - 217,232 729,886	- - - - - - - - -	\$	284,511 21,408 89,703 - - - 53,535 63,497 - 217,232 729,886	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 77,393	\$ -	\$	77,393	0.0%
OPEB Contribution	\$ 37,991	\$ -	\$	37,991	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ -	\$ -	\$	-	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 900	\$ -	\$	900	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 2,141,130	\$ -	\$	2,141,130	0.0%

Disability Litigation FY 2021-2022 Mid-Year Budget Adjustment **Services and Supplies**

FY			

	Approved	Proposed		Proposed	%	
Description	Budget	Mid-Year Adjustment	An	nended Budget Amount	Change	
Auto Expenses	\$ 3,000	\$ -	\$	3,000	0	.0%
Communications	\$ -	\$ -	\$	-	0	.0%
Transportation and Travel	\$ 6,800	\$ -	\$	6,800	0	.0%
Postage	\$ -	\$ -	\$	-	0	.0%
Stationery and Forms	\$ -	\$ -	\$	-	0	.0%
Office Supplies and Equipment	\$ 1,500	\$ -	\$	1,500	0	.0%
Insurance	\$ -	\$ -	\$	-	0	.0%
Equipment Maintenance	\$ -	\$ -	\$	-	0	.0%
Equipment Rents and Leases	\$ -	\$ -	\$	-	0	.0%
Building Costs	\$ -	\$ -	\$	-	0	.0%
Parking Fees	\$ -	\$ -	\$	-	0	.0%
Professional and Specialized Services	\$ -	\$ -	\$	-	0	.0%
Bank Services	\$ -	\$ -	\$	-	0	.0%
Legal Fees and Services	\$ 7,500	\$ -	\$	7,500	0	.0%
Disability Fees and Services	\$ -	\$ -	\$	-	0	.0%
Computer Services and Support	\$ -	\$ -	\$	-	0	.0%
Educational Expenses	\$ 33,000	\$ -	\$	33,000	0	.0%
Miscellaneous	\$ 700	\$ -	\$	700	0	.0%
S&S GRAND TOTAL	\$ 52,500	\$ -	\$	52,500	0	.0%

Disability Litigation Summary of FY 2021-2022 Mid-Year Budget Adjustment

	FY 2021-2022						
	Approved		Proposed		Proposed	%	
Description	Budget		Mid-Year Adjustment	Ar	mended Budget Amount	Change	
Salaries and Employee Benefits	\$ 2,141,130	\$	-	\$	2,141,130		0.0%
Services and Supplies	\$ 52,500	\$	-	\$	52,500		0.0%
	\$ 2,193,630	\$	-	\$	2,193,630		0.0%
Budgeted Positions	 Disability Litigation	_					
Approved	7.0						
Addition/(Deletion)							
Final Budgeted Positions Requested	 7.0	-					

^{*}All amounts rounded to the nearest dollar.

Disability Retirement FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary	\$ 3,971,485	\$ -	\$	3,971,485	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 3,971,485	\$ -	\$	3,971,485	0.0%
Outside Agency Temporary Staffing	\$ 143,000	\$ -	\$	143,000	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 975,679 64,826 368,275 296,468 1,184 - - 121,173 93,371 - 546,466 2,467,442	- - - - - - - -	\$	975,679 64,826 368,275 296,468 1,184 - - 121,173 93,371 - 546,466 2,467,442	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 237,356	\$ -	\$	237,356	0.0%
OPEB Contribution	\$ 116,515	\$ -	\$	116,515	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 16,100	\$ -	\$	16,100	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 6,000	\$ -	\$	6,000	0.0%
Rideshare Allowance	\$ 4,500	\$ -	\$	4,500	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 6,962,398	\$ -	\$	6,962,398	0.0%

Disability Retirement FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Budget	Proposed ′ear Adjustment	Ame	Proposed nded Budget Amount	% Change	
\$ -	\$ _	\$	_	0	0.0%
\$ =	\$ -	\$	-		0.0%
\$ 8,000	\$ -	\$	8,000	0	0.0%
\$ -	\$ -	\$	-	0	0.0%
\$ -	\$ -	\$	-	0	0.0%
\$ 6,000	\$ -	\$	6,000	0	0.0%
\$ -	\$ -	\$	-	0	0.0%
\$ -	\$ -	\$	-	0	0.0%
\$ =	\$ -	\$	-	0	0.0%

\$

\$

\$

224,500

20,000

10,700

300

2,665,500

2,935,000

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

0.0%

Disability Retirement Summary of FY 2021-2022 Mid-Year Budget Adjustment

224,500

2,665,500

20,000 \$

10,700 \$

2,935,000 \$

300 \$

\$

FY 2021-2022

\$

\$

\$ \$ \$

\$

\$

\$

	F.	Y 2021-2022						
		Approved		Proposed		Proposed	%	
Description		Budget		Mid-Year Adjustment	Amen	ded Budget Amount	Change	
Salaries and Employee Benefits	\$	6,962,398	\$	-	\$	6,962,398		0.0%
Services and Supplies	\$	2,935,000	\$	-	\$	2,935,000		0.0%
	\$	9,897,398	\$	-	\$	9,897,398		0.0%
		Disability						
Budgeted Positions		Retirement	_					
Approved		41.0						
Addition/(Deletion)								
Final Budgeted Positions Requested		41.0	- =					

^{*}All amounts rounded to the nearest dollar.

Description

Auto Expenses
Communications
Transportation and Travel

Postage

Stationery and Forms
Office Supplies and Equipment

Equipment Maintenance Equipment Rents and Leases

Legal Fees and Services

Educational Expenses

S&S GRAND TOTAL

Disability Fees and Services

Computer Services and Support

Professional and Specialized Services

Building Costs

Parking Fees

Bank Services

Miscellaneous

Executive Office FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Ame	Proposed ended Budget Amount	% Change
Gross Salary (1)	\$ 2,073,672	\$ (165,117)	\$	1,908,555	-8.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 2,073,672	\$ (165,117)	\$	1,908,555	-8.0%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (2) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 399,754 34,225 203,412 - - - 67,617 77,773 - 357,209 1,139,992	(26,534) (2,394) (18,163) - - - (6,605) (6,605) (6,605) - (28,070) (88,371)		373,220 31,831 185,249 - - - - 61,013 71,169 - 329,139 1,051,621	-6.6% -7.0% -8.9% 0.0% 0.0% 0.0% -9.8% -8.5% 0.0% -7.9%
Other Benefits	\$ 123,933	\$ -	\$	123,933	0.0%
OPEB Contribution	\$ 60,837	\$ -	\$	60,837	0.0%
Stipends	\$ 65,000	\$ -	\$	65,000	0.0%
Overtime	\$ 25,600	\$ -	\$	25,600	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 1,400	\$ -	\$	1,400	0.0%
Transportation Allowance (3)	\$ -	\$ 7,200	\$	7,200	0.0%
S&EB GRAND TOTAL	\$ 3,490,434	\$ (246,288)	\$	3,244,146	-7.1%

Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

² Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Reflects an addition in the use of Transportation Allowance for the Chief Executive Officer for not utilizing a LACERA vehicle.

Executive Office FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

	FY 2021-2022 Approved	Proposed		Proposed	%	
Description	Budget	Mid-Year Adjustment	Α	mended Budget Amount	Change	
Auto Expenses	\$ 12,300	\$ -	\$	12,300		0.0%
Communications	\$ -	\$ -	\$	-		0.0%
Transportation and Travel	\$ 17,000	\$ -	\$	17,000		0.0%
Postage	\$ -	\$ -	\$	-		0.0%
Stationery and Forms	\$ -	\$ -	\$	-		0.0%
Office Supplies and Equipment	\$ 4,500	\$ -	\$	4,500		0.0%
Insurance	\$ -	\$ -	\$	-		0.0%
Equipment Maintenance	\$ -	\$ -	\$	-		0.0%
Equipment Rents and Leases	\$ -	\$ -	\$	-		0.0%
Building Costs	\$ -	\$ -	\$	-		0.0%
Parking Fees	\$ -	\$ -	\$	-		0.0%
Professional and Specialized Services	\$ 205,000	\$ -	\$	205,000		0.0%
Bank Services	\$ -	\$ -	\$	-		0.0%
Legal Fees and Services	\$ =	\$ -	\$	-		0.0%
Disability Fees and Services	\$ -	\$ -	\$	-		0.0%
Computer Services and Support	\$ -	\$ -	\$	-		0.0%
Educational Expenses	\$ 64,000	\$ -	\$	64,000		0.0%
Miscellaneous	\$ 16,000	\$ -	\$	16,000		0.0%
S&S GRAND TOTAL	\$ 318,800	\$ -	\$	318,800		0.0%

Executive Office Summary of FY 2021-2022 Mid-Year Budget Adjustment

% Change		Proposed Amended Budget Amount		Proposed Mid-Year Adjustment		Approved Budget	Description	
-7.1%		3,244,146	\$	(246,288)	\$	3,490,434	\$ Salaries and Employee Benefits	
0.0%		318,800	\$	-	\$	318,800	\$ Services and Supplies	
-6.5%		3,562,946	\$	(246,288)	\$	3,809,234	\$	
_			<u> </u>				\$ correct and supplied	

Budgeted Positions	Executive Office			
Approved	14.0			
Addition/(Deletion)				
Final Budgeted Positions Requested	14.0			

^{*}All amounts rounded to the nearest dollar.

Financial and Accounting Services FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Am	Proposed nended Budget Amount	% Change
Gross Salary	\$ 1,942,091	\$ -	\$	1,942,091	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,942,091	\$ -	\$	1,942,091	0.0%
Outside Agency Temporary Staffing	\$ 729,400	\$ -	\$	729,400	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 475,607 33,541 43,865 460,739 2,075 - - 84,267 14,054 - 54,403	- - - - - - -	\$	475,607 33,541 43,865 460,739 2,075 - - 84,267 14,054 - 54,403	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 116,069	\$ -	\$	116,069	0.0%
OPEB Contribution	\$ 56,977	\$ -	\$	56,977	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 67,900	\$ -	\$	67,900	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 12,000	\$ -	\$	12,000	0.0%
Rideshare Allowance	\$ 7,500	\$ -	\$	7,500	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 4,100,488	\$ -	\$	4,100,488	0.0%

Financial and Accounting Services FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

		FY 2021-2022						
		Approved		Proposed		Proposed	%	
Description		Budget		Mid-Year Adjustment	P	mended Budget Amount	Change	
Auto Formania	•		•		•			0.00/
Auto Expenses	\$	-	\$	-	\$	-		0.0%
Communications	\$	-	\$	-	\$	-		0.0%
Transportation and Travel	\$	14,000	\$	-	\$	14,000		0.0%
Postage	\$	-	\$	-	\$	-		0.0%
Stationery and Forms	\$	-	\$	-	\$	-		0.0%
Office Supplies and Equipment	\$	3,500	\$	=	\$	3,500		0.0%
Insurance	\$	-	\$	-	\$	-		0.0%
Equipment Maintenance	\$	=	\$	=	\$	-		0.0%
Equipment Rents and Leases	\$	=	\$	=	\$	-		0.0%
Building Costs	\$	-	\$	-	\$	-		0.0%
Parking Fees	\$	-	\$	-	\$	-		0.0%
Professional and Specialized Services	\$	-	\$	-	\$	-		0.0%
Bank Services	\$	200,500	\$	-	\$	200,500		0.0%
Legal Fees and Services	\$	-	\$	-	\$	-		0.0%
Disability Fees and Services	\$	=	\$	=	\$	-		0.0%
Computer Services and Support	\$	-	\$	-	\$	-		0.0%
Educational Expenses	\$	19,000	\$	=	\$	19,000		0.0%
Miscellaneous	\$	3,000	\$	-	\$	3,000		0.0%
S&S GRAND TOTAL	\$	240,000	\$	=	\$	240,000		0.0%

Financial and Accounting Services Summary of FY 2021-2022 Mid-Year Budget Adjustment

Description	FY 2021-2022 Approved Budget	N	Proposed Mid-Year Adjustment	Ame	Proposed nded Budget Amount	% Change
Salaries and Employee Benefits	\$ 4,100,488	\$	-	\$	4,100,488	0.0%
Services and Supplies	\$ 240,000	\$	-	\$	240,000	0.0%
	\$ 4,340,488	\$	-	\$	4,340,488	0.0%

Budgeted Positions	Financial & Accounting Svcs.
Approved	30.0
Addition/(Deletion)	
Final Budgeted Positions Requested	30.0

^{*}All amounts rounded to the nearest dollar.

Human Resources FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Am	Proposed nended Budget Amount	% Change
Gross Salary	\$ 1,513,977	\$ -	\$	1,513,977	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,513,977	\$ -	\$	1,513,977	0.0%
Outside Agency Temporary Staffing	\$ 47,700	\$ -	\$	47,700	0.0%
LACERA Intern Program	\$ 312,000		\$	312,000	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 377,830 25,509 122,504 - - - - 49,425 66,289 - 271,568 913,126	\$ - - - - - - - - -	\$	377,830 25,509 122,504 - - - - 49,425 66,289 - 271,568 913,126	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 90,483	\$ -	\$	90,483	0.0%
OPEB Contribution	\$ 44,417	\$ -	\$	44,417	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 2,900	\$ -	\$	2,900	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 1,700	\$ -	\$	1,700	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 2,926,303	\$ -	\$	2,926,303	0.0%

Human Resources FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Budget Mid-Year Adjustment Amended Budget Amount Description Change 0.0% Auto Expenses \$ \$ \$ Communications \$ \$ \$ 0.0% Transportation and Travel \$ 9.000 \$ \$ 9,000 0.0% \$ 0.0% Postage \$ \$ Stationery and Forms \$ \$ \$ 0.0% Office Supplies and Equipment 8,000 8,000 0.0% \$ \$ \$ Insurance \$ \$ \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ \$ \$ 0.0% **Building Costs** \$ \$ 0.0% \$ Parking Fees 0.0% \$ 377,000 377,000 \$ \$ Professional and Specialized Services (1) \$ 425,800 150,000 \$ 575,800 35.2% Bank Services \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% 55,000 Computer Services and Support \$ 55,000 \$ \$ 0.0% **Educational Expenses** \$ 512,000 \$ \$ 512,000 0.0% Miscellaneous 232,500 232,500 0.0% \$ \$

150,000

1,769,300

9.3%

Human Resources Summary of FY 2021-2022 Mid-Year Budget Adjustment

FY 2021-2022

1,619,300

\$

Description	Approved Budget		Proposed ear Adjustment		Proposed d Budget Amount	% Change	
Salaries and Employee Benefits	\$ 2,926,303	\$	-	\$	2,926,303		0.0%
Services and Supplies	\$ 1,619,300	\$	150,000	\$	1,769,300		9.3%
	\$ 4,545,603	\$	150,000	\$	4,695,603		3.3%
	 	·		•			

Budgeted Positions	Human Resources
Approved	15.0
Addition/(Deletion)	
Final Budgeted Positions Requested	15.0

^{*}All amounts rounded to the nearest dollar.

S&S GRAND TOTAL

Reflects an addition in the use of Professional and Specialized Service for Organizational Programs for COVID-19 testing due to workplace exposures and weekly testing for staff members who are not vaccinated.

Internal Audit Services FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary	\$ 1,454,721	\$ -	\$	1,454,721	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,454,721	\$ -	\$	1,454,721	0.0%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 335,340 26,378 96,629 - - - - 58,959 63,665 - 262,100 843,072	- - - - - - - - -	\$	335,340 26,378 96,629 - - - - 58,959 63,665 - 262,100 843,072	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 86,941	\$ -	\$	86,941	0.0%
OPEB Contribution	\$ 42,678	\$ -	\$	42,678	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 4,900	\$ -	\$	4,900	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 1,500	\$ -	\$	1,500	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 2,433,813	\$ -	\$	2,433,813	0.0%

Internal Audit Services FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Budget Amended Budget Amount Mid-Year Adjustment Change Description 0.0% Auto Expenses \$ \$ \$ 0.0% Communications \$ \$ \$ Transportation and Travel \$ 17,000 \$ \$ 17,000 0.0% \$ \$ 0.0% Postage \$ Stationery and Forms \$ \$ \$ 0.0% 1,500 0.0% Office Supplies and Equipment \$ 1,500 \$ \$ Insurance \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ \$ 0.0% \$ Building Costs \$ \$ \$ 0.0% Parking Fees 0.0% \$ \$ Professional and Specialized Services \$ 671,000 \$ \$ 671,000 0.0% Bank Services \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% \$ Computer Services and Support \$ \$ 0.0% \$ **Educational Expenses** 30,500 \$ 30,500 0.0% Miscellaneous 500 500 0.0% \$ \$ S&S GRAND TOTAL \$ 720,500 720,500 0.0%

Internal Audit Services Summary of FY 2021-2022 Mid-Year Budget Adjustment

	FY 2021-2022						
	Approved		Proposed		Proposed	%	
Description	Budget		Mid-Year Adjustment	Ame	nded Budget Amount	Change	
Salaries and Employee Benefits	\$ 2,433,813	\$	-	\$	2,433,813		0.0%
Services and Supplies	\$ 720,500	\$	-	\$	720,500		0.0%
	\$ 3,154,313	\$	-	\$	3,154,313		0.0%
Budgeted Positions	 Internal Audit	_					
Approved	11.0						
Addition/(Deletion)							
Final Budgeted Positions Requested	 11.0	_					

^{*}All amounts rounded to the nearest dollar.

Investment Office FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Ar	Proposed mended Budget Amount	% Change
Gross Salary	\$ 10,263,564	\$ -	\$	10,263,564	0.0%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 10,263,564	\$ -	\$	10,263,564	0.0%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 1,584,170 196,259 657,236 - - - 317,034 375,423 - 1,868,119 4,998,241	- - - - - - - - -	\$	1,584,170 196,259 657,236 - - - - 317,034 375,423 - 1,868,119 4,998,241	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ 613,402	\$ -	\$	613,402	0.0%
OPEB Contribution	\$ 301,112	\$ -	\$	301,112	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 1,000	\$ -	\$	1,000	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 5,000	\$ -	\$	5,000	0.0%
Transportation Allowance	\$ 7,200		\$	7,200	0.0%
S&EB GRAND TOTAL	\$ 16,189,519	\$ -	\$	16,189,519	0.0%

Investment Office FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY	2021	-2022
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D	Approved		Proposed		Proposed	%	
Description	Budget		Mid-Year Adjustment	Amended Budget Amount		Change	
Auto Expenses	\$ -	\$	-	\$	-	0.0%	
Communications	\$ -	\$	-	\$	-	0.0%	
Transportation and Travel	\$ 141,000	\$	-	\$	141,000	0.0%	
Postage	\$ -	\$	-	\$	-	0.0%	
Stationery and Forms	\$ -	\$	-	\$	-	0.0%	
Office Supplies and Equipment	\$ 4,500	\$	-	\$	4,500	0.0%	
Insurance	\$ -	\$	-	\$	-	0.0%	
Equipment Maintenance	\$ -	\$	-	\$	-	0.0%	
Equipment Rents and Leases	\$ -	\$	-	\$	-	0.0%	
Building Costs	\$ -	\$	-	\$	-	0.0%	
Parking Fees	\$ -	\$	-	\$	-	0.0%	
Professional and Specialized Services	\$ -	\$	-	\$	-	0.0%	
Bank Services	\$ -	\$	-	\$	-	0.0%	
Legal Fees and Services	\$ -	\$	-	\$	-	0.0%	
Disability Fees and Services	\$ -	\$	-	\$	-	0.0%	
Computer Services and Support	\$ -	\$	-	\$	-	0.0%	
Educational Expenses	\$ 116,000	\$	-	\$	116,000	0.0%	
Miscellaneous	\$ 7,000	\$	-	\$	7,000	0.0%	
S&S GRAND TOTAL	\$ 268,500	\$	=	\$	268,500	0.0%	

Investment Office Summary of FY 2021-2022 Mid-Year Budget Adjustment

		202 . 2022											
		Approved Budget		Proposed	Proposed		% Change						
Description				Mid-Year Adjustment		ed Budget Amount							
Salaries and Employee Benefits	\$	16,189,519	\$	-	\$	16,189,519		0.0%					
Services and Supplies	\$	268,500	\$	-	\$	268,500		0.0%					
	\$	16.458.019	\$		\$	16.458.019		0.0%					

Budgeted Positions	Investments				
Approved	45.0				
Addition/(Deletion)					
Final Budgeted Positions Requested	45.0				

^{*}All amounts rounded to the nearest dollar.

Legal Services FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Am	Proposed ended Budget Amount	% Change
Gross Salary (1)	\$ 3,588,077	\$ 42,295	\$	3,630,372	1.2%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 3,588,077	\$ 42,295	\$	3,630,372	1.2%
Outside Agency Temporary Staffing (2)	\$ 85,400	\$ 64,600	\$	150,000	75.6%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (3) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 755,248 61,093 391,975 - - - 100,740 120,934 - 662,779 2,092,770	6,797 613 7,190 - - - 1,692 1,692 - 7,190 25,174	\$	762,045 61,707 399,165 102,432 122,626 - 669,969 2,117,944	0.9% 1.0% 1.8% 0.0% 0.0% 0.0% 1.7% 1.4% 0.0% 1.1%
Other Benefits	\$ 214,441	\$ -	\$	214,441	0.0%
OPEB Contribution	\$ 105,267	\$ -	\$	105,267	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime (4)	\$ 18,100	\$ 11,900	\$	30,000	65.7%
Bilingual Bonus	\$ 2,400	\$ -	\$	2,400	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ -	\$ -	\$	-	0.0%
Rideshare Allowance	\$ 2,500	\$ -	\$	2,500	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 6,108,955	\$ 143,969	\$	6,252,924	2.4%

- Reflects an addition in the use of Permanent Salaries due to hiring plan changes.

 Reflects an addition in the use of Agency Temp due to additional staff on leave. The reliance of temporary staff is critical and essential to 2 Legal Services' current operation in order to mitigate any delays in cases, projects, etc. during this fiscal year.
- 3 Reflects a addition in the use of Variable Benefits due to hiring plan changes.
- Reflects an addition in the use of Overtime to cover the workload during the periods before a temp is hired due to additional staff on leave.

Legal Services FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022

Description	Approved Budget	Proposed Mid-Year Adjustment	Δn	Proposed nended Budget Amount	% Change	
Besonption	Daaget	Wild Todi 7 lajasti ilont	7 (1	neriaea Baager / inioant	Onlingo	
Auto Expenses	\$ 4,400	\$ -	\$	4,400		0.0%
Communications	\$ -	\$ -	\$	-		0.0%
Transportation and Travel	\$ 26,400	\$ -	\$	26,400		0.0%
Postage	\$ -	\$ -	\$	-		0.0%
Stationery and Forms	\$ -	\$ -	\$	-		0.0%
Office Supplies and Equipment	\$ 6,000	\$ -	\$	6,000		0.0%
Insurance	\$ -	\$ -	\$	-		0.0%
Equipment Maintenance	\$ -	\$ -	\$	-		0.0%
Equipment Rents and Leases	\$ -	\$ -	\$	-		0.0%
Building Costs	\$ -	\$ -	\$	-		0.0%
Parking Fees	\$ -	\$ -	\$	-		0.0%
Professional and Specialized Services	\$ 252,300	\$ -	\$	252,300		0.0%
Bank Services	\$ -	\$ -	\$	-		0.0%
Legal Fees and Services (1)	\$ 445,000	\$ 655,000	\$	1,100,000	1	47.2%
Disability Fees and Services	\$ -	\$ -	\$	-		0.0%
Computer Services and Support	\$ -	\$ -	\$	-		0.0%
Educational Expenses	\$ 103,000	\$ -	\$	103,000		0.0%
Miscellaneous	\$ 3,000	\$ -	\$	3,000		0.0%
S&S GRAND TOTAL	\$ 840,100	\$ 655,000	\$	1,495,100		78.0%

Reflects an addition in Legal Fees and Services for Outside Legal Counsel due to addition of 2-3 special Executive Office and Board level legal projects.

Legal Services Summary of FY 2021-2022 Mid-Year Budget Adjustment

	 LOL! LOLL					
	Approved		Proposed		Proposed	%
Description	Budget	Mic	d-Year Adjustment	Amende	ed Budget Amount	Change
Salaries and Employee Benefits	\$ 6,108,955	\$	143,969	\$	6,252,924	2.4%
Services and Supplies	\$ 840,100	\$	655,000	\$	1,495,100	78.0%
	\$ 6,949,055	\$	798,969	\$	7,748,024	11.5%
	Logal					

Budgeted Positions	Legal Services
Approved	28.0
Addition/(Deletion)	
Final Budgeted Positions Requested	28.0

^{*}All amounts rounded to the nearest dollar.

Member Services FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	Am	Proposed ended Budget Amount	% Change
Gross Salary (1)	\$ 6,147,368	\$ (174,357)	\$	5,973,011	-2.8%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 6,147,368	\$ (174,357)	\$	5,973,011	-2.8%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (2) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 1,374,865 101,971 103,980 1,254,364 4,942 188,375 - 218,819 30,007 20,794 162,470 3,460,588	(28,180) (2,543) (21,043) (59,074) (47) (67,417) - (7,014) - - - (185,318)		1,346,685 99,429 82,937 1,195,290 4,895 120,959 - 211,804 30,007 20,794 162,470 3,275,270	-2.0% -2.5% -20.2% -4.7% -0.9% -35.8% 0.0% -3.2% 0.0% 0.0% -5.4%
Other Benefits	\$ 367,397	\$ -	\$	367,397	0.0%
OPEB Contribution	\$ 180,351	\$ -	\$	180,351	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 133,800	\$ -	\$	133,800	0.0%
Bilingual Bonus	\$ 16,800	\$ -	\$	16,800	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 15,000	\$ -	\$	15,000	0.0%
Rideshare Allowance	\$ 10,000	\$ -	\$	10,000	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 10,331,305	\$ (359,675)	\$	9,971,630	-3.5%

¹ Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

² Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Member Services FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Budget Mid-Year Adjustment Amended Budget Amount Change Description Auto Expenses \$ \$ 0.0% \$ 0.0% Communications \$ \$ \$ Transportation and Travel \$ 21,700 \$ \$ 21,700 0.0% \$ \$ 0.0% Postage \$ Stationery and Forms \$ \$ 0.0% 0.0% Office Supplies and Equipment \$ 12,500 12,500 \$ \$ Insurance \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ \$ 0.0% \$ Building Costs \$ \$ \$ 0.0% \$ Parking Fees 0.0% \$ \$ Professional and Specialized Services \$ \$ \$ 0.0% Bank Services \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% Computer Services and Support \$ \$ \$ 0.0% \$ **Educational Expenses** 16,500 16,500 0.0% 0.0% Miscellaneous 4,800 4,800 \$ \$ 0.0% S&S GRAND TOTAL \$ 55,500 55,500

Member Services Summary of FY 2021-2022 Mid-Year Budget Adjustment

	FY 2021-2022					
	Approved		Proposed		Proposed	%
Description	Budget		Mid-Year Adjustment	Am	ended Budget Amount	Change
Salaries and Employee Benefits	\$ 10,331,305	\$	(359,675)	\$	9,971,630	-3.5%
Services and Supplies	\$ 55,500	\$	-	\$	55,500	0.0%
	\$ 10,386,805	\$	(359,675)	\$	10,027,130	-3.5%
	Member					
Budgeted Positions	 Services	_				
Approved	79.0					
Addition/(Deletion)						
Final Budgeted Positions Requested	79.0	_				

^{*}All amounts rounded to the nearest dollar.

Quality Assurance FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget	Proposed Mid-Year Adjustment	An	Proposed nended Budget Amount	% Change
Gross Salary (1)	\$ 1,968,269	\$ (147,070)	\$	1,821,199	-7.5%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 1,968,269	\$ (147,070)	\$	1,821,199	-7.5%
Outside Agency Temporary Staffing	\$ -	\$ -	\$	-	0.0%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (2) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 484,451 35,841 129,208 22,153 87 - 60,558 69,608 - 364,885 1,166,791	(23,634) (2,133) (14,507) - - - (5,883) (5,883) (5,883) - (24,414) (76,453)		460,817 33,709 114,701 22,153 87 - 54,675 63,725 - 340,471 1,090,338	-4.9% -5.9% -11.2% 0.0% 0.0% 0.0% 0.0% -9.7% -8.5% 0.0% -6.7%
Other Benefits	\$ 117,634	\$ -	\$	117,634	0.0%
OPEB Contribution	\$ 57,745	\$ -	\$	57,745	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 21,300	\$ -	\$	21,300	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 1,000	\$ -	\$	1,000	0.0%
Rideshare Allowance	\$ 2,200	\$ -	\$	2,200	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 3,334,939	\$ (223,523)	\$	3,111,416	-6.7%

¹ Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

² Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Quality Assurance FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

FY 2021-2022 Approved Proposed Proposed % Budget Mid-Year Adjustment Amended Budget Amount Change Description \$ 0.0% Auto Expenses \$ \$ 0.0% Communications \$ \$ \$ Transportation and Travel \$ 12,000 \$ \$ 12,000 0.0% \$ \$ 0.0% Postage \$ Stationery and Forms \$ \$ 0.0% 0.0% Office Supplies and Equipment \$ 2,000 2,000 \$ \$ Insurance \$ \$ 0.0% **Equipment Maintenance** \$ \$ \$ 0.0% **Equipment Rents and Leases** \$ \$ 0.0% \$ Building Costs \$ \$ \$ 0.0% \$ Parking Fees 0.0% \$ Professional and Specialized Services \$ 50,000 \$ \$ 50,000 0.0% Bank Services \$ \$ \$ 0.0% Legal Fees and Services \$ \$ \$ 0.0% Disability Fees and Services \$ \$ \$ 0.0% \$ Computer Services and Support \$ \$ 0.0% \$ **Educational Expenses** 19,500 \$ 19,500 0.0% 0.0% Miscellaneous 400 400 \$ \$ 0.0% S&S GRAND TOTAL \$ 83,900 83,900

Quality Assurance Summary of FY 2021-2022 Mid-Year Budget Adjustment

	F	Y 2021-2022						
		Approved		Proposed		Proposed	%	
Description		Budget		Mid-Year Adjustment	Amended Budget Amount		Change	
Salaries and Employee Benefits	\$	3,334,939	\$	(223,523)	\$	3,111,416	-	6.7%
Services and Supplies	\$	83,900	\$	-	\$	83,900		0.0%
	\$	3,418,839	\$	(223,523)	\$	3,195,316		6.5%
		Quality						
Budgeted Positions		Assurance	_					
Approved		19.0						
Addition/(Deletion)								
Final Budgeted Positions Requested		19.0	- =					

^{*}All amounts rounded to the nearest dollar.

Systems FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

	FY 2021-2022 Approved	Proposed		Proposed	%
Description	Budget	Mid-Year Adjustment	Aı	mended Budget Amount	Change
Gross Salary (1)	\$ 6,381,630	\$ (326,750)	\$	6,054,880	-5.1%
Salary Differential	-	-		-	0.0%
Permanent Salaries	\$ 6,381,630	\$ (326,750)	\$	6,054,880	-5.1%
Outside Agency Temporary Staffing (2)	\$ 1,762,500	\$ 430,600	\$	2,193,100	24.4%
LACERA Intern Program	\$ -	\$ -	\$	-	0.0%
Variable Benefits (3) Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 1,407,841 115,879 418,437 342,564 1,443 - - 247,455 207,356 1,714 955,689 3,698,379	(52,474) (4,735) (29,388) - - - (13,061) (13,061) - (55,511) (168,230)		1,355,367 111,145 389,049 342,564 1,443 - - 234,393 194,295 1,714 900,178 3,530,149	-3.7% -4.1% -7.0% 0.0% 0.0% 0.0% -5.3% -6.3% 0.0% -5.8% -4.5%
Other Benefits	\$ 381,398	\$ -	\$	381,398	0.0%
OPEB Contribution	\$ 187,224	\$ -	\$	187,224	0.0%
Stipends	\$ -	\$ -	\$	-	0.0%
Overtime	\$ 133,300	\$ -	\$	133,300	0.0%
Bilingual Bonus	\$ -	\$ -	\$	-	0.0%
Reserves for Remuneration	\$ -	\$ -	\$	-	0.0%
Sickleave Buyback	\$ 12,000	\$ -	\$	12,000	0.0%
Rideshare Allowance	\$ 8,900	\$ -	\$	8,900	0.0%
Transportation Allowance	\$ -	\$ -	\$	-	0.0%
S&EB GRAND TOTAL	\$ 12,565,331	\$ (64,380)	\$	12,500,951	-0.5%

¹ Reflects a reduction in the use of Permanent Salaries for vacant positions' salary savings due to hiring plan changes/recruitment delays.

Reflects an addition in the use of Agency Temporary staff due to recruitment delays. The reliance of temporary staff is critical and essential to Systems' current operation in order to mitigate any delays in projects, remote work access for LACERA staff, etc. during this fiscal year.

Reflects a reduction in the use of Variable Benefits for vacant positions' savings due to recruitment delays.

Systems FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies Walkthrough

Description		FY 2021-2022 Approved Budget		Proposed Mid-Year Adjustment		Proposed mended Budget Amount	% Change	
Auto Expenses	\$	-	\$	-	\$	-		0.0%
Communications (1)	\$	925,000	\$	(295,000)	\$	630,000		-31.9%
Transportation and Travel	\$	4,600	\$	-	\$	4,600		0.0%
Postage	\$	390,000	\$	-	\$	390,000		0.0%
Stationery and Forms	\$	-	\$	-	\$	-		0.0%
Office Supplies and Equipment (2)	\$	349,600	\$	50,000	\$	399,600		14.3%
Insurance	\$	-	\$	-	\$	-		0.0%
Equipment Maintenance (3)	\$	609,500	\$	(175,000)	\$	434,500		-28.7%
Equipment Rents and Leases	\$	-	\$	-	\$	-		0.0%
Building Costs	\$	-	\$	-	\$	-		0.0%
Parking Fees	\$	-	\$	-	\$	-		0.0%
Professional and Specialized Services (4)	\$	984,600	\$	552,000	\$	1,536,600		56.1%
Bank Services	\$	-	\$	-	\$	-		0.0%
Legal Fees and Services	\$	-	\$	-	\$	-		0.0%
Disability Fees and Services	\$	-	\$	-	\$	-		0.0%
Computer Services and Support (5)	\$	4,539,600	\$	80,000	\$	4,619,600		1.8%
Educational Expenses	\$	36,500	\$	-	\$	36,500		0.0%
Miscellaneous	\$	1,000	\$	-	\$	1,000		0.0%
S&S GRAND TOTAL	\$	7,840,400	\$	212,000	\$	8,052,400	•	2.7%

- 1 Reflects a reduction in Communications for Telephone Systems Supplies and Maintenance .
- 2 Reflects an addition in Office Supplies and Equipment for docking stations.
- Reflects a reduction in Equipment Maintenance for Hardware Maintenance and Equipment Maintenance UPS Server Room.
- 4 Reflects an addition in Professional & Specialized Services for Centera Upgrade (LACERA Write Once Read Many storage replacement), AWS Connect Hosting, and Cloud Migration.
- Reflects an addition in Computer Services and Support for Microsoft Tenant Migration.

Systems Summary of FY 2021-2022 Mid-Year Budget Adjustment (Draft)

		Approved		Proposed		Proposed	%	
Description		Budget		Mid-Year Adjustment	Am	ended Budget Amount	Change	
Salaries and Employee Benefits	\$	12,565,331	\$	(64,380)	\$	12,500,951		-0.5%
Services and Supplies	\$	7,840,400	\$	212,000	\$	8,052,400		2.7%
	\$	20,405,731	\$	147,620	\$	20,553,351		0.7%
Budgeted Positions		Systems						
Approved		56.0	_					
Addition/(Deletion)		55.5						
Final Budgeted Positions Requested	_	56.0	_					

^{*}All amounts rounded to the nearest dollar.

Retiree Healthcare Benefits Program FY 2021-2022 Mid-Year Budget Adjustment Salaries and Employee Benefits

Description	FY 2021-2022 Approved Budget		Proposed Mid-Year Adjustment	Ar	Proposed nended Budget Amount	% Change
Gross Salary	\$ 2,814,534	\$	-	\$	2,814,534	0.0%
Salary Differential	-		-		-	0.0%
Permanent Salaries	\$ 2,814,534	\$	-	\$	2,814,534	0.0%
Outside Agency Temporary Staffing	\$ 511,700	\$	-	\$	511,700	0.0%
LACERA Intern Program	\$ -	\$	-	\$	-	0.0%
Variable Benefits Retirement FICA Contribution County Subsidy Options Plan Life Insurance Health Insurance Temps Flexible Benefit Plan Thrift Plan/Horizons Savings Plan Pension Savings Plan Megaflex Total	\$ 621,150 41,101 82,831 567,583 1,460 129,777 - 100,857 34,635 9,301 139,734 1,728,430	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - -	\$	621,150 41,101 82,831 567,583 1,460 129,777 - 100,857 34,635 9,301 139,734 1,728,430	0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
Other Benefits	\$ -	\$	-	\$	-	0.0%
OPEB Contribution	\$ 82,573	\$	-	\$	82,573	0.0%
Stipends	\$ -	\$	-	\$	-	0.0%
Overtime	\$ 118,500	\$	-	\$	118,500	0.0%
Bilingual Bonus	\$ 3,600	\$	-	\$	3,600	0.0%
Reserves for Remuneration	\$ -	\$	-	\$	-	0.0%
Sickleave Buyback	\$ 10,000	\$	-	\$	10,000	0.0%
Rideshare Allowance	\$ 3,600	\$	-	\$	3,600	0.0%
Transportation Allowance	\$ -	\$	-	\$	-	0.0%
S&EB GRAND TOTAL	\$ 5,272,936	\$	-	\$	5,272,936	0.0%

Retiree Healthcare Benefits Program FY 2021-2022 Mid-Year Budget Adjustment Services and Supplies

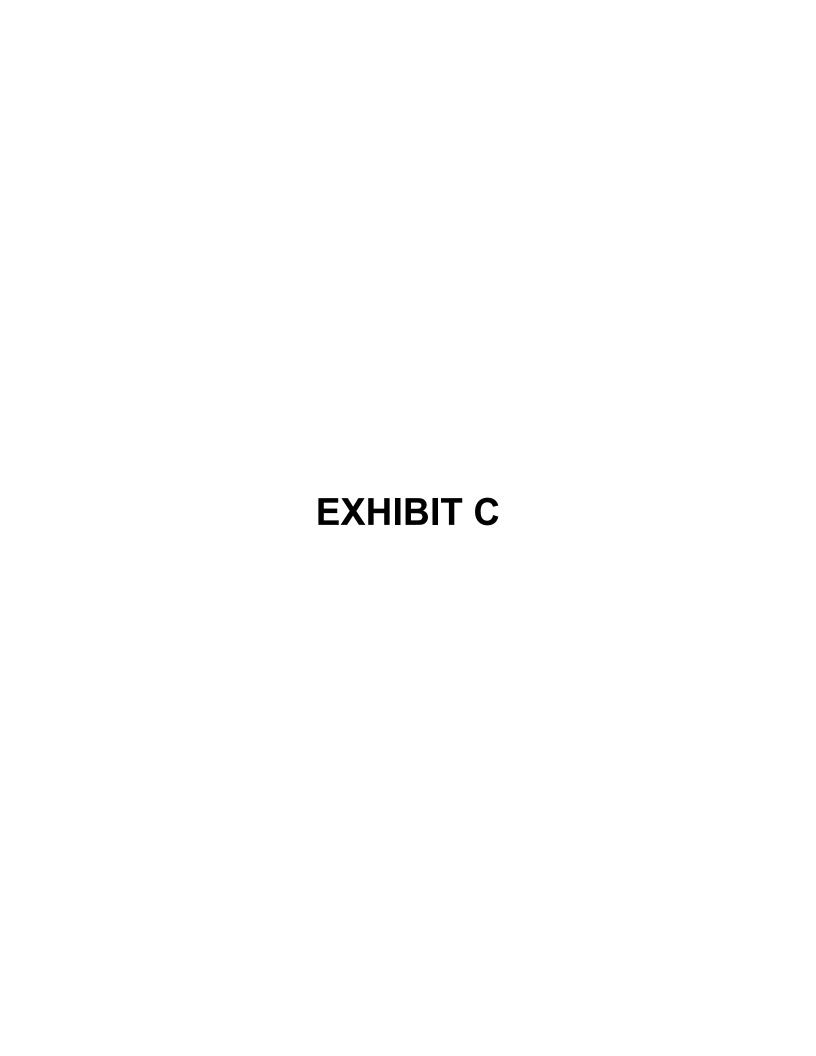
	Approved		Proposed		Proposed	%	
Description	Budget		Mid-Year Adjustment		mended Budget Amount	Change	
Transportation and Travel	\$ 28,500	\$	-	\$	28,500	0.0	%
Postage	\$ 300,000	\$	-	\$	300,000	0.0	%
Office Supplies and Equipment	\$ 6,000	\$	-	\$	6,000	0.0	%
Operational Costs	\$ 4,532,792	\$	-	\$	4,532,792	0.0	%
Professional and Specialized Services	\$ 1,209,800	\$	-	\$	1,209,800	0.0	%
Bank Services	\$ 21,500	\$	-	\$	21,500	0.0	%
Educational Expenses	\$ 19,300	\$	-	\$	19,300	0.0	%
Miscellaneous	\$ 300	\$	-	\$	300	0.0	%
S&S GRAND TOTAL	\$ 6,118,192	\$	-	\$	6,118,192	0.0	%

Retiree Healthcare Benefits Program Summary of FY 2021-2022 Mid-Year Budget Adjustment

Description	·	Approved Budget	pposed r Adjustment	Amend	Proposed ed Budget Amount	% Change
Salaries and Employee Benefits	\$	5,272,936	\$ -	\$	5,272,936	0.0%
Services and Supplies	\$	6,118,192	\$ -	\$	6,118,192	0.0%
	\$	11,391,128	\$ -	\$	11,391,128	0.0%

Budgeted Positions	Retiree Healthcare
Approved	37.0
Addition/(Deletion)	
Final Budgeted Positions Requested	37.0

^{*}All amounts rounded to the nearest dollar.

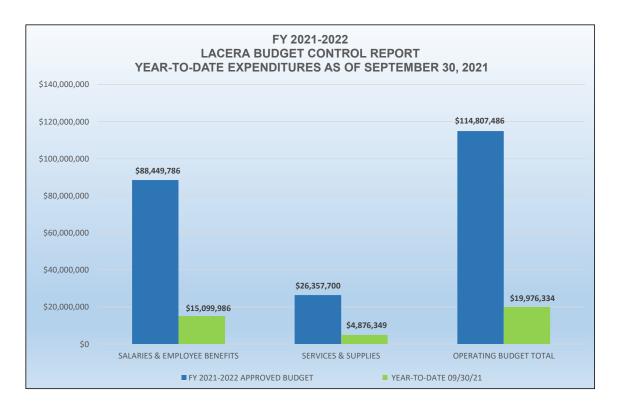


FY 2021-2022

LACERA BUDGET CONTROL REPORT

BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021

ADMINISTRATIVE BUDGET	FY 2021-2022 APPROVED BUDGET	YEAR-TO-DATE 09/30/21	OVER/(UNDER) BUDGET	% VARIANCE
SALARIES & EMPLOYEE BENEFITS	\$88,449,786	\$15,099,986	(\$73,349,800)	-82.9%
SERVICES & SUPPLIES	\$26,357,700	\$4,876,349	(\$21,481,351)	-81.5%
OPERATING BUDGET TOTAL	\$114,807,486	\$19,976,334	(\$94,831,152)	-82.6%



FY 2021-2022

LACERA BUDGET CONTROL REPORT BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021 SUMMARY BY DIVISION

DIVISION	FY 2021-2022 APPROVED BUDGET	YEAR-TO- DATE 09/30/21	OVER/(UNDER) BUDGET	% VARIANCE
Administrative Services	\$13,946,034	\$2,642,372	(\$11,303,662)	-81.1%
Benefits	11,357,046	1,924,051	(9,432,995)	-83.1%
Board of Retirement	214,000	5,287	(208,713)	-97.5%
Board of Investments	436,000	12,219	(423,781)	-97.2%
Communications	3,295,291	465,713	(2,829,578)	-85.9%
Disability Litigation	2,193,630	414,857	(1,778,773)	-81.1%
Disability Retirement	9,897,398	1,701,522	(8,195,876)	-82.8%
Executive Office	3,809,234	516,753	(3,292,480)	-86.4%
Financial & Accounting Services	4,340,488	615,000	(3,725,488)	-85.8%
Human Resources	4,545,603	578,072	(3,967,530)	-87.3%
Internal Audit	3,154,313	452,358	(2,701,955)	-85.7%
Investment Office	16,458,019	2,818,506	(13,639,513)	-82.9%
Legal Services	6,949,055	1,322,682	(5,626,373)	-81.0%
Member Services	10,386,805	1,802,299	(8,584,505)	-82.6%
Quality Assurance	3,418,839	525,440	(2,893,399)	-84.6%
Systems	20,405,731	4,179,203	(16,226,528)	-79.5%
TOTAL	\$114,807,486	\$19,976,334	(\$94,831,152)	-82.6%

LACERA BUDGET CONTROL REPORT

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	\$50,631,648 3,121,500 312,000 65,000 877,000 21,600 0 7,200 70,300 68,800 0 \$55,175,048	\$8,840,655 932,780 0 8,295 151,049 3,500 0 1,500 370 25,848 0 \$9,963,997	(\$41,790,993) (2,188,720) (312,000) (56,705) (725,951) (18,100) 0 (5,700) (69,930) (42,952) 0 (\$45,211,051)
VARIABLE BENEFITS	Ф 33,173,046	ф э,э оэ,ээ <i>т</i>	(\$43,211,031)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	10,759,292 884,997 2,983,542 4,601,103 18,341 353,089 26,074 1,732,245 1,253,606 37,462 6,113,559 \$28,763,309	1,732,714 141,198 356,066 638,268 2,795 0 3,322 275,611 195,604 0 740,347 \$4,085,925	(9,026,578) (743,799) (2,627,476) (3,962,835) (15,546) (353,089) (22,752) (1,456,634) (1,058,002) (37,462) (5,373,212) (\$24,677,384)
OPEB CONTRIBUTION	1,485,427	377,491	(1,107,936)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	3,026,000 \$33,274,737 \$88,449,786	672,572 \$5,135,988 \$15,099,986	(2,353,428) (\$28,138,749) (\$73,349,800)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

LACERA BUDGET CONTROL REPORT

SUMMARY OF SERVICES AND SUPPLIES BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021

	BUDGET	YTD ACTUAL	OVER / (UNDER) BUDGET
AUTO EXPENSES	\$131,200	\$1,812	(\$129,388)
COMMUNICATIONS	925,000	182,846	(742,154)
TRANSPORTATION & TRAVEL	604,500	3,960	(600,540)
POSTAGE	991,400	340,914	(650,486)
STATIONERY & FORMS	645,300	96,666	(548,634)
OFFICE SUPPLIES & EQUIPMENT	696,500	247,587	(448,913)
INSURANCE	911,600	271,880	(639,720)
EQUIPMENT MAINTENANCE	612,800	78,486	(534,314)
EQUIPMENT RENTS & LEASES	277,000	39,431	(237,569)
BUILDING COSTS	7,472,400	1,324,728	(6,147,672)
PARKING FEES	377,000	74,200	(302,800)
PROFESSIONAL & SPECIALIZED SERVICES	3,142,200	663,910	(2,478,290)
BANK SERVICES	200,500	(106,413)	(306,913)
LEGAL FEES & SERVICES	472,500	259,548	(212,952)
DISABILITY FEES & SERVICES	2,665,500	401,160	(2,264,340)
COMPUTER SERVICES & SUPPORT	4,609,100	892,255	(3,716,845)
EDUCATIONAL EXPENSES	1,225,400	100,662	(1,124,738)
MISCELLANEOUS	397,800	2,718	(395,082)
TOTAL	\$26,357,700	\$4,876,349	(\$21,481,351)

^{*} All amounts rounded to the nearest dollar.

BOARD OF RETIREMENT

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$10,000	\$405	(\$9,595)
9182	TRAVEL	75,000	1,620	(73,380)
	TOTAL	85,000	2,025	(82,975)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	44,000	0	(44,000)
9962	REGISTRATION FEES	30,000	1,240	(28,760)
9963	EDUCATIONAL MATERIALS	8,000	2,023	(5,977)
	TOTAL	82,000	3,263	(78,737)
	MISCELLANEOUS			
9983	OFF-SITE BOARD MEETING EXPENSE	35,000	0	(35,000)
9984	FOOD/BEVERAGES	12,000	0	(12,000)
	TOTAL	47,000	0	(47,000)
	GRAND TOTAL	\$214,000	\$5,287	(\$208,713)

^{*} All amounts rounded to the nearest dollar.

BOARD OF INVESTMENTS

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$20,000	\$0	(\$20,000)
9182	TRAVEL	200,000	822	(199,178)
	TOTAL	220,000	822	(219,178)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	85,000	3,148	(81,852)
9962	REGISTRATION FEES	60,000	7,799	(52,201)
9963	EDUCATIONAL MATERIALS	5,000	450	(4,550)
	TOTAL	150,000	11,397	(138,603)
	MISCELLANEOUS			
9983	OFF-SITE BOARD MEETING EXPENSE	60,000	0	(60,000)
9984	FOOD/BEVERAGES	6,000	0	(6,000)
	TOTAL	66,000	0	(66,000)
	GRAND TOTAL	\$436,000	\$12,219	(\$423,781)

^{*} All amounts rounded to the nearest dollar.

ADMINISTRATIVE SERVICES

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$2,477,204 202,000 0 50,000 0 0 0 6,900 7,300	\$377,020 123,074 0 0 228 0 0 0 370 1,817	(\$2,100,184) (78,926) 0 0 (49,772) 0 0 0 (6,530) (5,483) 0
TOTAL SALARIES & OTHER PAYS	\$2,743,404	\$502,508	(\$2,240,896)
VARIABLE BENEFITS			
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	501,641 35,578 65,106 582,272 1,525 0 26,074 73,610 17,419 0 58,980	79,444 5,770 6,919 75,225 195 0 3,322 11,588 2,777 0 10,561	(422,197) (29,808) (58,187) (507,047) (1,330) 0 (22,752) (62,022) (14,642) 0 (48,419) (\$1,166,402)
OPEB CONTRIBUTION	72,676	17,214	(55,462)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	148,050 \$1,582,931 \$4,326,334	32,906 \$245,922 \$748,430	(115,144) (\$1,337,009) (\$3,577,904)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

ADMINISTRATIVE SERVICES DIVISION

	_	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	AUTO EXPENSES			
9102	AUTO MAINTENANCE/REPAIR	\$10,000	\$375	(\$9,625)
9103	GAS	1,000	161	(839)
9105	LICENSE FEES	500	242	(258)
9106	SPECIAL ORDER - AUTOMOBILE	100,000	0	(100,000)
	TOTAL	111,500	778	(110,723)
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	1,100	0	(1,100)
9182	TRAVEL	6,900	0	(6,900)
	TOTAL	8,000	0	(8,000)
	POSTAGE			
9201	POSTAGE METER	300,000	150,000	(150,000)
9204	CALLER BOX SERVICE ANNUAL FEE	1,400	1,320	(80)
	TOTAL	301,400	151,320	(150,080)
	STATIONERY AND FORMS			
9264	MISC STATIONERY & FORMS/DIRECTORIES	3,800	0	(3,800)
	TOTAL	3,800	0	(3,800)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	26,000	2,859	(23,141)
9305	SAFETY AND HEALTH SUPPLIES	28,500	10,048	(18,452)
9306	COMPUTER SUPPLIES	75,000	8,665	(66,335)
9307	STANDARD STOCK	125,000	42,876	(82,124)
9337	OFFICE FURNISHINGS	33,000	0	(33,000)
9352	ERGONOMIC ITEMS	1,000	0	(1,000)
	TOTAL	288,500	64,448	(224,052)
	INSURANCE			
9381	FIDUCIARY INSURANCE	386,200	(185)	(386,385)
9382	UMBRELLA POLICY	26,400	23,212	(3,188)
9384	EARTHQUAKE/FLOOD	96,000	67,204	(28,796)
9386	CRIME INSURANCE POLICY	19,500	0	(19,500)
9387	BUSINESS PACKAGE	61,000	55,834	(5,166)
9388	EMPLOYMENT PRACTICE LIABILITY INSURANCE	144,000	118,154	(25,846)
9390	CYBER LIABILITY INSURANCE	169,400	0	(169,400)
9391	TERRORISM INSURANCE	9,100	7,661	(1,439)
	TOTAL	911,600	271,880	(639,720)

ADMINISTRATIVE SERVICES DIVISION

		DUDGET	VTD ACTUAL	OVER/(UNDER)
		BUDGET	YTD ACTUAL	BUDGET
	EQUIPMENT MAINTENANCE			
9401	FAX MACHINES	\$1,000	\$0	(\$1,000)
9423	TIME CLOCK MAINTENANCE	300	0	(300)
9426	SECURITY SYSTEM (PANIC BUTTONS)	2,000	450	(1,550)
	TOTAL	3,300	450	(2,850)
	EQUIPMENT RENTS AND LEASES			
9452	MAILING EQUIPMENT	32.000	6,947	(25,053)
9463	PRODUCTION COPIERS - LEASES	245,000	32,484	(212,516)
0.00	TOTAL	277,000	39,431	(237,569)
	BUILDING COSTS			
9476	BUILDING OPERATIONAL COSTS	5,877,400	1,321,805	(4,555,595)
9477	OVERTIME HVAC/LIGHTING	120,000	(3,292)	(123,292)
9480	FACILITIES MAINTENANCE	175,000	6,216	(168,784)
9481	RENOVATION PROJECTS	1,300,000	0	(1,300,000)
	TOTAL	7,472,400	1,324,728	(6,147,672)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9552	BUSINESS CONTINUITY SERVICES (IBM)	30,000	0	(30,000)
9553	ARCHIVE/ OFF-SITE STORAGE	55,000	15,272	(39,728)
9677	SHREDDING SERVICE	25,000	1,549	(23,451)
9685	COURIER SERVICE	25,000	4,337	(20,663)
9686	FURNITURE OFF-SITE STORAGE	18,000	4,515	(13,485)
9688	UNIVERSAL MAIL DELIVERY SERVICE	8,000	2,413	(5,587)
9689	NEXT DAY MAIL DELIVERY SERVICE	60,000	10,770	(49,230)
	TOTAL	221,000	38,856	(182,144)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	1,000	150	(850)
9962	REGISTRATION FEES	6,000	0	(6,000)
9963	EDUCATIONAL MATERIALS	700	0	(700)
0000	TOTAL	7,700	150	(7,550)
	MISCELLANICOUS			
9986	MISCELLANEOUS MISCELLANEOUS	10,000	1,902	(0.000)
9990	RIDESHARE	3,500	1,902	(8,098) (3,500)
2220	TOTAL	13,500	1,902	(11,598)
	GRAND TOTAL	\$9,619,700	\$1,893,942	(\$7,725,758)
	ONDITO IOIAL	+++++++++++++++++++++++++++++++++++++	Ţ.,500,0∃Z	(7. ,1 20,1 00)

^{*} All amounts rounded to the nearest dollar.

BENEFITS DIVISION

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$6,264,311 71,900 0 0 398,000 2,400 0 0 16,300 12,000	\$1,136,889 18,451 0 0 66,213 500 0 0 7,309	(\$5,127,422) (53,449) 0 0 (331,787) (1,900) 0 (16,300) (4,691)
TOTAL SALARIES & OTHER PAYS	\$6,764,911	\$1,229,363	(\$5,535,548)
VARIABLE BENEFITS			
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	1,529,224 112,150 193,180 1,447,638 6,959 164,713 0 238,839 33,650 14,954 220,659 \$3,961,966	244,505 18,824 18,677 195,668 1,082 0 0 38,070 5,909 0 29,857 \$552,592	(1,284,719) (93,326) (174,503) (1,251,970) (5,877) (164,713) 0 (200,769) (27,741) (14,954) (190,802) (\$3,409,374)
OPEB CONTRIBUTION	183,782	54,062	(129,720)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	374,387 \$4,520,135 \$11,285,046	83,213 \$689,867 \$1,919,230	(291,174) (\$3,830,268) (\$9,365,816)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

BENEFITS DIVISION

TOTAL 6,500 0 6,500 6,500 0		<u>-</u>	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
9181 TRANSPORTATION \$1,300 \$0 (\$1,30 9182 TRAVEL 5,200 0 (5,20 TOTAL 6,500 0 (6,50 OFFICE SUPPLIES AND EQUIPMENT 9302 SPECIAL ORDERS/MINOR EQUIP TOTAL 3,400 0 0 (3,40) PROFESSIONAL AND SPECIALIZED SERVICES 9516 RECORD SEARCHES 6,000 57 (5,94) 9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00) 9674 MEMBER VERIFICATION 25,000 2,960 (22,04) TOTAL 46,000 3,017 (42,98) EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17) 9962 REGISTRATION FEES 11,600 100 (11,50) 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79) MISCELLANEOUS TOTAL 1,500 0 </td <td></td> <td>TRANSPORTATION AND TRAVEL</td> <td></td> <td></td> <td></td>		TRANSPORTATION AND TRAVEL			
TRAVEL	9181		\$1 300	\$0	(\$1,300)
TOTAL 6,500 0 (6,50 0 0 (6,50 0 0 0 0 0 0 0 0 0					(5,200)
9302 SPECIAL ORDERS/MINOR EQUIP TOTAL 3,400 0 (3,40) PROFESSIONAL AND SPECIALIZED SERVICES 9516 RECORD SEARCHES 6,000 57 (5,94) 9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00) 9674 MEMBER VERIFICATION 25,000 2,960 (22,04) TOTAL 46,000 3,017 (42,98) EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17) 9962 REGISTRATION FEES 11,600 100 (11,50) 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79) MISCELLANEOUS MISCELLANEOUS 1,500 0 (1,50) TOTAL 1,500 0 (1,50)		TOTAL	•		(6,500)
PROFESSIONAL AND SPECIALIZED SERVICES 9516 RECORD SEARCHES 6,000 57 (5,94) 9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00) 9674 MEMBER VERIFICATION 25,000 2,960 (22,04) TOTAL 46,000 3,017 (42,98) EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17) 9962 REGISTRATION FEES 11,600 100 (11,50) 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79) MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50) TOTAL 1,500 0 (1,50)		OFFICE SUPPLIES AND EQUIPMENT			
PROFESSIONAL AND SPECIALIZED SERVICES 9516 RECORD SEARCHES 6,000 57 (5,94) 9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00) 9674 MEMBER VERIFICATION 25,000 2,960 (22,04) TOTAL 46,000 3,017 (42,98) EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17) 9962 REGISTRATION FEES 11,600 100 (11,50) 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79) MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50) TOTAL 1,500 0 (1,50)	9302	SPECIAL ORDERS/MINOR EQUIP	3,400	0	(3,400)
9516 RECORD SEARCHES 6,000 57 (5,94 9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00 9674 MEMBER VERIFICATION 25,000 2,960 (22,04 EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17 9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50		TOTAL	3,400	0	(3,400)
9572 PENSION BENEFIT INFORMATION 15,000 0 (15,00 9674 MEMBER VERIFICATION 25,000 2,960 (22,04 TOTAL 46,000 3,017 (42,98 EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17 9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50		PROFESSIONAL AND SPECIALIZED SERVICES			
9674 MEMBER VERIFICATION TOTAL 25,000 46,000 2,960 2,04 (22,04) EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17) 9962 REGISTRATION FEES 11,600 100 (11,50) 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79) MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50) TOTAL 1,500 0 (1,50)	9516	RECORD SEARCHES	6,000	57	(5,943)
TOTAL 46,000 3,017 (42,98	9572	PENSION BENEFIT INFORMATION	15,000	0	(15,000)
## EDUCATIONAL EXPENSES 9961 MEMBERSHIPS 2,400 225 (2,17 9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 ### MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50 PM) ### TOTAL 1,500 0 (1,50	9674	MEMBER VERIFICATION	25,000	2,960	(22,040)
9961 MEMBERSHIPS 2,400 225 (2,17 9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50		TOTAL	46,000	3,017	(42,983)
9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50		EDUCATIONAL EXPENSES			
9962 REGISTRATION FEES 11,600 100 (11,50 9963 EDUCATIONAL MATERIALS 600 1,480 88 TOTAL 14,600 1,805 (12,79 MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50	9961	MEMBERSHIPS	2,400	225	(2,175)
TOTAL 14,600 1,805 (12,79) MISCELLANEOUS 9986 MISCELLANEOUS TOTAL 1,500 0 (1,50) TOTAL 1,500 0 (1,50)	9962	REGISTRATION FEES	11,600	100	(11,500)
MISCELLANEOUS 9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50	9963	EDUCATIONAL MATERIALS	600	1,480	880
9986 MISCELLANEOUS 1,500 0 (1,50 TOTAL 1,500 0 (1,50		TOTAL	14,600	1,805	(12,795)
TOTAL 1,500 0 (1,50		MISCELLANEOUS			
TOTAL 1,500 0 (1,50	9986	MISCELLANEOUS	1,500	0	(1,500)
		TOTAL	1,500	0	(1,500)
GRAND TOTAL \$72,000 \$4,821 (\$67,17)		GRAND TOTAL	\$72,000	\$4,821	(\$67,179)

^{*} All amounts rounded to the nearest dollar.

COMMUNICATIONS

		YTD	OVER/(UNDER)
	BUDGET	ACTUAL	BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY	\$1,290,318	\$197,919	(\$1,092,399)
AGENCY TEMPORARY	79,600	0	(79,600)
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	4,100	326	(3,774)
BILINGUAL BONUS	0	0	0
PAY IN LIEU OF SALARY REDUCTION	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	1,000	0	(1,000)
SICKLEAVE BUYBACK	3,500	866	(2,634)
RESERVE FOR REMUNERATION	0	0	0
TOTAL SALARIES & OTHER PAYS	\$1,378,518	\$199,110	(\$1,179,408)
VARIABLE BENEFITS			
RETIREMENT	273,130	41,354	(231,776)
FICA CONTRIBUTION	20,337	3,052	(17,285)
COUNTY SUBSIDY - INSURANCE	100,031	8,016	(92,015)
OPTIONS PLAN	194,905	19,951	(174,954)
LIFE INSURANCE	126	28	(98)
HEALTH INSURANCE TEMPS	0	0) Ó
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	40,215	4,955	(35,260)
SAVINGS PLAN	20,557	2,885	(17,672)
PENSION SAVINGS PLAN	0	0	Û
MEGAFLEX	111,000	11,128	(99,872)
TOTAL VARIABLE BENEFITS	\$760,302	\$91,369	(\$668,933)
OPEB CONTRIBUTION	37,855	9,272	(28,583)
OTHER BENEFITS	77,116	17,140	(59,976)
TOTAL EMPLOYEE BENEFITS	\$875,272	\$117,781	(\$757,491)
TOTAL SALARIES & EMPLOYEE BENEFITS	\$2,253,791	\$316,891	(\$1,936,900)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

COMMUNICATIONS

	_	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$800	\$0	(\$800)
9182	TRAVEL	6,700	0	(6,700)
	TOTAL	7,500	0	(7,500)
	POSTAGE			
9205	NEWSLETTER POSTAGE	180,000	42,281	(137,719)
9207	ANNUAL BENEFITS STATEMENT POSTAGE	95,000	0	(95,000)
9210	MISCELLANEOUS MAILINGS	25,000	663	(24,337)
	TOTAL	300,000	42,944	(257,056)
	STATIONERY AND FORMS			
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	6,500	0	(6,500)
9240	ANNUAL REPORT	55,000	0	(55,000)
9242	ANNUAL BENEFITS STATEMENT	110,000	17,795	(92,205)
9246	FORMS	25,000	848	(24,152)
9248	INVITATIONS	0	14,039	14,039
9249	LACERA CALENDARS	8,000	0	(8,000)
9253	NEW MEMBER PACKAGE	10,000	0	(10,000)
9255	PRE-RET GUIDE	20,000	0	(20,000)
9256	POSTSCRIPT PRINTING	80,000	16,503	(63,497)
9259	RETIREES - INSERTS	1,500	0	(1,500)
9261	SPOTLIGHT PRINTING	68,000	18,389	(49,611)
9262	SURVEY	1,500	0	(1,500)
9263	UNANTICIPATED PROJECTS	35,000	1,509	(33,491)
9265	SPECIALIZED MAILINGS	15,000	1,016	(13,984)
9266	DIRECT DEPOSIT - BROCHURES	2,500	0	(2,500)
9267	Q&A - BROCHURES	7,000	4,016	(2,984)
9268	TRANSFER BROCHURES	2,000	0	(2,000)
9269	DISABILITY RETIREMENT PACKETS	12,000	0	(12,000)
9274	STATIONERY	35,000	20,057	(14,943)
9280	ANNUAL BENEFIT STATEMENT PDF/CD'S	30,000	2,494	(27,506)
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	641,500	96,666	(544,834)

COMMUNICATIONS

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	\$5,000	\$220	(\$4,780)
3002	TOTAL	5,000	220	(4,780)
				,
	PROFESSIONAL AND SPECIALIZED SERVICES			
9627	NEWSLETTER MAILINGS	30,000	8,664	(21,336)
9628	HR CONFERENCE/FORUM	2,000	0	(2,000)
9719	CAMPAIGNS	10,000	0	(10,000)
9720	REBRANDING	20,000	0	(20,000)
	TOTAL	62,000	8,664	(53,336)
	COMPUTER SERVICES & SUPPORT			
9837	MACINTOSH CONSULTING & MAINT	3,000	0	(3,000)
9840	MACINTOSH SOFTWARE PACKAGE	1,500	0	(1,500)
9855	MACINTOSH EQUIPMENT	10,000	0	(10,000)
	TOTAL	14,500	0	(14,500)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	400	0	(400)
9962	REGISTRATION FEES	6,000	328	(5,672)
9963	EDUCATIONAL MATERIALS	4,000	0	(4,000)
9903	TOTAL	10,400	328	(10,072)
	TOTAL	10,400	020	(10,072)
	MISCELLANEOUS			
9986	MISCELLANEOUS	600	0	(600)
	TOTAL	600	0	(600)
	GRAND TOTAL	\$1,041,500	\$148,822	(\$892,678)

^{*} All amounts rounded to the nearest dollar.

DISABILITY LITIGATION

_	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY	\$1,294,960	\$262,608	(\$1,032,352)
AGENCY TEMPORARY	0	0	0
LACERA INTERN PROGRAM	0	0	0
STIPENDS	0	0	0
OVERTIME	0	0	0
BILINGUAL BONUS	0	0	0
PAY IN LIEU OF SALARY REDUCTION	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	900	0	(900)
SICKLEAVE BUYBACK	0	0	0
RESERVE FOR REMUNERATION	0	0	0
TOTAL SALARIES & OTHER PAYS	\$1,295,860	\$262,608	(\$1,033,252)
VARIABLE BENEFITS			
RETIREMENT	284,511	51,904	(232,607)
FICA CONTRIBUTION	21,408	3,903	(17,505)
COUNTY SUBSIDY - INSURANCE	89,703	14,005	(75,698)
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	53,535	9,730	(43,805)
SAVINGS PLAN	63,497	10,744	(52,753)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	217,232	32,393	(184,839)
TOTAL VARIABLE BENEFITS	\$729,886	\$122,679	(\$607,207)
OPEB CONTRIBUTION	37,991	10,410	(27,581)
OTHER BENEFITS	77,393	17,202	(60,191)
TOTAL EMPLOYEE BENEFITS	\$845,270	\$150,290	(\$694,980)
TOTAL SALARIES & EMPLOYEE BENEFITS	\$2,141,130	\$412,898	(\$1,728,232)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

DISABILITY LITIGATION

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	AUTO EXPENSES			
9102	AUTO MAINTENANCE/REPAIR	\$1,300	\$38	(\$1,262)
9103	GAS	1,400	270	(1,130)
9105	LICENSE FEES	300	0	(300)
	TOTAL	3,000	308	(2,692)
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	1,300	0	(1,300)
9182	TRAVEL	5,500	0	(5,500)
	TOTAL	6,800	0	(6,800)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	1,500	941	(559)
	TOTAL	1,500	941	(559)
	LEGAL FEES AND SERVICES			
9772	OUTSIDE LEGAL COUNSEL	7,000	0	(7,000)
9777	LITIGATION SUPPORT	500	0	(500)
	TOTAL	7,500	0	(7,500)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	3,000	0	(3,000)
9962	REGISTRATION FEES	5,000	150	(4,850)
9963	EDUCATIONAL MATERIALS	25,000	559	(24,441)
	TOTAL	33,000	709	(32,291)
	MISCELLANEOUS			
9986	MISCELLANEOUS	700	0	(700)
	TOTAL	700	0	(700)
	GRAND TOTAL	\$52,500	\$1,958	(\$50,542)

^{*} All amounts rounded to the nearest dollar.

DISABILITY RETIREMENT

LACERA INTERN PROGRAM 0 0 STIPENDS 0 0 OVERTIME 16,100 8,347 0 BILINGUAL BONUS 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	DER) OGET
AGENCY TEMPORARY 143,000 10,195 (132) LACERA INTERN PROGRAM 0 0 0 STIPENDS 0 0 0 OVERTIME 16,100 8,347 (7) BILINGUAL BONUS 0 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 0 TRANSPORTATION ALLOWANCE 0 0 0	
LACERA INTERN PROGRAM 0 0 STIPENDS 0 0 OVERTIME 16,100 8,347 0 BILINGUAL BONUS 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	•
STIPENDS 0 0 OVERTIME 16,100 8,347 (7 BILINGUAL BONUS 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	2,805)
OVERTIME 16,100 8,347 (7) BILINGUAL BONUS 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	0
BILINGUAL BONUS 0 0 PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	0
PAY IN LIEU OF SALARY REDUCTION 0 0 TRANSPORTATION ALLOWANCE 0 0	7,753)
TRANSPORTATION ALLOWANCE 0 0	0
	0
RIDESHARE ALLOWANCE 4,500 0 (4	0
	1,500)
•	1,285)
RESERVE FOR REMUNERATION 0 0	0
TOTAL SALARIES & OTHER PAYS \$4,141,085 \$738,894 (\$3,402	2,191)
VARIABLE BENEFITS	
RETIREMENT 975,679 165,881 (809)	9,798)
FICA CONTRIBUTION 64,826 11,818 (55)	3,008)
COUNTY SUBSIDY - INSURANCE 368,275 53,298 (314)	1,977)
OPTIONS PLAN 296,468 38,262 (258)	3,206)
LIFE INSURANCE 1,184 138 (**	1,046)
HEALTH INSURANCE TEMPS 0 0	0
FLEXIBLE BENEFIT PLAN 0 0	0
THRIFT PLAN / HORIZONS 121,173 20,124 (10 ⁻¹	1,049)
SAVINGS PLAN 93,371 16,150 (77)	7,221)
PENSION SAVINGS PLAN 0 0	0
MEGAFLEX 546,466 81,451 (465	5,015)
TOTAL VARIABLE BENEFITS \$2,467,442 \$387,121 (\$2,080),321)
OPEB CONTRIBUTION 116,515 37,209 (79)	9,306)
OTHER BENEFITS 237,356 52,756 (184	1,600)
TOTAL EMPLOYEE BENEFITS \$2,821,313 \$477,085 (\$2,344	,228)
TOTAL SALARIES & EMPLOYEE BENEFITS \$6,962,398 \$1,215,979 (\$5,746)	

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

DISABILITY RETIREMENT

			C	VER/(UNDER)
		BUDGET	YTD ACTUAL	BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$1,500	\$0	(\$1,500)
9182	TRAVEL	6,500	602	(5,898)
	TOTAL	8,000	602	(7,398)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	0	(6,000)
	TOTAL	6,000	0	(6,000)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9673	PHOTOCOPIES OF DOCUMENTS	215,000	71,810	(143,190)
9695	JOB ANALYST	9,500	4,365	(5,135)
	TOTAL	224,500	76,175	(148,325)
	LEGAL FEES AND SERVICES			
9772	OUTSIDE LEGAL COUNSEL	20,000	7,485	(12,515)
	TOTAL	20,000	7,485	(12,515)
	DISABILITY FEES AND SERVICES			
9802	HEARING OFFICER FEES	150,000	15,440	(134,560)
9803	MEDICAL FEES	2,400,000	376,261	(2,023,739)
9804	COURT REPORTER	25,000	5,516	(19,484)
9805	INVESTIGATIVE SERVICES	25,000	3,943	(21,057)
9806	DATABASE SEARCHES	500	0	(500)
9807	MEDICAL ADVISOR	65,000	0	(65,000)
	TOTAL	2,665,500	401,160	(2,264,340)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	200	0	(200)
9962	REGISTRATION FEES	10,000	120	(9,880)
9963	EDUCATIONAL MATERIALS	500	0	(500)
	TOTAL	10,700	120	(10,580)
	MISCELLANEOUS			
9986	MISCELLANEOUS	300	0	(300)
	TOTAL GRAND TOTAL	300 \$2,935,000	0 \$485,543	(300) (\$2,449,457)
	OIVAID IOIAL	ΨΣ,333,000	ψ τ 00,0 τ 0	(42,773,737)

^{*} All amounts rounded to the nearest dollar.

EXCUTIVE OFFICE

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	\$2,073,672 0 0 65,000 25,600 0 0 1,400 0	\$309,518 0 0 8,295 0 0 0 0 0	(\$1,764,154) 0 0 (56,705) (25,600) 0 0 (1,400) 0 (\$1,400)
VARIABLE BENEFITS	\$2,165,672	\$317,813	(\$1,847,859)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	399,754 34,225 203,412 0 0 0 0 67,617 77,773 0 357,209 \$1,139,992	56,106 5,143 18,566 0 0 0 0 6,876 10,088 0 41,678	(343,648) (29,082) (184,846) 0 0 0 (60,741) (67,685) 0 (315,531) (\$1,001,535)
OPEB CONTRIBUTION	60,837	12,935	(47,902)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	123,933 \$1,324,760 \$3,490,434	27,546 \$178,938 \$496,751	(96,387) (\$1,145,822) (\$2,993,683)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

EXECUTIVE OFFICE

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
		BUDGET	TID ACTUAL	BUDGET
	AUTO EXPENSES			
9102	AUTO MAINTENANCE/REPAIR	\$4,000	\$18	(\$3,982)
9103	GAS	6,500	531	(5,969)
9105	LICENSE FEES	1,800	41	(1,759)
0.00	TOTAL	12,300	590	(11,710)
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	3,000	12	(2,988)
9182	TRAVEL	14,000	454	(13,546)
	TOTAL	17,000	466	(16,534)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	4,500	174	(4,326)
	TOTAL	4,500	174	(4,326)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9672	IMPROVEMENT PROJECTS	80,000	3,750	(76,250)
9716	PUBLIC & MEDIA RELATIONS	125,000	7,055	(117,945)
	TOTAL	205,000	10,805	(194,195)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	30,000	6,108	(23,892)
9962	REGISTRATION FEES	24,000	520	(23,480)
9963	EDUCATIONAL MATERIALS	10,000	906	(9,094)
	TOTAL	64,000	7,534	(56,466)
	MISCELLANEOUS			
9982	EMPLOYEE RECOGNITION PROGRAM	5,000	225	(4,775)
9984	FOOD/BEVERAGES	5,000	208	(4,792)
9986	MISCELLANEOUS	6,000	0	(6,000)
	TOTAL	16,000	433	(15,567)
	GRAND TOTAL	\$318,800	\$20,002	(\$298,798)

^{*} All amounts rounded to the nearest dollar.

FINANCIAL AND ACCOUNTING SERVICES DIVISION

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK	\$1,942,091 729,400 0 0 67,900 0 0 7,500 12,000	\$413,941 76,979 0 0 15,765 0 0 0 3,995	(\$1,528,150) (652,421) 0 0 (52,135) 0 0 0 (7,500) (8,005)
RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	0 \$2,758,891	0 \$510,679	(\$2,248,212)
VARIABLE BENEFITS			
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	475,607 33,541 43,865 460,739 2,075 0 0 84,267 14,054 0 54,403 \$1,168,551	76,777 6,077 4,752 59,201 183 0 0 12,826 1,773 0 5,940	(398,830) (27,464) (39,113) (401,538) (1,892) 0 (71,441) (12,281) 0 (48,463) (\$1,001,022)
OPEB CONTRIBUTION	56,977	16,569	(40,408)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	116,069 \$1,341,597 \$4,100,488	25,798 \$209,896 \$720,576	(90,271) (\$1,131,701) (\$3,379,912)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

FINANCIAL AND ACCOUNTING SERVICES DIVISION

9182 TRAVEL 11,700 0 (1 TOTAL 14,000 0 (1 TOTAL 156 (1 TOTAL 156 0 (1 TOTAL 156 (1 TOTAL 156 0 (DER) DGET
9182 TRAVEL 11,700 0 (1 TOTAL 14,000 0 (1 TOTAL 156	
9182 TRAVEL 11,700 0 (1 TOTAL 14,000 0 (1 TOTAL 156	2,300)
TOTAL 14,000 0 (1.20) OFFICE SUPPLIES AND EQUIPMENT 9302 SPECIAL ORDERS/MINOR EQUIP 3,500 156 (TOTAL 3,500 156 (BANK SERVICES	1,700)
9302 SPECIAL ORDERS/MINOR EQUIP 3,500 156 (TOTAL 3,500 156 (BANK SERVICES	1,000)
TOTAL 3,500 156 (
BANK SERVICES	3,344)
	3,344)
9753 BANK CHARGES - STATE STREET 200,500 (106,413) (30	5,913)
TOTAL 200,500 (106,413) (30	5,913)
EDUCATIONAL EXPENSES	
9961 MEMBERSHIPS 6,500 600 (5,900)
9962 REGISTRATION FEES 10,000 80 (9,920)
9963 EDUCATIONAL MATERIALS 2,500 0	2,500)
TOTAL 19,000 680 (1	3,320)
MISCELLANEOUS	
9986 MISCELLANEOUS 3,000 0 (3,000)
	3,000)
GRAND TOTAL \$240,000 (\$105,576) (\$34	5,576)

^{*} All amounts rounded to the nearest dollar.

HUMAN RESOURCES

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	\$1,513,977 47,700 312,000 0 2,900 0 0 1,700 0 0 1,700 0 0	\$283,600 2,201 0 0 176 0 0 0 0	(\$1,230,377) (45,499) (312,000) 0 (2,724) 0 0 (1,700) 0 (\$1,592,300)
VARIABLE BENEFITS	¥ ., • . •, =	* ===,=	(+ 1,000,000)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	377,830 25,509 122,504 0 0 0 49,425 66,289 0 271,568	63,944 4,304 18,508 0 0 0 9,863 10,888 0 37,457	(313,886) (21,205) (103,996) 0 0 0 (39,562) (55,401) 0 (234,111) (\$768,162)
OPEB CONTRIBUTION	44,417	14,382	(30,035)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	90,483 \$1,048,025 \$2,926,303	20,111 \$179,457 \$465,434	(70,372) (\$868,568) (\$2,460,869)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

HUMAN RESOURCES

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$2,400	\$0	(\$2,400)
9182	TRAVEL	6,600	0	(6,600)
	TOTAL	9,000	0	(9,000)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	8,000	197	(7,803)
	TOTAL	8,000	197	(7,803)
	PARKING FEES			
9491	GATEWAY PLAZA	375,000	74,200	(300,800)
9492	MUSIC CENTER	2,000	0	(2,000)
	TOTAL	377,000	74,200	(302,800)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9504	PAYROLL SERVICES	100,000	9,725	(90,275)
9510	FINGERPRINTING SERVICES	3,000	294	(2,706)
9511	SECURITY SERVICES - SHERIFF	16,000	906	(15,094)
9512	PAYROLL ENV, DUPLICATE W2'S - AUD	300	120	(180)
9513	PERSONNEL SRVCS - HUMAN RESOURCES	45,000	5,443	(39,557)
9547	HUMAN RESOURCES CONSULTING	150,000	0	(150,000)
9694	BACKGROUND CHECKS	3,000	332	(2,668)
9700	OHS PHYSICALS	1,000	0	(1,000)
9711	REQUEST FOR ACCOMMODATIONS	35,000	0	(35,000)
9718	LEAVE CASE MANAGEMENT PROGRAM	47,500	3,815	(43,685)
9721	ORGANIZATIONAL PROGRAMS	25,000	0	(25,000)
	TOTAL	425,800	20,634	(405,166)
	COMPUTER SERVICES & SUPPORT			
9838	MISC SOFTWARE PACKAGES	55,000	1,067	(53,933)
	TOTAL	55,000	1,067	(53,933)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	4,000	0	(4,000)
9962	REGISTRATION FEES	20,000	1,560	(18,440)
9963	EDUCATIONAL MATERIALS	6,000	0	(6,000)
9966	DEPARTMENTAL TRAINING	250,000	4,106	(245,894)
9967	TUITION REIMBURSEMENT PROGRAM	75,000	5,250	(69,750)
9968	MOU TRAINING ALLOCATION	100,000	5,623	(94,377)
9969	MENTORING PROGRAM	35,000	0	(35,000)
9970	FORUM	22,000	0	(22,000)
	TOTAL	512,000	16,539	(495,461)

HUMAN RESOURCES

				OVER/(UNDER)
	_	BUDGET	YTD ACTUAL	BUDGET
	MISCELLANEOUS			
9981	RECRUITMENT	\$200,000	\$0	(\$200,000)
9986	MISCELLANEOUS	2,500	0	(2,500)
9989	WEB DAY	5,000	0	(5,000)
9991	MANAGEMENT OFFSITE	25,000	0	(25,000)
	TOTAL	232,500	0	(232,500)
	GRAND TOTAL	\$1,619,300	\$112,638	(\$1,506,662)

^{*} All amounts rounded to the nearest dollar.

INTERNAL AUDIT SERVICES

-	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	\$1,454,721 0 0 0 4,900 0 0 1,500 0	\$279,212 0 0 0 447 0 0 0 0	(\$1,175,509) 0 0 0 (4,453) 0 0 (1,500) 0 (24,404,462)
VARIABLE BENEFITS	\$1,461,121	\$279,659	(\$1,181,462)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	335,340 26,378 96,629 0 0 0 0 58,959 63,665 0 262,100 \$843,072	57,719 4,601 13,980 0 0 0 9,563 11,046 0 35,121 \$132,030	(277,621) (21,777) (82,650) 0 0 0 (49,396) (52,619) 0 (226,979) (\$711,042)
OPEB CONTRIBUTION	42,678	12,864	(29,814)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	86,941 \$972,690 \$2,433,813	19,324 \$164,218 \$443,877	(67,617) (\$808,472) (\$1,989,936)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

INTERNAL AUDIT SERVICES

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	-	DODGET	TID ACTUAL	DODGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$2,000	\$0	(\$2,000)
9182	TRAVEL	15,000	0	(15,000)
	TOTAL	17,000	0	(17,000)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	1,500	25	(1,475)
	TOTAL	1,500	25	(1,475)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9541	AUDITS	650,000	3,236	(646,764)
9702	AUDIT COMMITTEE CONSULTANT	21,000	2,625	(18,375)
	TOTAL	671,000	5,861	(665,139)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	8,000	795	(7,205)
9962	REGISTRATION FEES	20,000	120	(19,880)
9963	EDUCATIONAL MATERIALS	2,500	1,680	(820)
	TOTAL	30,500	2,595	(27,905)
	MISCELLANEOUS			
9986	MISCELLANEOUS	500	0	(500)
	TOTAL	500	0	(500)
	GRAND TOTAL	\$720,500	\$8,480	(\$712,020)

^{*} All amounts rounded to the nearest dollar.

INVESTMENT OFFICE

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION TOTAL SALARIES & OTHER PAYS	\$10,263,564 0 0 0 1,000 0 7,200 5,000 0 0	\$1,869,570 0 0 0 0 0 0 1,500 0 0 0	(\$8,393,994) 0 0 0 (1,000) 0 (5,700) (5,000) 0 (\$8,405,694)
VARIABLE BENEFITS	ψ10,270,70 4	\$1,071,070	(\$0,400,094)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	1,584,170 196,259 657,236 0 0 0 317,034 375,423 0 1,868,119	266,314 29,952 84,395 0 0 0 49,329 66,089 0 227,717 \$723,795	(1,317,856) (166,307) (572,841) 0 0 0 (267,705) (309,334) 0 (1,640,402) (\$4,274,446)
OPEB CONTRIBUTION	301,112	53,378	(247,734)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	613,402 \$5,912,755 \$16,189,519	136,337 \$913,510 \$2,784,581	(477,065) (\$4,999,245) (\$13,404,938)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

INVESTMENT OFFICE

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$20,500	\$0	(\$20,500)
9182	TRAVEL	120,500	46	(120,454)
	TOTAL	141,000	46	(140,954)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	4,500	30	(4,470)
	TOTAL	4,500	30	(4,470)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	80,000	23,700	(56,300)
9962	REGISTRATION FEES	20,000	550	(19,450)
9963	EDUCATIONAL MATERIALS	16,000	9,437	(6,563)
	TOTAL	116,000	33,687	(82,313)
	MISCELLANEOUS			
9986	MISCELLANEOUS	7,000	162	(6,838)
	TOTAL	7,000	162	(6,838)
	GRAND TOTAL	\$268,500	\$33,925	(\$234,575)

^{*} All amounts rounded to the nearest dollar.

LEGAL SERVICES

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$3,588,077 85,400 0 18,100 2,400 0 0 2,500 0	\$596,012 20,830 0 0 2,925 250 0 0 0	(\$2,992,065) (64,570) 0 0 (15,175) (2,150) 0 0 (2,500) 0
TOTAL SALARIES & OTHER PAYS VARIABLE BENEFITS	\$3,696,477	\$620,016	(\$3,076,461)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	755,248 61,093 391,975 0 0 0 0 100,740 120,934 0 662,779 \$2,092,770	121,867 9,813 47,610 0 0 0 18,216 18,373 0 77,582 \$293,460	(633,381) (51,280) (344,365) 0 0 0 (82,524) (102,561) 0 (585,197) (\$1,799,310)
OPEB CONTRIBUTION	105,267	26,446	(78,821)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	214,441 \$2,412,477 \$6,108,955	47,663 \$367,569 \$987,585	(166,778) (\$2,044,908) (\$5,121,370)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

LEGAL SERVICES

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	AUTO EXPENSES			
9102	AUTO MAINTENANCE/REPAIR	\$2,000	\$0	(\$2,000)
9103	GAS	2,000	137	(1,863)
9105	LICENSE FEES	400	0	(400)
	TOTAL	4,400	137	(4,263)
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	4,800	0	(4,800)
9182	TRAVEL	21,600	0	(21,600)
	TOTAL	26,400	0	(26,400)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	20	(5,980)
	TOTAL	6,000	20	(5,980)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9543	LEGISLATIVE CONSULTING	252,000	63,920	(188,080)
9673	PHOTOCOPIES OF DOCUMENTS	300	10	(290)
	TOTAL	252,300	63,930	(188,370)
	LEGAL FEES AND SERVICES			
9771	ATTORNEY FEES AWARDS	40,000	0	(40,000)
9772	OUTSIDE LEGAL COUNSEL	400,000	252,040	(147,960)
9777	LITIGATION SUPPORT	5,000	23	(4,977)
	TOTAL	445,000	252,063	(192,937)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	13,500	175	(13,325)
9962	REGISTRATION FEES	19,000	698	(18,302)
9963	EDUCATIONAL MATERIALS	70,500	17,855	(52,645)
	TOTAL	103,000	18,728	(84,272)
	MISCELLANEOUS			
9986	MISCELLANEOUS	3,000	220	(2,780)
	TOTAL	3,000	220	(2,780)
	GRAND TOTAL	\$840,100	\$335,096	(\$505,004)

^{*} All amounts rounded to the nearest dollar.

MEMBER SERVICES

<u>-</u>	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$6,147,368 0 0 0 133,800 16,800 0 0 10,000 15,000 0	\$1,108,482 0 0 0 19,967 2,750 0 0 0 5,430	(\$5,038,886) 0 0 0 (113,833) (14,050) 0 (10,000) (9,570) 0
TOTAL SALARIES & OTHER PAYS VARIABLE BENEFITS	\$6,322,968	\$1,136,630	(\$5,186,338)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	1,374,865 101,971 103,980 1,254,364 4,942 188,375 0 218,819 30,007 20,794 162,470 \$3,460,588	237,301 16,767 12,183 198,519 857 0 39,567 3,886 0 20,774	(1,137,564) (85,204) (91,797) (1,055,845) (4,085) (188,375) 0 (179,252) (26,121) (20,794) (141,696) (\$2,930,735)
OPEB CONTRIBUTION	180,351	52,686	(127,665)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	367,397 \$4,008,335 \$10,331,305	81,659 \$664,199 \$1,800,828	(285,738) (\$3,344,136) (\$8,530,477)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

MEMBER SERVICES

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$7,000	\$0	(\$7,000)
9182	TRAVEL	14,700	0	(14,700)
	TOTAL	21,700	0	(21,700)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	12,500	1,321	(11,179)
	TOTAL	12,500	1,321	(11,179)
	EDUCATIONAL EXPENSES			
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)
	MISCELLANEOUS			
9986	MISCELLANEOUS	3,200	0	(3,200)
9992	FACILITIES RENTAL	1,600	0	(1,600)
	TOTAL	4,800	0	(4,800)
	GRAND TOTAL	\$55,500	\$1,471	(\$54,029)

^{*} All amounts rounded to the nearest dollar.

QUALITY ASSURANCE

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY	\$1,968,269	\$322,554	(\$1,645,715)
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
PAY IN LIEU OF SALARY REDUCTION	0	0	0
TRANSPORTATION ALLOWANCE	0	0	0
RIDESHARE ALLOWANCE	2,200	0	(2,200)
SICKLEAVE BUYBACK	1,000	0	(1,000)
RESERVE FOR REMUNERATION	0	0	0
TOTAL SALARIES & OTHER PAYS	\$1,992,769	\$322,818	(\$1,669,951)
VARIABLE BENEFITS			
RETIREMENT	484,451	69,362	(415,089)
FICA CONTRIBUTION	35,841	5,343	(30,498)
COUNTY SUBSIDY - INSURANCE	129,208	17,098	(112,110)
OPTIONS PLAN	22,153	2,055	(20,098)
LIFE INSURANCE	87	31	(56)
HEALTH INSURANCE TEMPS	0	0	0
FLEXIBLE BENEFIT PLAN	0	0	0
THRIFT PLAN / HORIZONS	60,558	11,367	(49,191)
SAVINGS PLAN	69,608	10,453	(59,155)
PENSION SAVINGS PLAN	0	0	0
MEGAFLEX	364,885	44,545	(320,340)
TOTAL VARIABLE BENEFITS	\$1,166,791	\$160,255	(\$1,006,536)
OPEB CONTRIBUTION	57,745	15,452	(42,293)
OTHER BENEFITS	117,634	26,146	(91,488)
TOTAL EMPLOYEE BENEFITS	\$1,342,170	\$201,852	(\$1,140,318)
TOTAL SALARIES & EMPLOYEE BENEFITS	\$3,334,939	\$524,670	(\$2,810,269)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

QUALITY ASSURANCE

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	\$2,500	\$0	(\$2,500)
9182	TRAVEL	9,500	0	(9,500)
	TOTAL	12,000	0	(12,000)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	2,000	0	(2,000)
	TOTAL	2,000	0	(2,000)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9715	COST EFFECTIVE MANAGEMENT (CEM)	50,000	0	(50,000)
	TOTAL	50,000	0	(50,000)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	9,000	770	(8,230)
9962	REGISTRATION FEES	10,000	0	(10,000)
9963	EDUCATIONAL MATERIALS	500	0	(500)
	TOTAL	19,500	770	(18,730)
	MISCELLANEOUS			
9986	MISCELLANEOUS	400	0	(400)
	TOTAL	400	0	(400)
	GRAND TOTAL	\$83,900	\$770	(\$83,130)

^{*} All amounts rounded to the nearest dollar.

SYSTEMS DIVISION

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$6,381,630 1,762,500 0 0 133,300 0 0 0 8,900 12,000 0	\$964,694 681,051 0 0 36,390 0 0 0 4,716	(\$5,416,936) (1,081,449) 0 0 (96,910) 0 0 (8,900) (7,284)
TOTAL SALARIES & OTHER PAYS VARIABLE BENEFITS	\$8,298,330	\$1,686,851	(\$6,611,479)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	1,407,841 115,879 418,437 342,564 1,443 0 0 247,455 207,356 1,714 955,689 \$3,698,379	200,238 15,830 38,062 49,386 281 0 0 33,536 24,543 0 84,142 \$446,018	(1,207,603) (100,049) (380,375) (293,178) (1,162) 0 (213,919) (182,813) (1,714) (871,547) (\$3,252,361)
OPEB CONTRIBUTION	187,224	44,613	(142,611)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	381,398 \$4,267,000 \$12,565,331	84,771 \$575,403 \$2,262,254	(296,627) (\$3,691,597) (\$10,303,077)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

SYSTEMS DIVISION

				OVER/(UNDER)
		BUDGET	YTD ACTUAL	BUDGET
	COMMUNICATIONS			
9121	MOBILE DEVICES SERVICE & EQUIPMENT	\$150,000	\$83,891	(\$66,109)
9124	ENTERPRISE INTERNET CONNECTION	165,000	32,198	(132,802)
9125	TELEPHONE CONNECTION	120,000	65,133	(54,867)
9130	REMOTE SUPPORT	30,000	1,623	(28,377)
9133	TELEPHONE SYSTEM SUPPLIES & MODIFICATION:	60,000	0	(60,000)
9135	TELEPHONE SYSTEM MAINTENANCE	400,000	0	(400,000)
	TOTAL	925,000	182,846	(742,154)
				,
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION	2,000	0	(2,000)
9182	TRAVEL	2,600	0	(2,600)
	TOTAL	4,600	0	(4,600)
	POSTAGE			
9208	MONTHLY RETIREE CHECK MAILING	390,000	146,650	(243,350)
3200	TOTAL	390,000	146,650	(243,350)
		333,333		(=:0,000)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	11,000	1,316	(9,684)
9332	COMPUTER MONITORS	80,000	9,675	(70,326)
9336	COMPUTER PRINTER	10,000	0	(10,000)
9344	COMPUTER ACCESSORIES	10,000	3,708	(6,292)
9345	COMPUTER PERIPHERALS	10,000	3,639	(6,361)
9347	STORAGE MEDIA	15,000	0	(15,000)
9348	BOARD MEMBER TECH SUPPORT	50,000	3,937	(46,063)
9353	DIVISIONAL IT SUPPLIES/EQUIPMENT	33,600	43,877	10,277
9354	REMOTE WORKFORCE EQUIPMENT	130,000	113,902	(16,098)
	TOTAL	349,600	180,054	(169,546)
	EQUIPMENT MAINTENANCE			
9406	MAINFRAME LICENSE & MAINTENANCE	0	50,927	50,927
9411	AUDIOVISUAL MAINTENANCE	40,000	6,115	(33,885)
9412	KEY CARD SECURITY SYSTEM (DAS)	25,000	5,679	(19,321)
9414	LAN HARDWARE MAINTENANCE	150,000	0	(150,000)
9419	ON-SITE PRINTER MAINTENANCE	25,000	370	(24,630)
9424	EQUIP MAINT - UPS - SERVER ROOM	264,500	0	(264,500)
9436	EQUIP MAINT - AIR CONDITIONING	60,000	9,272	(50,728)
9438	AUDIOVISUAL EQUIPMENT REPLACEMENTS	25,000	4,482	(20,518)
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	609,500	78,036	(531,464)
		- ,	-,	(,)

FISCAL YEAR 2021-2022

SYSTEMS DIVISION

DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
		DODGET	TID ACTUAL	DODGET
	PROFESSIONAL AND SPECIALIZED SERVICES			
9502	EDP CHARGES - ISD	\$9,500	\$15,858	\$6,358
9509	AUDITOR CONTROLLER - PAYROLL SERVICES	86,100	0	(86,100)
9550	ADVANCED WORKFLOW CONCEPTS	140,000	0	(140,000)
9574	KNOWLEDGE & DOC MGMT PROJECT	0	276,367	276,367
9680	IRON MOUNTAIN MEDIA STORAGE	50,000	16,186	(33,814)
9681	RETIREE PAYROLL PRINTING	244,000	1,837	(242,163)
9692	HOT SITE SERVICES	140,000	2,005	(137,995)
9714	SECURITY ASSESSMENT & MONITORING	75,000	0	(75,000)
9717	CLOUD MIGRATION	150,000	123,715	(26,285)
9722	MAINTENANCE SERVICES	90,000	0	(90,000)
	TOTAL	984,600	435,968	(548,632)
	COMPUTER SERVICES & SUPPORT			
9831	LAN SOFTWARE & LIC - NEW	1,085,000	45,583	(1,039,417)
9832	LAN SOFTWARE & LIC - EXISTING	1,854,600	465,446	(1,389,154)
9833	MAINFRAME SOFTWARE & LIC - EXISTING	1,125,000	219,271	(905,729)
9843	LAN NETWORK HARDWARE - NEW	175,000	108,767	(66,233)
9879	CO-LOCATION	200,000	39,791	(160,209)
9882	BOARDROOM OPERATION MGMT SYSTEMS I	100,000	12,331	(87,669)
	TOTAL	4,539,600	891,188	(3,648,412)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	1,500	0	(1,500)
9962	REGISTRATION FEES	30,000	2,207	(27,793)
9963	EDUCATIONAL MATERIALS	5,000	2,207	(5,000)
3300	TOTAL	36,500	2,207	(34,293)
	. 3	55,500	_,_0:	(5 :,=55)
	MISCELLANEOUS			
9986	MISCELLANEOUS	1,000	0	(1,000)
	TOTAL	1,000	0	(1,000)
	GRAND TOTAL	\$7,840,400	\$1,916,949	(\$5,923,451)

^{*} All amounts rounded to the nearest dollar.

FISCAL YEAR 2021-2022

RETIREE HEALTH CARE BENEFITS PROGRAM

SUMMARY OF SALARIES AND EMPLOYEE BENEFITS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021

	BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
SALARIES & OTHER PAYS			
PERMANENT / COUNTY TEMPORARY AGENCY TEMPORARY LACERA INTERN PROGRAM STIPENDS OVERTIME BILINGUAL BONUS PAY IN LIEU OF SALARY REDUCTION TRANSPORTATION ALLOWANCE RIDESHARE ALLOWANCE SICKLEAVE BUYBACK RESERVE FOR REMUNERATION	\$2,814,534 511,700 0 0 118,500 3,600 0 3,600 10,000 0	\$476,921 107,165 0 0 16,403 500 0 0 0 3,927 0	(\$2,337,613) (404,535) 0 0 (102,097) (3,100) 0 (3,600) (6,073) 0
TOTAL SALARIES & OTHER PAYS VARIABLE BENEFITS	\$3,461,934	\$604,917	(\$2,857,017)
RETIREMENT FICA CONTRIBUTION COUNTY SUBSIDY - INSURANCE OPTIONS PLAN LIFE INSURANCE HEALTH INSURANCE TEMPS FLEXIBLE BENEFIT PLAN THRIFT PLAN / HORIZONS SAVINGS PLAN PENSION SAVINGS PLAN MEGAFLEX TOTAL VARIABLE BENEFITS	621,150 41,101 82,831 567,583 1,460 129,777 0 100,857 34,635 9,301 139,734 \$1,728,430	96,713 6,352 6,266 64,415 221 0 0 14,641 5,183 0 20,983	(524,437) (34,749) (76,565) (503,168) (1,239) (129,777) 0 (86,216) (29,452) (9,301) (118,751) (\$1,513,656)
OPEB CONTRIBUTION	82,573	16,509	(66,064)
OTHER BENEFITS TOTAL EMPLOYEE BENEFITS TOTAL SALARIES & EMPLOYEE BENEFITS	0 \$1,811,002 \$5,272,936	0 \$231,283 \$836,200	0 (\$1,579,719) (\$4,436,736)

^{*} All amounts rounded to the nearest dollar.

^{**} Note: All Permanent Salaries and Employee Benefits include amounts through 09/15/21, except Agency Temporary and Rideshare Allowance which are through 09/30/21.

FISCAL YEAR 2021-2022

RETIREE HEALTH CARE BENEFITS PROGRAM

DETAIL OF SERVICES AND SUPPLIES ACCOUNTS BASED ON EXPENDITURES AS OF SEPTEMBER 30, 2021

		BUDGET	YTD ACTUAL	OVER/(UNDER) BUDGET
	TRANSPORTATION AND TRAVEL			
9181	TRANSPORTATION AND TRAVEL	\$2,600	\$0	(\$2,600)
9182	TRAVEL	\$2,000 25,900	φ0 0	(25,900)
9102	TOTAL	28,500	0	(28,500)
	POSTAGE			
9212	SPECIAL RETIREE MAILINGS	300,000	900	(299,100)
	TOTAL	300,000	900	(299,100)
	OFFICE SUPPLIES AND EQUIPMENT			
9302	SPECIAL ORDERS/MINOR EQUIP	6,000	153	(5,847)
	TOTAL	6,000	153	(5,847)
	OPERATIONAL COSTS			
9482	RENT	199,100	49,001	(150,099)
9483	DEPARTMENTAL OVERHEAD	4,333,692	1,083,423	(3,250,269)
	TOTAL	4,532,792	1,132,424	(3,400,368)
	PROFESSIONAL AND SPECIALIZED SERVICES			
9541	AUDITS	120,000	19,518	(100,483)
9545	HEALTH CARE CONSULTING	750,000	123,600	(626,400)
9572	PENSION BENEFIT INFORMATION	1,500	0	(1,500)
9573	OPEB VALUATION TOTAL	338,300	17,606	(320,694)
	TOTAL	1,209,800	160,723	(1,049,077)
9753	BANK SERVICES BANK CHARGES - STATE STREET	21,500	(5,144)	(26,644)
9133	TOTAL	21,500	(5,144)	(26,644)
	TOTAL	21,300	(3,144)	(20,044)
	EDUCATIONAL EXPENSES			
9961	MEMBERSHIPS	4,000	0	(4,000)
9962	REGISTRATION FEES	15,000	4,930	(10,070)
9963	EDUCATIONAL MATERIALS	300	0	(300)
	TOTAL	19,300	4,930	(14,370)
0000	MISCELLANEOUS	225	_	(0.0.5)
9986	MISCELLANEOUS	300	0	(300)
	TOTAL	300 \$6,118,192	\$1 202 00E	(300) (\$4,824,207)
	GRAND ICIAL	φο,116,1 9 2	\$1,293,985	(\$4,824,207)

^{*} All amounts rounded to the nearest dollar.



November 22, 2021

TO: Trustees – Board of Investments

FROM: Jude Pérez

Principal Investment Officer

FOR: December 8, 2021 Board of Investments Meeting

SUBJECT: CUSTODY BANK SEARCH (PENSION PLAN AND OPEB MASTER

TRUST) - REQUEST FOR PROPOSAL, MINIMUM QUALIFICATIONS,

AND SCOPE OF WORK

RECOMMENDATION

Approve the proposed custody bank search Minimum Qualifications, Evaluation Criteria, and Scope of Work.

BACKGROUND

Staff prepared materials related to the Custody Bank Search Request for Proposal for discussion with the Board of Investments. **ATTACHMENT I** describes the recommended search criteria in compliance with the Procurement Policy for Investment-Related Services. This includes: (i) structure of the evaluation team; (ii) the selection authority; (iii) search timing; (iv) minimum qualifications; (v) evaluation criteria; and (vi) scope of work summary.

Attachments

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

Custody Bank Search (Pension Plan and OPEB Master Trust) Request for Proposal Minimum Qualifications



Board of Investments Meeting

December 8, 2021

Jude Pérez, Principal Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Recommendation and Background

Recommendation

To approve the proposed Minimum Qualifications, Evaluation Criteria, and Scope of Work

Background

One of LACERA's key vendor relationships is with its custodian bank. The size and scope of services provided by the custodian are essential in LACERA's ability to meet its mission to "Produce, Protect, and Provide the Promised Benefits."

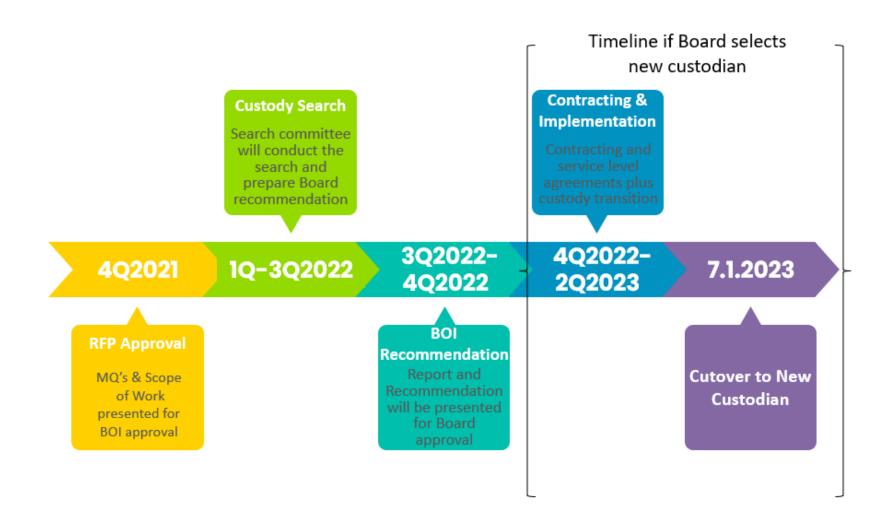
- According to LACERA's Procurement Policy for Investment Services, custody vendor contracts are re-bid every ten years
- The last custody bank search was conducted in 2012 via Request for Proposal ("RFP") which went through a competitive search process
- State Street Bank and Trust was selected by the Board in March 2013 and retained in July 2013
- The search requires:
 - Participation and collaboration from multiple divisions;
 - Ample time to transition (5-6 months), if the Board selects a new custodian



Evaluation Process

- The Proposed Evaluation Team is Multi-divisional:
 - Investments (Co-Lead), Financial Accounting & Services Division (Co-Lead), Executive Office, Legal, Systems, and Information Security
- Evaluation Team will conduct the Request for Proposal process in two phases:
 - Phase One: Evaluation of written RFP responses
 - Phase Two: Candidate interviews (virtual and possibly on-site)
- Final scores, evaluation review, and recommendation will be advanced to the Board
- Selection authority for this RFP will be the Board

1. Proposed Timeline





Minimum Qualifications

In order to be eligible, responding firms must meet the following MQs:

- 1. Must agree to be a fiduciary to LACERA under California and other applicable law.
- 2. At least \$500 billion in total tax-exempt assets under trust/custody as of December 31, 2021.
- 3. Minimum of ten (10) years experience in providing global trust/custody services for at least five (5) institutional tax-exempt investors, each of which had a market value greater than \$25 billion as of December 31, 2021.
- 4. Minimum of ten (10) years experience in providing alternative investment administration for at least five (5) US based tax-exempt public pension clients.
- 5. At least \$10 billion in total market capitalization as of December 31, 2021.
- 6. The responding firm must maintain, or be willing to obtain the following insurance coverage:
 - a. Professional/Technical, errors and omission, and/or miscellaneous liability policy
 - I. The policy will provide coverage for all claims the candidate firm may become legally obligated to pay resulting from any actual or alleged negligent act, error, or omission related to professional services required under the contract, as well as damages to LACERA.
 - b. Financial Institution/Fidelity Bond including electronic computer crime loss coverage
 - c. Cyber Liability coverage



Evaluation Criteria

All responses received will be subject to evaluations on the following seven categories:

- 1. Organization
- 2. Professional Staff and Client Service
- 3. Core Service Model
- 4. Additional Service Model and Capabilities
- 5. Technology and Information Security
- 6. Transition and Conversion
- 7. Fees

Scope of Work – Core Services

	Core Services
1.	Safekeeping and Custody of Assets Serve as a Fiduciary in the safekeeping of custodied assets and serve as Book of Record for LACERA Pension and OPEB
2.	Plan Accounting and Reporting Price Positions, calculate NAV, and reconcile assets; Audit accounting; GASB and ACFR reporting
3.	Trade Settlement and Income Collection Capture, process, and settle trades; Ensure collection of dividends and interest
4.	Cash Management and Short-Term Sweep Manage payments, daily forecasting, and sweep of excess cash balances
5.	Alternative Asset Administration Accounting and performance administration, reconciliation; Provide wire management and custom reporting
6.	Performance Measurement, Risk, and Analytics Calculate, reconcile, and report on gross and net performance, attribution, risk analysis, and peer universes
7.	Compliance Monitoring and Reporting Provide a platform and team to monitor and report on daily/monthly Investment Guideline Compliance
8.	Corporate Actions, Proxy Voting Administrative Services, and Class Action Claims Filing Process corporate actions; Provide proxy voting and securities litigation/class action support
9.	Tax Reclaims/Filings Monitor and seek relief on taxed income payments; Engage tax agents; country registration
10.	Technology and Reporting Provide cloud-based platform to access data and create reports; Develop custom reporting as needed

Scope of Work – Commercial Banking and Treasury Services

	Commercial Banking and Treasury Services
1.	Commercial Banking Accounts Provide LACERA a means to connect commercial banking accounts to custody accounts to manage cashflow
2.	Member Benefit Payment Services Process monthly direct deposit file for ~70,000 benefit payments
3.	Check Disbursements and Fraud Protection Require payee positive pay and check stock security for disbursements of physical checks
4.	Remote Check Deposit Service Ability to process remote deposits

Scope of Work – Other Services

	Other Services
1.	Securities Lending Provide securities lending of multiple asset types; Established collateral, borrower, and risk management; Reporting
2.	Derivatives Pricing and Processing Service Price, process, and monitor derivatives across various types, markets, and currencies
3.	FX Execution Provide transparent pricing and trading of FX
4.	Business Continuity Resources Provide support and collaborate with client to meet obligations during emergency events
5.	Enterprise and Market Compliance Support and provide education on Operational and Industry Compliance
6.	Research and Assistance with Regulatory Requirements Produce research and assist with regulatory needs



Things to Consider

- The universe of custody banks that can fulfill LACERA's service model is small (3-5 firms)
- If the BOI selects a new custodian, the transition time will have to be longer than our previous transition
 - Percentage of assets under direct custody has increased since the last transition





November 16, 2021

TO: Each Trustee

Board of Retirement Board of Investments

FROM: Santos H. Kreimann

Chief Executive Officer

FOR: Board of Retirement Meeting on December 1, 2021

Board of Investments Meeting on December 8, 2021

SUBJECT: BOARD OF RETIREMENT AND BOARD OF INVESTMENTS 2022

MEETING CALENDAR

RECOMMENDATION

It is recommended the Boards review the 2022 meeting calendar and consider rescheduling meeting dates that conflict with a holiday and/or the potential of a lack of quorum.

DISCUSSION

At its December meeting, the Board of Retirement will further discuss the Board meeting schedule and approve a single day combined meeting or having regular meetings on the first Wednesday and the Thursday following the second Wednesday in 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 and/or the potential of a lack of quorum.

Following are meeting dates that the Board of Retirement and/or Board of Investments may consider rescheduling due to a lack of quorum:

May 1-4, 2022 – Milken Global Conference (BOR)
May 10-13, 2022 - SACRS Spring Conference (BOR & BOI)
November 8-11, 2022 - SACRS Fall Conference (BOR & BOI)

A copy of the 2022 meeting and educational calendar is attached for your reference

SHK:bn

Attachment

	January 2022							
Sun	Mon	Tue	Wed	Thu	Fri	Sat 1		
						New Year's Day		
2	New Year's Day Observed	4	5 BOR	6	7	8		
9	10	11	BOI	13	14	15		
16	Martin Luther King Jr. Day	18	19	NACD Innovation, Technology, and ESG - Virtual	21	22		
23	24	25	26	27	28	29		
30	IFEBP Health Benefits Conference – Clearwater Beach, FL							

February 2022							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
		1	BOR	3	4	5	
			nefits Conference er Beach, FL				
6	7	8	9 BOI	BOR	11	12	
13	14 Valentine's Day	15	16	17	18	19	
20	21 Presidents' Day	22	PPI Winter Rou	24 undtable – Westlc	25 ake Village, CA	26	
27	28						

			March 202	2		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	BOR	3	4	CALAPRS General Assembly - TBD
6				10 BOR	11	12
13	AHIP National	15 Conference on	16 Health Policy - V	17 Vashington, DC	18	19
20	21	22	Private I	f Education in Equity for Staff – TBD	25	26
27	Cesar Chavez Day	29	Pension Go	v. Principles of vernance for s Angeles, CA		•

April 2022							
Sun	Mon	Tue	Wed 30	Thu 31	Fri 1	Sat 2	
			30	31	'		
					L		
				Adv. Principles of for Trustees - Los			
3	4	5	6	7	8	9	
			BOR				
	Whartor	n Investment Stra	tegies and Portfo	lio Management	- Virtual		
10	11	12	13	14	15	16	
			BOI	BOR			
17	18	19	20	21	22	23	
Easter Sunday							
24	25	26	27	28	29	30	

May 2022							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
1	2		4 BOR	5	6	7	
Milker	n Global Confere	nce – Los Angele	es, CA				
8	9	40	11	12	13	14	
Mother's Day	9	10	BOI	BOR	13	14	
		SACRS	Spring Conferen	ce – Rancho Miro I	age, CA		
15	16	17	18	19	20	21	
						NCPERS TEDS/PATS/ NAFS - Washington, DC	
22	23	24	25	26	27	28	
NCPER	RS Annual Confer	ence - Washingt	on, DC				
NCPERS TEDS/PATS/ NAFS - Washington, DC	Update - Wo	ton Legislative Ishington, DC					
29	30 Memorial Day	31					

June 2022							
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
			BOR	2	3	4	
5	6	7	8 BOI	9 BOR	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
Father's Day		AHIP Cor	 nference – Las Ve	eaas, NV			
ramor s Bay		71111 001	lioreries Eds ve	5gas, 111			
	ICGN Ann	ual Conference	– Toronto				
26	27	28	29	30			
		oloyee Benefits Institu		1- 1			
	NASP Annual Financial Services Conference – Chicago, IL						
	World He	ealthcare Congre	ess – National Har	rbor, MD			

	July 2022					
Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4 Independence Day Holiday	5	6 BOR	7	8	9
10	11	12	BOI	14 BOR	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31				1		

August 2022						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 BOR	4	5	6
7	8	9	10 BOI	11 BOR	12	13
14	15	16	17	18	19	20
NCPERS Fun	22 ding Forum - Los		24	25	26	27
28	29	30	31			

September 2022						
Sun	Mon	Tue	Wed	Thu 1	Fri 2	Sat 3
4	5 Labor Day	6	7 BOR	8	9	10
11	12	13	14 BOI	15 BOR	16	17
18	19	20	21	22	23	24
		CII Fall (Conference – Bos	ston, MA		
25	26	27	28	29	30	

	October 2022					
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4 Yom Kippur		6 Il Conference – Gouth Korea	7	NACD Summit – National Harbor, MD
9 NACD Sui	Indigenous People's Day mmit – National H	11 arbor, MD	BOI	BOR	14	15
16	17	18	19	20	21	22
			PPI	Roundtable – Sin	gapore	
23	24	25	26	27	28	29
NCPER	S Public Safety Co	onference - Nash	nville, TN			
IFEBP Em	ployee Benefits C	onference – Las '	Vegas, NV			
30	31 Halloween					

November 2022						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	BOR	3	4	5
6	7	8	9 BOI	BOR	11 Veterans Day	12
		SAC	RS Fall Conference	 ce – Long Beach, 	. CA	
13	14	15	16	17	18 Hanukkah Begins	19
20	21	22	23	24 Thanksgiving Day	25 Thanksgiving Day Holiday	26
27	28 Hanukkah Ends	29	30			

December 2022						
Sun	Mon	Tue	Wed	Thu 1	Fri 2	Sat 3
4	5	6	7 BOR	8	9	10
11	12	13	14 BOI	15 BOR	16	17
			Scotts	aster Class – dale, AZ		
18	19	20	21	22	23	24 Christmas Eve Holiday
25 Christmas Day	26 Christmas Day Holiday		28	29	30	31 New Year's Eve





November 14, 2021

TO: Trustees

Board of Investments

FOR: Board of Investments Meeting of December 8, 2021

SUBJECT: Institutional ESG Investing Conference North America in New York, NY on

April 20, 2022

The 2022 Institutional ESG Investing Conference North America Meeting will be held on April 20, 2022 at the in New York, New York. The event will be attended by approximately 150 asset owners and mid and back-office investment and operations professionals. The Summit is intended to be 'practical' focused, looking at different available investment strategies that an asset owner can employ when thinking about

The main conference highlights include the following:

- Climate Risk as Investment Risk: The Strategic Decisions and Tactical Considerations on a Journey to Net-Zero Carbon Emissions International Opportunities
- Reflections on a Career in ESG: Combining Math and Analytical Tools with Philosophy Practices to Create Robust and Scalable Strategies
- Global Magnitsky Sanctions: Holding Non-ESG Compliant Companies to Account Whilst Remaining Disengaged from Geopolitics

Following are approximate conference and travel costs:

Registration: \$75.00 **Airfare:** \$300.00 - \$1,400.00

Hotel: \$230.00 to \$350.00 per night plus tax (2 nights) **Ground Transportation:** \$60.00 per

Total: \$460.00 to \$700.00

day (3 days) Total: \$180.00

Daily Per Diem & Incidentals: \$79.00 per day (3 days) Total: \$237.00

(The Registration Fee Includes Most Meals)

Approximate Cost Per Traveler: \$1,300.00 - \$3,000.00

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

IT IS THEREFORE RECOMMENDED THAT YOUR BOARD:

Approve attendance of Trustees at the Institutional ESG Investing Conference North America on April 20, 2022 in New York, New York and approve reimbursement of all travel costs incurred in accordance with LACERA's Trustee Education and Trustee Travel Policies.



DRAFT AGENDA

INSTITUTIONAL ESG INVESTMENT SUMMIT | NORTH AMERICA 2022

To be held 20th April 2022

New York - Venue to be confirmed

W www.clearpathanalysis.com

KEYNOTE PRESENTATION: Red, White and Green: is it important for the US to be a front runner in the fight for sustainable finance initiatives? • Proposed: Gina Sanchez, Board Member and ESG Specialist, Los Angeles County Employees Retirement Association (LSCERA) 11:15 - 11:30am MORNING REFRESHMENTS & NETWORKING TALKING TABLE WORKSHOPS Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 - Round 1 - Round 1 Workshop Leader and topic to be confirmed TABLE 2 - Round 1 Workshop Leader and topic to be confirmed TABLE 2 - Round 1 Workshop Leader and topic to be confirmed	TIME	20 th April 2022				
Second S	8:15 - 9:10am		BREAKFAST AI	ND NETWORKING		
bridging the divide between the future of cryptocurrency and the focus on ESG • Proposed: Kristina Littman, Chief of the Enforcement Division's Cyber Unit, The Securities and Exchange Commission PANEL DISCUSSION: Divest or Engage? The ESG investor's dilemma: how to decide what is best for your portfolio • Proposed: • Confirmed: Jonathan Taylor, Director of Growth and Development, Northwestern Mutual • Confirmed: Adam Frankel, City Commissioner, City of Delray Genera Employees Retirement Fund KEYNOTE PRESENTATION: Red, White and Green: is it important for the US to be a front runner in the fight for sustainable finance initiatives? • Proposed: Gina Sanchez, Board Member and ESG Specialist, Los Angeles County Employees Retirement Association (LSCERA) 11:15 - 11:30am MORNING REFRESHMENTS & NETWORKING TALKING TABLE WORKSHOPS Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 - Round 1 Workshop Leader and topic to be confirmed 11:30 - 1:15pm Workshop Leader and topic to be confirmed Workshop Leader and topic to be confirmed Workshop Leader and topic to be confirmed	9:10 - 9:20am		Chairman's c	pening address		
how to decide what is best for your portfolio Proposed: Confirmed: Jonathan Taylor, Director of Growth and Development, Northwestern Mutual Confirmed: Adam Frankel, City Commissioner, City of Delray Genera Employees Retirement Fund KEYNOTE PRESENTATION: Red, White and Green: is it important for the US to be a front runner in the fight for sustainable finance initiatives? Proposed: Gina Sanchez, Board Member and ESG Specialist, Los Angeles County Employees Retirement Association (LSCERA) 11:15 - 11:30am MORNING REFRESHMENTS & NETWORKING TALKING TABLE WORKSHOPS Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 Round 1 Workshop Leader and topic to be confirmed 11:30-1:15pm WORKSHOP Leader and topic to be confirmed	9:20 - 10:00am	bridging the divide between the future of cryptocurrency and the focus on ESG • Proposed: Kristina Littman, Chief of the Enforcement Division's				
10:45 - 11:15am US to be a front runner in the fight for sustainable finance initiatives? • Proposed: Gina Sanchez, Board Member and ESG Specialist, Los Angeles County Employees Retirement Association (LSCERA) 11:15 - 11:30am MORNING REFRESHMENTS & NETWORKING TALKING TABLE WORKSHOPS Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 - Round 1 Workshop Leader and topic to be confirmed 11:30—1:15pm Workshop Leader and topic to be confirmed	10:00 - 10:45am	 how to decide what is best for your portfolio Proposed: Confirmed: Jonathan Taylor, Director of Growth and Development, Northwestern Mutual Confirmed: Adam Frankel, City Commissioner, City of Delray General 				
TALKING TABLE WORKSHOPS Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 - Round 1 - Round 1 Workshop Leader and topic to be confirmed TABLE 2 - Round 1 Workshop Leader and topic to be confirmed TABLE 2 - Round 1 Workshop Leader and topic to be confirmed	10:45 - 11:15am	US to be a front r	unner in the fight f Gina Sanchez, Boa	or sustainable finan rd Member and ESG	ce initiatives? Specialist, Los	
Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing subjects chosen by the Sponsor who host three sessions WORKSHOP TABLE 1 TABLE 2 - Round 1 - Round 1 Workshop Leader and topic to be confirmed TABLE 2 - Round 1 - R	11:15 - 11:30am	М	ORNING REFRESHI	MENTS & NETWORK	ING	
TABLE 1 — Round 1 Workshop Leader and topic to be confirmed TABLE 2 — Round 1 Workshop Leader and topic to be confirmed TABLE 2 — Round 1 Workshop Leader and topic to be confirmed		Reserved for asset owner group representatives only plus invited other delegates by our Workshop Leaders. The audience splits into four groups to attend each of three workshops on differing				
TABLE 1 TABLE 2 3 4	11:30– 1:15pm	TABLE 1 - Round 1 Workshop Leader and topic to be confirmed WORKSHOP	TABLE 2 - Round 1 Workshop Leader and topic to be confirmed WORKSHOP	3 - Round 1 Workshop Leader and topic to be confirmed WORKSHOP TABLE	- Round 1 Workshop Leader and topic to be confirmed WORKSHOP TABLE	

	Workshop Leader and topic to be confirmed	Workshop Leader and topic to be confirmed	Workshop Leader and topic to be confirmed	Workshop Leader and topic to be confirmed		
	WORKSHOP TABLE 1 - Round 3 Workshop Leader and topic to be confirmed	WORKSHOP TABLE 2 - Round 3 Workshop Leader and topic to be confirmed	WORKSHOP TABLE 3 - Round 3 Workshop Leader and topic to be confirmed	WORKSHOP TABLE 4 - Round 3 Workshop Leader and topic to be confirmed		
1:15 – 2:05pm		LU	JNCH			
2:05 – 2:10pm		CHAIRMAN'S O	PENING REMARKS			
2:10 – 2:35pm	FIRESIDE CHAT: Reflections on a career in ESG: combining math and analytical tools with philosophy practices to create robust and scalable strategies • Moderator: Representative from Clear Path Analysis • Proposed: Savita Subramanian, Head of Global ESG Research and US Equity and Quantitative Strategy, Bank of America					
2:35 – 3:00pm	decisions and tacted emissions • Proposed:	tical consideration	te Risk as Investments on a journey to net the naging Director and F	t-zero carbon		
3:00 – 3:45pm	 PANEL DISCUSSION: Advanced analytics and data analysis: how to effectively use AI and data in ESG benchmark analysis Proposed: Randy Brown, Chief Investment Officer, SunLife Proposed: Jeffrey Mindlin, Chief Investment Officer, Arizona State University Confirmed: Eric Golberg, Chair of the Investment Committee, Evangelical Lutheran Church in America Foundation 					
3:45 – 4:00pm	AFT	TERNOON REFRESH	IMENTS & NETWORI	KING		
4:00 – 4:30pm		nds in investment p	forget the 'S': the ris portfolios	e and rise of		

1:30 - 5:10nm	SPECIAL GUEST ADDRESS: Global Magnitsky Sanctions: holding non-ESG compliant companies to account whilst remaining disengaged from geopolitics				
4:30 – 5:10pm	 Proposed: Max Meizlish, Sanctions Licensing Officer, US Department of the Treasury 				
5:10 – 6:45pm	END OF CONFERENCE & DRINKS RECEPTION				

* Talking Table Workshops Format

Our *Talking Tables* Workshops form a unique part of our summits and give our asset owner group representatives the opportunity to engage with one another on subjects they've stated to be issues of most pressing concern, interest, and topics for action.

Sponsors host three rounds of *Talking Table* Workshops with delegates moving to each workshop room in 30-minute blocks of time.

Should a sponsor wish to put forward a subject for consideration that is not listed below, then we are open to additional topics.

For more information on the *Talking Tables* workshops, please contact Noel Hillmann - <u>noelhillmann@clearpathanalysis.com</u>

Duncan Henderson - <u>duncanhenderson@clearpathanalysis.com</u>

Arry Langston - <u>arrylangstopn@clearpathanalysis.com</u>

TOPICS:

- 1. Separating the jargon from the fact: the real meaning of ESG
- 2. Integrating ESG risk into an investment framework
- 3. Divest or Engagement: what is right for your assets?
- 4. ESG, SRI, Impact Investing: differentiation and clarification
- 5. ESG gone global: implementing an effective and scalable ESG investment strategy
- 6. Impact Investing: developing metrics and defining goals
- 7. Data mining and Data analytics: advanced tools in mainstream investments
- 8. Short-term reactions vs long-term plans: longevity of ESG in portfolios
- 9. Climate Risk: risk management strategies and solutions
- 10. ESG data clarity: sourcing accurate data for larger investment returns
- 11. Harmonizing Frameworks: unifying standards and succinct analysis
- 12. Green Bonds: industry uptake and likely trends
- 13. Engagement and activism: how to effectively enact change
- 14. Crystal clear: ensuring reliable and clear data in ESG investment strategies
- 15. ESG & Private Markets
- 16. Using internal audit to hold impact to account





November 22, 2021

TO: Each Trustee,

Board of Investments

FROM: Santos H. Kreimann

Chief Executive Officer

Ted Granger 3

Interim Chief Financial Officer

FOR: December 8, 2021 Board of Investments Meeting

SUBJECT: 2021 ACTUARIAL VALUATION OF RETIREMENT BENEFITS

RECOMMENDATION

It is recommended that the Board of Investments:

- 1. Accept the June 30, 2021 Actuarial Valuation of Retirement Benefits as submitted by the plan actuary, Milliman.
- 2. Adopt recommended employer contribution rates (all plan tiers) and employee contribution rates (plan tiers General Plan G and Safety Plan C).
- Delegate authority to the Chief Executive Officer to communicate the results of the 2021 Actuarial Valuation of Retirement Benefits to the Board of Supervisors by May 15, 2022, with a recommendation to implement the employer and employee rates no later than September 29, 2022.

EXECUTIVE SUMMARY

The June 30, 2021 Actuarial Valuation of Retirement Benefits ("2021 Actuarial Valuation") report (Attachment I) has been prepared by Milliman to determine the employer and certain employee¹ contribution rates, which will be effective July 1, 2022. The 2021 Valuation results include decreases in employer contribution rates (except Safety Plan B), decreases in General Plan G and Safety Plan C member contribution rates, a decrease in the Unfunded Actuarial Accrued Liability (UAAL), and an increase in the Plan's funded ratio. LACERA is required to communicate the results to Los Angeles

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¹ Government Code Section 7522.30 of the California Public Employees' Pension Reform Act (PEPRA) requires annual adjustments to contribution rates for members entering the retirement system beginning January 1, 2013. PEPRA applies to LACERA members enrolled in General Plan G and Safety Plan C. Contribution rates for all other members who participate in contributory plans are updated every three years which was implemented as a result of the June 30, 2019 Actuarial Valuation report. This schedule of contribution rate updates is confirmed in LACERA's Funding Policy.

RE: 2021 Actuarial Valuation of Retirement Benefits

November 22, 2021

Page 2

County (County) so the new contribution rates can be implemented by the beginning of the upcoming fiscal year.

SUMMARY OF KEY VALUATION RESULTS

The key valuation results for the past three years are presented in the table below.

Significant Valuation Results							
	FISCAL YEAR ENDED						
	2021	2020	2019				
(\$ in Millions)							
Actuarial Accrued Liability	\$81,898	\$78,275	\$74,635				
Valuation Assets	Valuation Assets \$64,909 \$59,763 \$57,617						
	.	*	.				
Unfunded Actuarial Accrued Liability	\$16,989	\$18,512	\$17,018				
Funded Ratio	79.3%	76.3%	77.2%				
A	7.000/	7.000/	7.000/				
Assumed Investment Return	7.00%	7.00%	7.00%				
Actual Investment Return	25.20%	1.80%	6.40%				
Retired Members (count)	60.407	69.012	66 507				
,	69,497	68,012	66,507				
Average Monthly Benefit Payment	\$4,679	\$4,541	\$4,385				

Since the June 30, 2020 Actuarial Valuation, the Actuarial Accrued Liability (AAL) increased 4.6% to \$81.90 billion. The actuarial valuation process measures how well the Plan's assumptions estimated the actual Plan experience. This increase is primarily attributable to the expected liability growth.

The UAAL as of June 30, 2021, is \$16.99 billion and requires employers to make additional payments to the Plan using closed 20-year layered amortization periods. The estimated annual employer contributions for the upcoming fiscal year 2022-2023 is \$2.29 billion, which includes approximately \$1.02 billion in normal cost contributions and \$1.27 billion in UAAL contributions. The actuary is recommending changes to the employer and PEPRA member contribution rates at this time, as discussed below.

A valuation report is often described as a snapshot of a retirement Plan's funded status at a particular point in time. This year's snapshot finds LACERA with a funded ratio of 79.3%. That is, the estimated benefit liability is greater than the actuarial value of assets. However, this snapshot reflects the actuarial asset smoothing method which recognizes previous investment gains and losses over a five-year period. Based on the market value of assets (excluding non-valuation reserves), LACERA's funded ratio is 88.3%.

RE: 2021 Actuarial Valuation of Retirement Benefits

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Plan demographics reported in the 2021 Actuarial Valuation indicate a 1.0% decrease in the size of the active member population that totals 99,101, with an overall average age of 46.7 years. The retired population increased by 2.2% and totals 69,497 members. The average benefit payment increased by 3.0% to \$4,679 per month. The retired members' average age remained at 73 years.

The table below includes both historical and projected information based on the 2021 Actuarial Valuation report.

EMPLOYER AND EMPLOYEE CONTRIBUTIONS						
	FIS	CAL YEAR BEGINN	ING			
	July 1, 2022	July 1, 2021	July 1, 2020			
(\$ in millions)						
Total Employer Contribution Rate with Phase-in	24.46%	24.64%	22.59%			
Employee Safety Plan C	14.33%	14.42%	14.54%			
Employee General Plan G	9.08%	9.10%	9.11%			
Estimated Employer Contributions	\$2,293	\$2,244	\$1,965			

Annual valuations reset the employer contribution rates each year. For members of General Plan G and Safety Plan C, employee contribution rates are also recalculated annually based on one-half of the Plan's normal cost rate. Member contribution rates for all legacy plans (General Plans A, B, C, and D and Safety Plans A and B) are only updated following a change in assumptions (primarily investment return and mortality assumptions). Generally this occurs following the completion of an investigation of experience study.

LEGAL AUTHORITY

Provisions contained in the County Employees Retirement Law (California Government Code, Sections 31450-31899.1) (CERL) and the California Constitution (Article XVI, Section 17) govern the actuarial process at LACERA.

Section 31453 of the (CERL) 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. 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

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of the differences on the actuary's statement of costs and obligations shall be shown." Government Code Section 7522.30 of the California Public Employees' Pension Reform Act (PEPRA) requires annual adjustments to contribution rates for members entering the retirement system beginning January 1, 2013. PEPRA applies to LACERA members enrolled in General Plan G and Safety Plan C.

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."

Section 31453 further requires the Board of Investments to transmit its recommendations concerning assumptions, interest rates, and contributions to the Board of Supervisors at least 45 days prior to the beginning of the succeeding fiscal year. Section 31454 requires the Board of Supervisors to adjust contribution rates in accordance with LACERA's recommendations no later than 90 days following the beginning of the immediately succeeding fiscal year, which means that the adjustments must be made no later than September 29, 2020. Section 31454.1 exempts the independent assumptions and calculations of LACERA's actuary from "meet and confer" requirements. This same section also recognizes the "meet and confer" responsibility of the Board of Investments or Board of Supervisors in implementing the recommendations contained in the actuarial valuation report.

LACERA'S RETIREMENT BENEFIT FUNDING POLICY

LACERA's Retirement Benefit Funding Policy's main goal is to provide benefit security for its members as well as achieving and maintaining stable employer contributions that are as low as possible. The policy requires annual actuarial valuations to review the retirement system's funding progress, and to set the employer contribution and member contribution rates according to the plan documents (CERL and PEPRA), the relevant provisions of which are described in the Legal Authority above.

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

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experience or experience study, is accomplished by comparing recent actual experience to what was expected to happen according to the actuarial assumptions. Additionally, forecasts are considered where available, particularly for the economic assumptions. Based on this review, the actuary recommends whether any changes in the assumptions or methodology would allow a more accurate projection of total benefit liabilities and asset growth. Milliman completed the most recent experience study as of June 30, 2019. The next experience study is scheduled to be conducted as of June 30, 2022.

For legacy plan tiers using age-based employee contribution rates (General Plans A, B, C and D and Safety Plans A and B), LACERA's actuary will recommend adjusted member rates, as required, due to changes in the underlying assumptions and methodologies used to calculate the employee rates. Therefore, it is expected the age-based employee rates will change no more frequently than every three years when the actuary reviews the assumptions and methodologies as part of the experience study. As there was no experience study conducted in connection with the June 30, 2021 valuation, the actuary is not recommending new employee rates for those age-based employee contribution rate plan tiers (i.e. legacy plan tiers).

For the plan tiers using single-rate employee contribution rates (plan tiers General Plan G and Safety Plan C), members are required to contribute one-half of the total normal cost rate for the plan. The actuary is recommending slightly lower employee rates for those PEPRA tiers effective July 1, 2022.

ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION RATES

Liabilities not funded through employee contributions and portfolio earnings are the responsibility of the employer. The employer contributions include the cost of benefits expected to be earned in the future in excess of those funded by member contributions. These contributions are known as employer normal cost contributions. The actuary has calculated employer normal cost rates for all retirement plans. Comparing the recommended employer normal cost rates calculated in the 2021 valuation to the 2020 valuation rates currently in effect, the general plans' average rate decreased by 0.04% of pay and the safety plans' average rate increased by 0.14% of pay, for an aggregate decrease of 0.01%. A comparison by plan is presented in the 2021 Actuarial Valuation report's Exhibit 10 on page 31. Based on the actuary's recommended employer contribution rates for individual plans, the overall impact is to lower the employer normal cost contribution rate from 10.89% to 10.88% of estimated payroll.

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	June 30, 2021	2020	2019	2018
	Valuation	Valuation	Valuation	Valuation
Employer Normal Cost Rate	10.88%	10.89%	10.86%	9.92%
Employer UAAL Rate	13.58%	14.85%	13.92%	10.99%
Calculated Contribution				
Rate	24.46%	25.74%	24.78%	20.91%
Less cost phase-in	0.00%	-1.10%	-2.19%	0.00%
Total Employer Rate with				
cost phase-in	24.46%	24.64%	22.59%	20.91%

The employer is also responsible to contribute for funding shortfalls related to liabilities accrued in the past (which includes changes in the economic and non-economic assumptions affecting past service, if any). This portion of the employer's contribution is known as the UAAL contribution. Under the terms of the Retirement Benefit Funding Policy, contributions to retire an unfunded liability are calculated using a closed 20-year layered amortization period method when the funded ratio is below 100%. As the funded ratio as of June 30, 2021 is 79.3%, the employer is required to contribute an additional 13.58% of covered payroll towards the unfunded liability for the fiscal year beginning July 1, 2022. The Board of Investments provided direction to the Plan actuary to phase-in the cost of the 2019 Experience Study report's assumption changes over a three-year period (2019–2021 actuarial valuations) using a contribution smoothing method. For the employer contribution rates effective July 1, 2022, the cost phase-in has been fully implemented.

Together, the employer's 10.88% Normal Cost and 13.58% UAAL contribution rates equal the total employer contribution rate of 24.46% of covered payroll. For the fiscal year 2022-2023, the annual employer contribution is projected to increase approximately \$49 million compared to fiscal year 2021-2022, resulting in an approximate annual employer cost of \$2.29 billion.

ACTUARIALLY DETERMINED EMPLOYEE CONTRIBUTION RATES

Members participating in the closed contributory plan tiers (General Plans A, B, C and D and Safety Plans A and B) contribute using age-based rates to fund a defined annuity at a specified age and to fund one-half the cost-of-living benefit. Employee age-based annuity contribution rates are affected by changes made in the salary, investment, and life expectancy assumptions and will vary according to the employee's age at first membership. Since no new assumptions were adopted for this 2021 Actuarial Valuation, the actuary is not recommending changes to the member contribution rates for General Plan A to D and Safety Plans A and B.

Members participating in the open plan tiers (General Plan G and Safety Plan C) are required to contribute one-half of the plan's total normal cost rate. The actuary

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recommends changes to employee contribution rates in these tiers to reflect the Plan's normal cost rates. The General Plan G employee rate is recommended to decrease 0.02% to 9.08% of pay and Safety Plan C employee rate to decrease by 0.09% to 14.33% of pay.

Member contribution rates for all plans at every entry age can be found in the 2021 Actuarial Valuation report's Appendix D on page 108.

ACTUARIAL ASSUMPTION CHANGE COST PHASE-IN

The Board's January 8, 2020 action to use "direct rate smoothing" to phase-in the actuarial assumption change cost impact on the employer contribution rate is an implicit increase of the UAAL amortization period. The phase-in approach initially results in a lower employer contribution rate. Future employer contribution rates after the phase-in period are projected to be greater by approximately 0.23% of covered payroll due to lower employer contributions received during the phase-in period. Applying the 0.23% cost factor to the \$9.4 billion estimated employer payroll for fiscal year 2022 results in an approximate additional cost of \$22 million (based on a projected increase in the UAAL of \$303 million due to the cost phase-in) for the fiscal period beginning July 1, 2022.

With the rate increases fully phased-in, the employer contribution rate beginning July 1, 2022 is 24.46% of payroll. Member contributions rates are not impacted by the cost phase-in approach.

ACTUARIAL RISK DISCUSSION

Under Actuarial Standard of Practice (ASOP) Number 51 (ASOP 51), first effective with the June 30, 2019 valuation, the 2021 Actuarial Valuation report includes a risk discussion (see pages 44-47) in which Milliman assesses and discloses the main risks associated with measuring pension liabilities and the determination of pension plan contributions. This section is intended to identify significant risks, assess the risks, and disclose plan maturity measures and historical information necessary to understand the risks. In addition to the ASOP 51 discussion in the annual valuations, Milliman will prepare a separate ASOP 51 risk report based upon this 2021 Actuarial Valuation report, which will be placed on the Board agenda and discussed at a future meeting.

ACTUARIAL REVIEWS

Actuarial reviews or "audits" were last conducted by Cavanaugh MacDonald Consulting (CMC) on Milliman's 2019 Experience Study and Actuarial Valuation reports. CMC concluded that "We find the June 30, 2019 actuarial valuation results to be reasonable and accurate, based on the assumptions and methods used. The valuation was performed by qualified actuaries and was performed in accordance with the principals and practices prescribed by the Actuarial Standards Board." The next triennial Experience Study and Valuation reviews will be performed as of June 30, 2022.

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CONCLUSION

The LACERA Board of Investments adopted the Retirement Benefit Funding Policy to require the employer contribution rates to be adjusted annually based on the LACERA actuary's annual valuation. Member contribution rates are updated annually for plans established after January 2013 and triennially for all other legacy plans (or at such other times that valuation assumptions change). The Plan actuary, Milliman, performed the 2021 actuarial valuation; the employer contribution rates (all tiers) will change effective July 1, 2022 due to the phase-in adopted in the 2019 Valuation and current year investments gains. Milliman recommends changes to the employee contribution rates for only General Plan G and Safety Plan C. California State Law requires LACERA to transmit the contribution rate recommendations to the Board of Supervisors prior to May 15 and for the Board of Supervisors to implement the recommended contribution rates by July 1 but no later than September 29.

LACERA's consulting actuaries, Nick Collier and Craig Glyde with Milliman, will be attending the December 8, 2021 meeting to discuss the 2021 Actuarial Valuation report and answer any questions you may have.

Attachments

- I. Milliman's 2021 Actuarial Valuation of Retirement Benefits report (final)
- II. Milliman's presentation slides

SHK:tg

2021_Actuarial Valuation of Retirement Benefits BOI Memo FINAL

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Los Angeles County Employees Retirement Association

Actuarial Valuation of Retirement Benefits June 30, 2021

Prepared by:

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November 22, 2021

Board of Investments Los Angeles County Employees Retirement Association 300 North Lake Avenue, Suite 820 Pasadena, CA 91101-4199

Re: LACERA Actuarial Valuation of Retirement Benefits as of June 30, 2021

Dear Trustees of the Board:

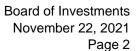
As requested, we have performed an actuarial valuation of retirement benefits for the Los Angeles County Employees Retirement Association (LACERA) as of June 30, 2021 to be used in determining the contribution rates effective July 1, 2022. The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2021, and LACERA's Retirement Benefit Funding Policy (Funding Policy) that was adopted in December of 2009 and amended as of February 2013. It should be noted that under the amended Funded Policy, the reserve value for STAR benefits is included in the Valuation Assets for 2014 and future valuations; however, the liability for any potential STAR benefits that may be granted in the future is not included in this valuation.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by LACERA's staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. Since the valuation results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for LACERA have been determined on the basis of actuarial assumptions and methods that are individually reasonable (taking into account the experience of LACERA and reasonable expectations); and that, in combination, offer a reasonable estimate of anticipated experience affecting LACERA. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations, which, in combination, represent a reasonable estimate of anticipated experience for LACERA. The valuation results were developed using models intended for valuations that use standard actuarial techniques.

This valuation report is only an estimate of LACERA's financial condition as of a single date. It can neither predict LACERA's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of benefits, only the timing of 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, although for informational purposes we have shown valuation results at +/- 0.5% on the investment return assumption at the end of the Executive Summary.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or





demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Investments has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A of this report.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts of LACERA. The calculations in the enclosed report have been made on a basis consistent with our understanding of LACERA's funding requirements as stated under their Funding Policy. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes. Milliman will provide LACERA financial reporting results relevant to GASB Statements No. 67 and 68 in separate reports.

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 exceptions:

- (a) LACERA may provide a copy of Milliman's work, in its entirety, to LACERA's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit LACERA.
- (b) LACERA may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal, investment, or accounting counsel.

The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States, published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We would like to express our appreciation to members of LACERA staff who gave substantial assistance in supplying the data on which this report is based.



We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Mark Olleman, FSA, EA, MAAA

Consulting Actuary

Nick Collier, ASA, EA, MAAA

Vin Celli

Consulting Actuary

Craig Glyde, ASA, EA, MAAA

Consulting Actuary

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Milliman June 30, 2021 Actuarial Valuation Los Angeles County Employees Retirement Association

1. Summary of Findings

2021 Valuation Results

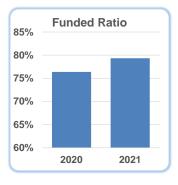
	Fiscal Year Beginning			
	July 1, 2022	July 1, 2021		
Employer Contribution Rate with phase-in	24.46% ⁽¹⁾	24.64%	(2)	
Funded Ratio	79.3%	76.3%		

- 1. The FYB 2022 employer contribution rate was calculated in the June 30, 2021 valuation.
- 2. The FYB 2021 employer contribution rate was calculated in the June 30, 2020 valuation.

This report presents the results of the June 30, 2021 actuarial valuation. This valuation determines the member and employer contribution rates payable starting July 1, 2022. Several key points are summarized below:

Investment Returns: For the fiscal year ending in 2021, the fund returned 25.2% on a market-value basis (net of investment expenses). In total, there was an \$11.5 billion gain on market assets relative to the assumed rate of return of 7.0%. Under the actuarial asset method, which recognizes investment gains and losses over a five-year period, 20% of this gain (\$2.3 billion) is recognized in the current year and the remaining amount (\$9.2 billion) will be recognized in the actuarial value of assets evenly over the next four years. Due to this deferred recognition, the return on actuarial assets was 10.4%, equivalent to a gain of \$2.0 billion relative to the assumed return of 7.0%.



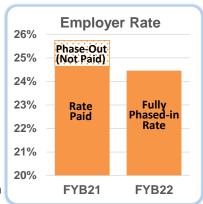


Funding: Due primarily to the recognition of current year investment gains, the Funded Ratio increased from 76.3% to 79.3%. Overall the recognition of current and prior year investment gains and losses caused a 2.5% increase in the Funded Ratio. Contributions to amortize the Unfunded Actuarial Accrued Liability (UAAL) increased the Funded Ratio by an additional 0.7%, while salary increases larger than predicted by the assumptions caused a 0.4% decrease in the Funded Ratio. On a market-value basis, the Funded Ratio increased from 74.0% to 88.3%.

The "Analysis of Change" section that follows later in Section 1 provides an analysis of the sources of change in the Funded Ratio since last year.

Employer Contribution Rate: At the January 2020 Board of Investments (BOI) meeting, the BOI adopted a three-year phase-in of the increase in the employer contribution rate due to the new assumptions and amortization method effective June 30, 2019. The rate increases are fully phased-in with the employer contributions effective July 1, 2022.

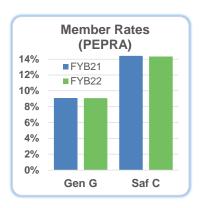
The total calculated employer contribution rate decreased from the prior valuation by 0.18% of payroll, from 24.64% to 24.46%. The decrease in the employer contribution rate due the recognition of current year investment gains is largely offset by the increase this year due to the phase-in of the final portion of the 2019 assumption changes, where the recognition was deferred in the prior valuation. Without the phase-in, the employer contribution rate in FYB 2021 would have been 25.74% of pay instead of the 24.64% that is currently being paid.



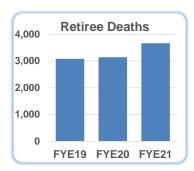
The "Analysis of Change" section provides an analysis of the sources of change in employer contribution rates since last year. In addition, the section "Projected Future Employer Contribution Rates" below shows a 10-year projection of employer contribution rates.

Member Contribution Rates: New member contribution rates are recommended for General Plan G and Safety Plan C effective July 1, 2022. General Plan G and Safety Plan C member rates are required to be equal to 50% of the Gross Normal Cost of the respective plan. The recommended member contribution rates are slightly lower for General Plan G (9.10% decreased to 9.08%) and Safety Plan C (14.42% decreased to 14.33%) relative to the fiscal year beginning July 1, 2021.

Member contribution rates for all plans, except General Plans E and G and Safety Plan C, vary based on a member's entry age to LACERA and the underlying actuarial assumptions. Since no new assumptions were adopted effective with this valuation, there are no recommended changes to member contribution rates for those plans.



Member contribution rates are discussed in detail in Section 5 of this report.



Pandemic Impact: Although it is difficult to isolate the exact impact of the pandemic on LACERA, we did observe several areas where there was a noticeable difference from recent experience. Relative to the prior fiscal year, the mortality rate among healthy retirees was approximately 13% higher. Additionally, both the numbers of service retirements and other terminations of employment were up about 10% over recent experience, which was likely impacted by the pandemic. Although there was clearly a meaningful impact of the pandemic on LACERA members, the results of the valuation did not show a significant impact on LACERA's funding.

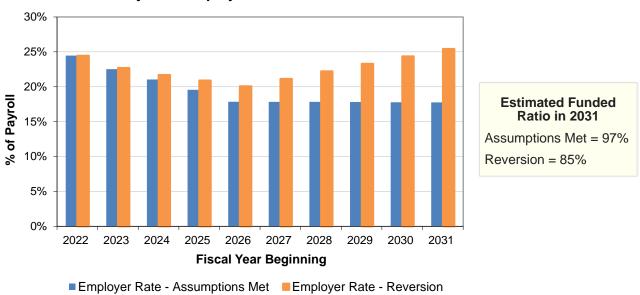
Projected Future Employer Contribution Rates

The employer contribution rate beginning July 1, 2022 is 24.46% of payroll, which is a weighted average for all LACERA plans. The actual percent of payroll to be contributed by the employers varies by plan as shown in Exhibit 11.

The calculated employer contribution rate is effective for the fiscal year beginning July 1, 2022. Employer contribution rates in future years will be largely dependent on actual experience relative to that projected by the actuarial assumptions, particularly the investment return assumption. Additionally, if the assumptions change, this could also have a material impact on future results. Even if all actuarial assumptions are met over the next few years and there are no changes in the underlying assumptions, we project additional changes in future employer contribution rates as deferred investment gains and losses are recognized. As will almost certainly be the case, actual experience will not exactly match the actuarial assumptions over those years, and a different pattern of future employer contribution rates will emerge.

To illustrate this potential variance, we have performed a 10-year projection of the employer contribution rate and Funded Ratio under two scenarios 1) one assuming that all actuarial assumptions are met (including 10 years of investment return of 7.0% per year); and 2) one that assumes a reversion to the assumed investment return. The 10-year reversion to the mean illustration is determined by calculating the annual investment return (5.15%) that would be necessary in each of the following 9 years, so that combined with the 25.2% rate of investment return from the fiscal year ended June 30, 2021 the 10-year average annual rate of investment return would be equal to the assumed annual investment return assumption of 7.0%. This projection is shown in the chart below.

Projected Employer Contribution Rate



As shown in the chart above, if all assumptions are met in future years, the employer contribution rate will decrease through 2026 as deferred investment gains and losses are recognized, and will then stabilize at about 17.8% of pay. However, if long term average investment return reverts gradually to the assumed mean value of 7.0%, then the long term employer contribution rate is projected to rise to about 25% of pay. The employer contribution rate is likely to be subject to more variance than shown due to year-to-year volatility in the actual investment return and actual experience deviating from that projected by the assumptions.

Under the projection scenarios, the Funded Ratio will be approximately 97% as of June 30, 2031 if all assumptions are met and will be approximately 85% as of that date under the investment return mean reversion illustration.

Analysis of Change

The following table shows an analysis of the primary causes of the change in the employer contribution rate and the Funded Ratio over the last year. The recognition of a portion of the current year's investment gain was the most significant factor affecting the employer contribution rate and Funded Ratio. The increase due to the final recognition of the 2019 assumption changes mostly offsets the decrease in the employer contribution rate from the recognition of the combined investment gains and losses.

Sources of Change	Employer Contribution Rate	Funded Ratio
June 30, 2020 Actuarial Valuation	24.64%	76.3%
Expected Year-to-Year Change ⁽¹⁾	0.08%	0.7%
Assumption and Method Changes	0.00%	0.0%
Recognized Investment Gain/Loss		
From Current Year	-1.90%	2.8%
From Prior Years	0.21%	-0.3%
Combined Investment Gain/Loss	-1.69%	2.5%
Contributions greater than assumed	-0.05%	0.0%
Payroll Increase less than assumed	0.04%	0.0%
Liability Gain / Loss		
Salary Increase greater than assumed	0.40%	-0.4%
Retiree COLAs less than assumed	-0.06%	0.0%
Other	0.00%	0.2%
Combined Liability Gain/Loss	0.34%	-0.2%
Recognition of 2019 Assumption Changes	1.10%	0.0%
Total Change	-0.18%	3.0%
June 30, 2021 Actuarial Valuation	24.46%	79.3%

Expected increase in employer contribution rate reflects the impact of the phase-in of 2019 assumption changes.

Based on the 2020 valuation, the expected UAAL as of June 30, 2021 was \$18.7 billion. The actual UAAL as of June 30, 2021 is \$17.0 billion. The lower than expected UAAL is primarily due to the recognition of actuarial asset gains from the current year. This was partially offset by salary increases greater than assumed in the prior fiscal year. An analysis of the difference between expected and actual UAAL is shown in Exhibit 8a.

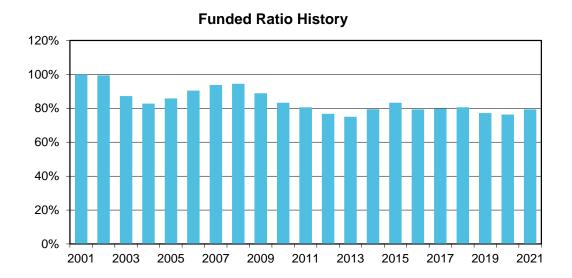
Funding Progress

One measure of the funding adequacy of the system is the Funded Ratio, which compares the Valuation Assets (the actuarial value of assets net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL). The

Funded Ratio shown in this valuation is appropriate for assessing the future contributions needed. Other calculations may be necessary for other purposes, such as assessing the sufficiency of current system assets to satisfy the estimated cost of settling the system's accrued benefit obligations.

As shown in the graph that follows, the Funded Ratio was 94.5% as of June 30, 2008, but decreased steadily over the five-year period following the economic downturn to a low of 75.0% as of June 30, 2013 as asset losses were gradually recognized. The Funded Ratio has increased slightly since that time, although this increase has been slow as the actuarial assumptions have been strengthened over the period, thereby increasing the AAL and offsetting some of the increase in the Funded Ratio from other sources.

A historical perspective of the Funded Ratio is shown in the following chart.



Assets

On June 30, 2021, the market value of the fund (including non-valuation reserves) was \$73.0 billion. The actuarial value of assets was \$65.6 billion, split between \$0.7 billion of Non-Valuation Assets and \$64.9 billion of Valuation Assets. The actuarial value of assets is approximately 90% of the market value of assets.

On a market-value basis, for the fiscal year ended June 30, 2021, LACERA earned 25.2% net of investment expenses, as reported by LACERA in the June 30, 2021 Annual Comprehensive Financial Report (ACFR). The market value of assets is used in calculating the actuarial value of assets. Under the actuarial asset method, investment gains and losses are recognized (or smoothed in) over a five-year period. Due to the recognition of current and deferred net asset gains, the return on the actuarial valuation of assets is 10.4% net of investment and administrative expenses, and is higher than the assumed return for the prior year of 7.0%.

Valuation Assets are used in the calculation of the UAAL contribution rate and Funded Ratio. Valuation Assets are equal to the actuarial value of assets less certain non-valuation reserves. The Valuation Assets of \$64.9 billion are equal to 79.3% of the \$81.9 billion AAL.

The non-valuation reserves are set aside for obligations or contingencies and are excluded from the assets used in the funding valuation. They are not used to fund the retirement benefits unless explicitly stated. As of June 30, 2021, the non-valuation reserves include only the Contingency Reserve, which is equal to 1% of the market value

of assets, or \$730 million. Note that this Contingency Reserve is different than the Contingency Reserve amount determined by LACERA for accounting purposes and included in the ACFR.

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 valuation. Note that if the STAR reserve of \$614 million was excluded from the Valuation Assets, the UAAL would increase by this amount. Under this hypothetical scenario, the calculated employer contribution rate for the fiscal year beginning July 1, 2022 would increase by 0.49% of payroll, and the Funded Ratio would decrease by 0.8% to 78.5%.

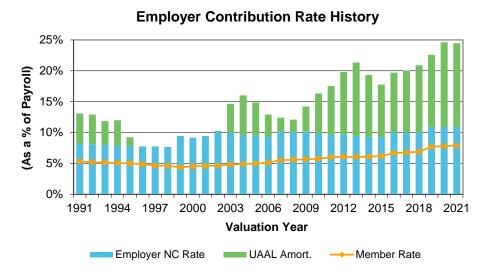
Future Impact of Recognition of Deferred Gains/Losses

The smoothing method is currently deferring \$7.4 billion in net asset gains. As the currently deferred gains and losses are recognized over upcoming valuations, it is projected there will be fluctuations in the calculated employer contribution rate.

The potential future impact of the recognition of these deferred gains and losses on the projected employer contribution rate is included in the graph on page 3.

Employer Contribution Rate History

Based on the results of the valuation, the calculated employer contribution rate should decrease for the fiscal year beginning in 2022 to a rate of 24.46% of pay. A historical perspective of the employer contribution rates is shown in the following chart.

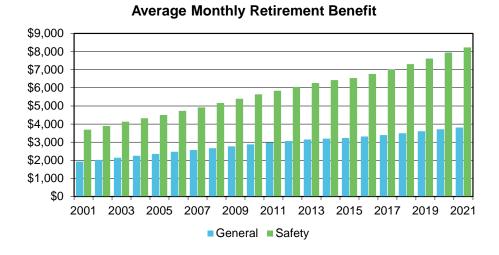


Member Information

Active payroll has increased while active membership has decreased since 2020. As of June 30, 2021, the annualized payroll is \$9.1 billion for 99,101 active members. This reflects a 4.0% increase in average member pay and a 1.0% decrease in the number of active members.



Retired member counts and average retirement benefit amounts continue to increase steadily. For 2021, there were 69,497 retired members and beneficiaries with an average benefit of \$4,679 per month. This represents a 2.2% increase in count and a 3.0% increase in the average monthly benefit.



The charts show that over the last 20 years the number of retired members has grown faster than the number of active members, and the average monthly benefit of retired members and beneficiaries has roughly doubled. This is typical of a maturing retirement system. The increasing number of retirees (relative to active members) and average monthly benefit is a key driver of the negative cashflows experienced over the last several years, and

that are projected to continue growing. Cashflow history and projections are shown and described in more detail in Section 8.

Analysis of Change in Member Population

The following table summarizes the year-to-year change in member population.

	Active Members	Inactive Members	Service Retired Members	Disabled Retired Members	Beneficiaries in Pay	Total
As of June 30, 2020	100,108	16,168	48,628	10,105	9,279	184,288
New Members	4,069	143	18		831	5,061
Status Change:						
to Active	94	(94)				-
to Inactive	(1,719)	1,719				-
to Service Retirement	(2,783)	(443)	3,226			-
to Disabled Retirement	(264)	(11)	(266)	541		-
Refunds	(220)	(258)				(478)
Terminated non-vested	(12)					(12)
Benefits Expired			(21)		(8)	(29)
Deaths	(172)	(36)	(1,819)	(333)	(684)	(3,044)
As of June 30, 2021	99,101	17,188	49,766	10,313	9,418	185,786

Note: Inactive Members include non-vested former members who have not taken a refund of their contributions.

Sensitivity to Investment Return Assumption

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing the ultimate cost. Of the assumptions, the investment return generally has the biggest impact. The following table provides a simple analysis on how the short-term costs are affected by the investment return assumption. Note that the long-term cost of the Plan will be largely driven by actual investment returns and other experience; the assumptions used in the valuation impact the timing of the contributions over the long term.

	Investment Return Assumption			
	Current	+0.5%	-0.5%	
	7.00%	7.50%	6.50%	
Employer Contribution Rate	24.46%	19.66%	29.49%	
Change		-4.80%	5.03%	
Funded Ratio	79.3%	84.3%	74.4%	
Change		5.0%	-4.9%	

Risk Discussion

Additional risks to the Plan are described in more detail in Section 9: Risk Disclosure. Some key points that can be seen in this report are:

- Maturity: As previously discussed, LACERA continues to mature as a system. One example of the impact of this maturity is that the employer contribution rate is becoming more sensitive to investment gains or losses and other experience. This sensitivity is measured by the asset and liability volatility ratios discussed in Section 9.
- Risk Factors: We believe investment returns are the greatest potential risk to future valuation results of LACERA. As shown in the reversion-to-the-mean example above, investment returns have a significant impact on employer contribution rates and Funded Ratios. One way to measure the potential impact is using the Asset Volatility Ratio (AVR), which is a measure of the level of assets to payroll. LACERA's AVR of 8.0 implies that a 10% investment gain or loss relative to the assumed 7% investment return (that is, an investment return of -3% or +17%) will result in a 5.7% of pay increase (or decrease) in the employer contribution rate (after investment gains or losses are smoothed in).
- Variation: Although we believe the actuarial assumptions provide a reasonable estimate of future experience, one thing is certain: future results will vary from those projected by the actuarial assumptions, either better or worse. One way to assess the potential future variation is to look at the past. The Funding Progress and Employer Contribution Rate History subsections above provide a historical perspective of LACERA's Funded Ratios and the employer contribution rate. These both show noticeable variation, both up and down, over the last 20 years.

Summary Valuation Results

Exhibit 1 on the following page presents a summary of key valuation elements as of June 30, 2021 and June 30, 2020, and shows the relative change over the past year. More detail on each of these elements can be found in the following sections and exhibits of this report.

Exhibit 1
Summary of Significant Valuation Results

Summary of Signific					Percentage
	Jun	e 30, 2021	June	30, 2020	Change
Total Membership					
A. Active Members		99,101		100,108	(1.0)%
B. Retired Members & Beneficiaries		69,497		68,012	2.2%
C. Vested Former Members ⁽¹⁾		17,188		16,168	6.3%
D. Total		185,786		184,288	0.8%
Pay Rate as of valuation date					
A. Annual Total (\$millions)	\$	9,080	\$	8,819	3.0%
B. Monthly Average per Active Member		7,635		7,341	4.0%
Average Monthly Benefit Paid to Current Retirees and Beneficiaries					
A. Service Retirement		4,577		4,469	2.4%
B. Disability Retirement		4,377 6,440		6,141	4.9%
C. Surviving Spouse and Dependents		3,289		3,176	3.6%
D. Total		4,679		4,541	3.0%
Actuarial Accrued Liability (\$millions)		,		•	
A. Active Members		35,124		33,775	4.0%
B. Retired Members		45,397		43,239	5.0%
C. Vested Former Members		1,377		1,261	9.2%
D. Total		81,898		78,275	4.6%
Assets					
A. Market Value of Fund (\$millions) B. Actuarial Value (\$millions)		73,012		58,510	24.8%
Valuation Reserves		64,909		59,763	8.6%
2. Non-valuation Reserves		730		585	24.8%
C. Annual Investment Return 1. Market Basis (Net Return)		25.2%		1.8%	n/a
2. Valuation (Actuarial) Basis		10.4%		5.8%	n/a
·	•		•		
Unfunded Actuarial Accrued Liability (\$ millions)	\$	16,989	\$	18,512	(8.2)%
Employer contribution rate for all plans combined as a percent of total payroll					
A. Gross Normal Cost		18.75%		18.69%	0.3%
B. Member Contributions ⁽²⁾		(7.87)%		(7.80)%	0.9%
C. Employer Normal Cost		10.88%		10.89%	(0.1)%
D. UAAL Amortization		13.58%		14.85%	(8.6)%
E. Calculated Contribution Rate		24.46%		25.74%	(5.0)%
F. Deferred Recognition of new assumptions		-		(1.10)%	n/a
G. Employer Contribution Rate with phase-in		24.46%		24.64%	(0.7)%
Funded Ratio		79.3%		76.3%	3.9%
Results Based on Market Value (Informational Purpose	es Only)				
Calculated Contribution Rate		18.57%		26.15%	(29.0)%
Funded Ratio (excluding non-valuation reserves)		88.3%		74.0%	19.3%

^{1.} Includes non-vested former members with contributions on deposit.

^{2.} Includes non-contributory members. The average rate for contributory plans increased from 9.13% to 9.16%.

2. Scope of the Report

This report presents the actuarial valuation of the Los Angeles County Employees Retirement Association as of June 30, 2021. This valuation was requested by the Board of Investments. Section 31453 of the County Employees Retirement Law of 1937 (the CERL) requires an actuarial valuation to be performed at least every three years for the purpose of setting contribution rates. The 2021 valuation meets this requirement. Under LACERA's Funding Policy, annual valuations determine the employer contribution rates each year. Member contribution rates for all plans except General Plan G and Safety Plan C are set in years in which relevant actuarial assumptions are altered. For members of General Plan G and Safety Plan C, member contribution rates are recalculated each year, based on one-half of the Plan's normal cost rate.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the Plan. The assets and investment income are presented in Exhibits 2-4. Exhibit 5 develops the actuarial value of assets as of June 30, 2021. Exhibit 6 develops the Valuation Assets used for funding benefits.

Section 4 describes the benefit obligations of LACERA. Exhibit 7 is the Actuarial Balance Sheet and Exhibit 8a analyzes the change in UAAL. Exhibit 8b shows a history of these changes.

Section 5 discusses the member contribution rates.

Section 6 discusses the employer contributions rates.

Section 7 discloses supplemental information for use in the Annual Comprehensive Financial Report (ACFR). Milliman provides LACERA financial reporting information relevant to GASB Statements No. 67 and 68 in separate reports.

Section 8 shows the estimated cash flow of the Plan, including a projection of both contributions and benefit payments.

This report includes several appendices:

Appendix A	A summary of the actuarial procedures and assumptions used to estimate liabilities and
	contributions.

Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2021.

Appendix C Schedules of valuation data classified by various categories of plan members.

Appendix D Member contribution rates by plan.

Appendix E Historical information.

Appendix F A glossary of actuarial terms used in this report.

3. Assets

In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2021. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities (both accrued and future) for current members, which are generally in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and employers are needed to pay all expected future benefits.

This section of the report looks at the assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Section 6 reviews the process for determining required contributions based on the relationship between the valuation assets and the actuarial liabilities.

A historical summary of the Plan's assets is presented below (dollar amounts in billions).

			Actuari	_	
	M	larket Value of Total Assets	Non-Valuation Reserves	Valuation Assets	Total Fund Return (%) ⁽¹⁾
2012	\$	38.3	\$ 0.9	\$ 39.0	0.0
2013		41.8	0.4	39.9	11.9
2014		47.7	0.5	43.7	16.5
2015		48.8	0.5	47.3	4.1
2016		47.8	0.5	49.4	0.8
2017		52.7	0.5	52.2	12.7
2018		56.3	0.6	55.2	9.0
2019		58.3	0.6	57.6	6.4
2020		58.5	0.6	59.8	1.8
2021		73.0	0.7	64.9	25.2

^{1.} As reported in the Investment Section of LACERA's ACFR for the fiscal year ended June 30, 2021. All returns are shown net of investment expenses and calculated on a time-weighted basis.

On June 30, 2021, the total market value of the fund, less current liabilities, was \$73.0 billion. The actuarial value of the fund was determined to be \$65.6 billion, including the non-valuation reserves. The average total fund return for the last 10 years is 8.6% net of fees, as reported by LACERA.

Financial Exhibits

Exhibit 2 presents a Statement of Fiduciary Net Position and Exhibit 3 presents a Statement of Changes in Fiduciary Net Position. Exhibit 4 describes the allocation of LACERA's assets by the various reserve values determined for accounting purposes as disclosed in the audited financial statements.

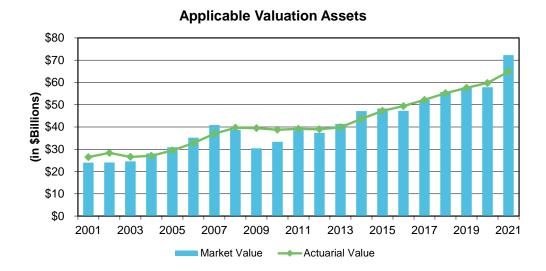
Exhibits 2-4 are taken directly from data furnished to us by LACERA in its annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them both for the prior year and the current year for reasonableness and consistency with previous reports.

Actuarial Asset Method

The actuarial asset method projects the expected market value of assets based on the prior year's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. For the previous year, the assumed rate of return was 7.0%, net of all expenses. The difference between the actual market value and the expected market value is recognized evenly (also referred to as "smoothing") over a five-year period.

Actuarial Value of Assets

The development of the June 30, 2021 actuarial value of assets is shown in Exhibit 5. Note the smoothing process is deferring past investment gains and losses, and is currently in a net actuarial gain position. The result is an actuarial value of assets that is less than the June 30, 2021 market value by \$7.4 billion. The following graph shows a historical comparison of the actuarial and market assets used for valuation purposes.



Funding Policy

Under the LACERA's Retirement Benefit Funding Policy, the following is the allocation of actuarial assets. A Funded Ratio equal to 100% is the Funding Goal. Note that although the allocation of assets used in the actuarial valuation is similar to the process LACERA uses for accounting purposes, there are some differences, including the earnings considered for interest crediting purposes.

For funding purposes and for setting employer contributions rates, recognized earnings for a plan year is the recognized investment income as determined by the actuarial asset method and includes both unrealized income and net realized income, together with the prior balance in the Contingency Reserve. The allocation of recognized earnings is performed once a year as of the Valuation Date in the following order of priority:

- Priority 1: Allocate to the Member Reserve so the Actuarial Asset allocation to that Reserve equals the accounting value for that Reserve on the Valuation Date.
- Priority 2: Allocate to the Advanced Employer Contributions Reserve so the Actuarial Asset allocation to that Reserve equals the accounting value for that Reserve on the Valuation Date.

- Priority 3: Allocate to the Employer Reserve so the Actuarial Asset allocation to that reserve equals the accounting value for that Reserve on the Valuation Date.
- Priority 4: Allocate to the County Contribution Credit Reserve so the Actuarial Asset allocation to that reserve equals the accounting value for that Reserve on the Valuation Date. Note: This Reserve is not a Valuation Reserve.
- Priority 5: Allocate to the Employer Reserve so the total amounts allocated equal one-year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date to the extent there are positive recognized earnings to allocate.
- Priority 6: Allocate to the Contingency Reserve an amount equal to 1% of the Market Value of Assets as of the Valuation Date to the extent there are positive recognized earnings to allocate.
- Priority 7: Allocate to the Employer Reserve an amount, if necessary, when combined with other Valuation Reserves, to provide 100% funding of the AAL as of the Valuation Date to reach the Funding Goal. In the event there are negative recognized earnings, allocate the entire amount.
- Priority 8: The Board may consider additional actions as permitted under the County Employee Retirement Law (CERL) using funds in excess of the amount needed to meet the Funding Goal for funding discretionary benefits. "Excess Earnings" as defined in the County Employees Retirement Law (CERL) may be appropriated upon reaching the Funding Goal; however, the Board may consider adjustment to the employer's contributions only upon satisfying California Government Code Section 7522.52(b).

Valuation Assets

Valuation Assets are the actuarial value of the fund, less the value of any Non-Valuation Reserves. Non-Valuation Reserves include Contingency Reserves and other reserves that have been set aside for current liabilities and special benefits to be funded outside of the actuarially determined contribution rates. The Contingency Reserve is set at a minimum of 1.0% of the market value of the total assets.

The Funding Policy allows the STAR Reserve to be allocated to the Valuation Assets (subject to periodic review), if needed. The June 30, 2021 STAR Reserve accounting value of \$614 million was included in Valuation Assets and used to determine the employer contribution rates for the fiscal year beginning July 1, 2022. Although the STAR Reserve is included in the 2021 Valuation Assets, there is no liability included in this valuation for STAR benefits that may be granted in the future.

The Non-Valuation Reserves shown in Exhibit 6 for funding purposes are not the same as those shown in the audited financial statements and in Exhibit 4.

Exhibit 2 Statement of Fiduciary Net Position As of June 30, 2021 and June 30, 2020

	2021	2020
Assets		
Cash and Short-Term Investments	\$ 3,034,716,419	\$ 2,668,514,883
Cash Collateral on Loaned Securities	1,198,528,379	1,177,374,278
Receivables		
Contributions Receivable	114,101,681	101,730,406
Accounts Receivable - Sale of Investments	439,841,239	697,420,087
Accrued Interest and Dividends	169,925,118	133,935,398
Accounts Receivable - Other	109,138,958	7,586,880
Total Receivables	833,006,996	940,672,771
Investments at Fair Value		
Equity	29,705,842,700	23,332,239,318
Fixed Income	21,077,313,430	18,778,182,107
Private Equity	11,471,947,142	7,141,780,830
Real Estate	5,294,150,081	5,128,770,609
Hedge Funds	2,748,464,892	2,193,437,377
Total Investments	70,297,718,245	56,574,410,240
Total Assets	75,363,970,038	 61,360,972,171
Liabilities		
Accounts Payable - Purchase of Investments	1,055,062,733	1,598,943,189
Retiree Payroll and Other Payables	1,550,257	1,176,761
Accrued Expenses	50,275,900	34,887,345
Tax Withholding Payable	40,144,308	38,002,636
Obligations under Securities Lending Program	1,198,528,379	1,177,374,278
Accounts Payable - Other	6,382,744	180,051
Total Liabilities	2,351,944,321	2,850,564,261
Fiduciary Net Position Restricted For Pension Benefits	\$ 73,012,025,718	\$ 58,510,407,911

Exhibit 3
Statement of Changes in Fiduciary Net Position
For the Fiscal Years Ended June 30, 2021 and 2020

		2021		2020
Additions				
Contributions				
Employer	\$	2,012,877,282	\$	1,800,137,447
Member ⁽¹⁾		760,993,626		659,295,961
Total Contributions		2,773,870,909		2,459,433,409
Investment Income				
From Investing Activities:				
Net Appreciation/(Depreciation) in Fair Value of Investments		9,981,327,917		(4,256,243,407)
Investment Income/(Loss)		5,915,583,546		5,906,599,371
Total Investing Activity Income	<u> </u>	15,896,911,462	·	1,650,355,964
Less Expenses From Investing Activities		(271,751,482)		(209,320,451)
Net Investing Activity Income		15,625,159,981		1,441,035,513
From Securities Lending Activities:				
Securities Lending Income		5,071,951		15,987,146
Less Expenses From Securities Lending Activities: Borrower Rebates		869,192		(10,030,889)
Management Fees		(1,186,215)		(1,115,182)
Total Expenses from Securities Lending Activities		(317,023)	-	(11,146,071)
Net Securities Lending Income		4,754,928		4,841,076
Total Net Investment Income		15,629,914,908		1,445,876,588
Miscellaneous		2,927,574		2,382,427
Total Additions		18,406,713,391		3,907,692,424
Deductions				
Retiree Payroll		3,785,607,812		3,578,878,907
Administrative Expenses		76,369,711		72,054,032
Investment Expenses		14,216,047		13,329,577
Refunds		24,512,008		25,231,451
Lump Sum Death Benefits		4,142,050		2,230,036
Miscellaneous		247,956		397,076
Total Deductions		3,905,095,584		3,692,121,078
Net Increase/(Decrease)		14,501,617,807		215,571,346
Fiduciary Net Position Restricted For Pension Benefits				
Beginning of Year		58,510,407,911		58,294,836,565
End of Year	\$	73,012,025,718	\$	58,510,407,911

^{1.} Member contributions include employer pick-up contributions.

Exhibit 4 Allocation of Assets by Accounting Reserve Amounts

(Dollars in Thousands)

	June 30, 2021	June 30, 2020
Member Reserves Astive Members	Ф. 04 C4C 070	Ф 22 404 F7C
a. Active Membersb. Unclaimed Deposits	\$ 24,646,373	\$ 23,481,576 -
c. Total Member Reserves	24,646,373	23,481,576
2. Employer Reserves		
a. Actual Employer Contributions	29,026,898	25,818,509
b. Advanced Employer Contributions	<u> </u>	
c. Total Employer Contributions	29,026,898	25,818,509
3. County Contribution Credit Reserve	-	-
4. STAR Reserve	614,011	614,011
5. Contingency Reserve	147,104	
6. Total Reserves at Book Value	54,434,386	49,914,096
7. Unrealized Investment Portfolio Appreciation	18,577,640	8,596,312
8. Total Reserves at Fair Value	\$ 73,012,026	\$ 58,510,408

Note: These amounts were determined by LACERA for accounting purposes and are reported in the ACFR for the fiscal year ended June 30, 2021.

Exhibit 5 Five-Year Smoothing of Gains and Losses on Market Value

(Dollars in Thousands)

June 30, 2021 Valuation										
Plan Year Ending	Contributions	Benefit Payments	Expected Market Value	Actual Market Value	Phase	e-Out of Gain / (Loss)				
6/30/2021	\$ 2,773,871	\$ 3,814,262	\$ 61,529,948	\$ 73,012,026	80.00% x \$	11,482,078 = \$	9,185,662			
6/30/2020	2,459,433	3,606,340	61,189,106	58,510,408	60.00% x	(2,678,698) =	(1,607,219)			
6/30/2019	2,303,566	3,407,155	59,238,837	58,294,837	40.00% x	(944,000) =	(377,600)			
6/30/2018	2,116,085	3,203,375	55,441,551	56,299,982	20.00% x	858,431 =	171,686			
6/30/2017	1,857,938	3,029,633	50,102,154	52,743,651	0.00% x	2,641,497 =	0			
					(a) Total Phase-Out o	of Gain / (Loss) = \$	7,372,529			
					(b) Total Market V	alue of Assets = \$	73,012,026			
				(c) T	otal Actuarial Value of As	ssets [(b) - (a)] = \$	65,639,497			

Total Actuarial Value of Assets = Total Market Value of Assets less the Total Phase-Out amount Phase-Out amounts will be recognized in future years.

Projected Recognition of Actuarial Asset Gains / (Losses) in Future Valuations

	2022 Val	2023 Val	2024 Val	2025 Val	Total		
Amount to be Recognized	\$ 1,743,562	\$ 1,571,876	\$ 1,760,676	\$ 2,296,415	\$ 7,372,529		

Exhibit 6 Allocation of Valuation and Non-Valuation Assets

(Dollars in Thousands)

	June 30, 2021	June 30, 2020
Total Market Value of Assets	\$ 75,363,970	\$ 61,360,972
2. Current Liabilities	2,351,944	2,850,564
3. Net Assets Held in Trust for Pension Benefits	73,012,026	58,510,408
4. Market Stabilization Reserve ⁽¹⁾	7,372,529	(1,837,687)
5. Actuarial Value of Fund Assets	65,639,497	60,348,095
6. Non-Valuation Reserves ⁽²⁾		
a. Unclaimed Deposits	-	-
b. Contingency Reserve	730,120	585,104
c. Advanced Employer Contributions	-	-
d. County Contribution Credit Reserve	-	-
e. Reserve for STAR Program		<u> </u>
f. Total	730,120	585,104
7. Valuation Assets ⁽²⁾		
a. Member Reserves	24,646,373	23,481,576
b. Employer Reserves for Funding Purposes	40,263,004	36,281,415
c. Total	64,909,377	59,762,991

^{1.} The Market Stabilization Reserve represents the difference between the Market Value of the fund less Current Liabilities, and the Actuarial Value of the fund as determined in Exhibit 5.

^{2.} The values used for funding purposes for all reserves are based on the Board's Funding Policy. Amounts used for funding purposes may differ from those reported in the audited financial statements as shown in Exhibit 4.

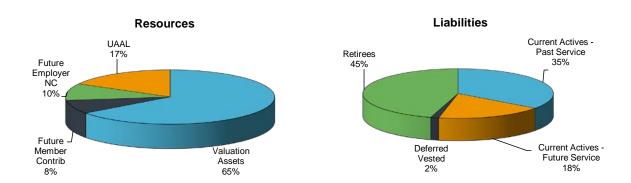
4. Actuarial Liabilities

In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of LACERA's assets as of the valuation date, June 30, 2021. In this section, the discussion will focus on the commitments of LACERA for retirement benefits, which are referred to as its actuarial liabilities.

Actuarial Balance Sheet - Liabilities

The first step in the valuation process is to compare the total resources of LACERA with the present value of all future benefits (liabilities) for all plans. Resources include Valuation Assets and expected future contributions by both the employers and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the pie charts below.

The AAL is the total of these liabilities less expected future Normal Cost contributions. The 2021 actuarial valuation indicates that LACERA's Valuation Assets are less than its AAL.



The difference between the Valuation Assets and the liabilities is the amount that needs to be funded by future member and employer contributions. Both the current and future assets (contributions) are included on the actuarial balance sheet and compared to the liabilities. The difference between these two values is the UAAL.

Exhibit 7 contains an analysis of the present value of future benefits for inactive members (both retired and vested former members) and active members. The analysis is given by class of membership, by plan and by type of benefit. Note that for purposes of this exhibit the Valuation Assets are shown allocated by plan in proportion to each plan's reserves (employer and member).

Liabilities are the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over the rest of their lives and for the lives of any surviving beneficiaries.

The actuarial assumptions used to determine the liabilities are based on the results of the 2019 Investigation of Experience Report. New assumptions were most recently adopted by the Board effective with the June 30, 2019 actuarial valuation. See Appendix A of this report for details.

All liabilities reflect the benefits effective through June 30, 2021. This includes permanent STAR COLAs that have been adopted through the valuation date, but does not include the value of any STAR benefits that may be granted in the future.

Exhibit 7
Actuarial Balance Sheet – June 30, 2021

(Dollars in Millions)

	General						Safety									
	Plan A	PI	an B	Plar	ı C	Plan D	Plan E	ı	Plan G	F	Plan A	Plan B		Plan C	A	III Plans
LIABILITIES																
Present Value of Benefits - Inactives																
- Retirees and Beneficiaries	\$ 10,731	\$	475	\$	289	\$ 10,976	\$ 4,852	\$	26	\$	6,859	\$ 11,176	\$	13	\$	45,397
- Vested Former	5		1		1	671	488		64		0	141		6		1,377
- Inactive Total	10,736		476		290	11,647	5,340		90		6,859	11,317		19		46,774
Present Value of Benefits - Actives																
- Service Retirement	80		22		26	22,135	6,329		6,765		5	8,747		1,610		45,719
 Transfer Service (prior LACERA plan) 	0		0		0	242	415		9		0	13		0		679
- Disability Retirement	1		0		0	924	N/A		490		0	3,230		875		5,520
- Death	1		0		0	378	N/A		153		0	73		28		633
- Termination	0		0		0	164	75		378		0	39		83		739
- Active Total	82		22		26	23,843	6,819		7,795		5	12,102		2,596		53,290
Total Actuarial Liabilities	\$ 10,818	\$	498	\$	316	\$ 35,490	\$ 12,159	\$	7,885	\$	6,864	\$ 23,419	\$	2,615	\$	100,064
ASSETS																
Valuation Assets	(4,503)		343		275	32,580	15,089		3,442		(2,565)	19,511		737		64,909
PV Future Member Contributions	1		0		0	2,816	N/A		3,149		0	1,024		1,121		8,111
PV Future Employer Normal Cost Contributions	2		1		1	3,233	1,073		2,842		0	1,865		1,038		10,055
UAAL or (Surplus Funding)	15,318		154		40	(3,139)	(4,003)		(1,548)		9,429	1,019		(281)		16,989
Total Current and Future Assets	\$ 10,818	\$	498	\$	316	\$ 35,490	\$ 12,159	\$	7,885	\$	6,864	\$ 23,419	\$	2,615	\$	100,064

Actuarial Balance Sheet - Assets

For the purpose of the Actuarial Balance Sheet, LACERA's assets are equal to the sum of:

- (a) Assets currently available to pay benefits and considered for funding purposes (the Valuation Assets);
- (b) The present value of future contributions expected to be made by current active members; and
- (c) The present value of future contributions expected to be made by the employer.

Actuarial Cost Method

The Actuarial Balance sheet determines the amount of future contributions that are needed, but the method used to determine when those future contributions will be made in future years is called the "actuarial cost method." For this valuation, the entry age actuarial cost method has been used. Under this method, the contributions required to meet the difference between current assets and current actuarial liabilities are allocated each year between two elements:

- A normal cost amount: and
- An amount to amortize the UAAL (Unfunded Actuarial Accrued Liability). Note that the UAAL may be negative (representing current assets greater than current actuarial liabilities).

The two items described above – the Normal Cost and UAAL – are the keys to understanding the actuarial cost method.

Normal Cost

The Normal Cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid. Under the entry age actuarial cost method, the Normal Cost contribution rate maintains the funding of benefits as a level percentage of pay. If experience follows the actuarial assumptions precisely, the fund would be completely liquidated when the last payment to the last survivor of the group is made.

By applying the Normal Cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future Normal Cost contributions. Future contributions are expected to be made by both the members and the employer. The member contribution rates are determined based upon requirements established in the CERL and the actuarial assumptions. Based on these member contribution rates, we determine the present value of future member contributions. We subtract that value from the total future Normal Cost contributions expected, based on the entry age cost method. The remaining difference is the employer portion of the future Normal Cost contributions.

Actuarial Accrued Liability

The difference between the present value of all future obligations and the present value of the future Normal Cost contributions is referred to as the Actuarial Accrued Liability (AAL). The AAL is calculated and then compared to the value of assets available to fund benefits. The difference is referred to as the UAAL. The results for all LACERA plans in aggregate are summarized below:

(Do	ollars in millions)	2021	2020	Percent Change
A.	Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 100,064	\$ 95,946	4.3%
B.	Actuarial present value of total future normal costs for current members	18,166	17,671	2.8%
C.	Actuarial accrued liability [A-B]	81,898	78,275	4.6%
D.	Valuation Assets	64,909	59,763	8.6%
E.	UAAL or (Surplus Funding) [C-D]	16,989	18,512	-8.2%
F.	Funded Ratio [D/C]	79.3%	76.3%	3.9%

Unfunded Actuarial Accrued Liability

The portion allocated to service already rendered or accrued is called the AAL. The difference between the AAL and the Valuation Assets is called the Unfunded AAL (UAAL). If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the employer had always contributed the current Normal Cost, and if there were no prior benefit or assumption changes, and if actual experience exactly matched the actuarial assumptions, then the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

Exhibit 7 shows how the UAAL was derived for each level of plan benefits. In the Actuarial Balance sheet, the total actuarial liability for all future benefits must be equal to the current and future assets.

The Actuarial Balance Sheet for each plan, as well as its UAAL, is based on an estimated allocation of the total LACERA Valuation Assets, as previously shown in Exhibit 7. The allocation is based on the relative value of each plan's employer and member reserves as reported to us by LACERA. These allocations are shown for illustrative purposes only, as the UAAL contribution rates are paid by the employer based on the valuation results in aggregate.

Funding Adequacy

A key consideration in determining the adequacy of the funding of LACERA is how the UAAL is being funded. Under LACERA's Funding Policy, a new UAAL "layer" is established each year when the Funded Ratio is less than 100% or greater than or equal to 120%. Effective with the June 30, 2019 valuation, all new UAAL layers are amortized over 20-year periods.

If future experience is significantly more favorable than expected based on the actuarial assumptions, then LACERA'S UAAL may be eliminated. Conversely, if experience is less favorable, a larger UAAL will develop.

Analysis of Change in Unfunded Actuarial Accrued Liability

The UAAL, at any date after establishment of a retirement plan, is affected by any actuarial gains (decreases in UAAL) or losses (increases in UAAL) arising when the actual experience of the retirement plan varies from the experience anticipated by the actuarial assumptions. To the extent actual experience, as it develops, differs from that expected according to the assumptions used, so will the emerging costs differ from the estimated costs.

The 2021 actuarial valuation reflects a decrease in the UAAL of approximately \$1.5 billion since the prior year. The effect of the gains and losses on the UAAL is shown in Exhibit 8a. A summary of these factors is:

- Investment Returns: Returns on market assets were 25.2% (net of investment expenses) compared to the assumed return of 7.0%. This, combined with recognitions of gains and losses from prior periods, resulted in an actuarial asset gain of \$2.0 billion.
- Active Member Experience (non salary): This includes gains and losses from termination, service retirement, disability retirement, and death different than assumed. This resulted in an actuarial loss of \$77 million.
- Salary Increases: Individual salaries for continuing active members increased at a rate greater than the valuation assumption. This resulted in an actuarial loss of \$484 million.
- Actual CPI versus Assumption: The actual CPI increase was lower than assumed. This resulted in COLA increases less than the assumption, which generated an actuarial gain of \$73 million.
- Mortality Experience: An actuarial loss due to mortality generally indicates that retired members are living longer than the current assumption predicts. Similarly, an actuarial gain on mortality indicates that retired members are not living as long as predicted. This year, there was an actuarial gain of \$96 million due to mortality experience for retirees and beneficiaries.
- Other Experience: Examples of this are gains and losses from retirement and mortality experience of inactive members, reciprocity, and transfers between plans. These factors combined resulted in an actuarial gain of \$47 million.

Change in Unfunded Actuarial Accrued Liability - History

Exhibit 8b shows the sources of change in the UAAL over the past five valuations. The single biggest source of annual change in most years, when there are no changes in the assumptions, is the return on investments being either greater than or less than the assumption.

Exhibit 8a Analysis of Change in Unfunded Actuarial Accrued Liability

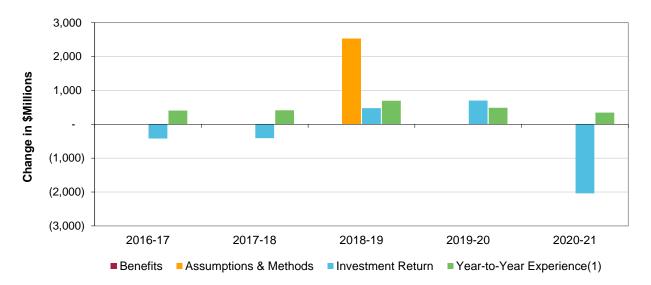
(Dollars in Millions)

			Δ	ımount	As a Percent of June 30, 2021 Actuarial Accrued Liability
Unfunded Actuarial Accrued Liability - June 30, 2020			\$	18,512	22.60%
Interest Accrued				1,311	1.60%
Benefits Accrued (Normal Cost)				1,634	2.00%
<u>Contributions</u>					
Employer - Cash	\$	(2,013)			-2.46%
Employer - Contribution Credit		-			0.00%
Member		(761)			-0.93%
Total				(2,774)	-3.39%
Expected Unfunded Actuarial Accrued Liability - June 30	, 2021		\$	18,683	22.81%
Sources of Change:					
Increase in UAAL due to New Assumptions				-	0.00%
Asset (Gains) and Losses					
(Gain) / Loss due to Investment Income				(2,039)	-2.49%
Liability (Gains) and Losses					
Active Member Experience (non salary)	\$	77			0.09%
Salary Increases Greater than Expected		484			0.59%
CPI Less than Expected		(73)			-0.09%
Mortality Experience		(96)			-0.12%
All Other Experience		(47)			-0.06%
Total				345	0.42%
Total Changes			\$	(1,694)	-2.07%
Unfunded Actuarial Accrued Liability - June 30, 2021			\$	16,989	20.74%

Exhibit 8b History of Changes in Unfunded Actuarial Accrued Liability

(Dollars in Millions)

	2	2016-17	2	2017-18	2018-19	2	2019-20	2	2020-21	2	2016-21
Prior Valuation UAAL	\$	12,841	\$	13,145	\$ 13,294	\$	17,018	\$	18,512	\$	12,841
Increase in UAAL due to:											
Expected Increase / (Decrease)		320		146	25		306		171		968
Asset (Gains) and Losses		(421)		(411)	477		701		(2,039)		(1,693)
Changes in Benefits		-		-	-		-		-		-
Changes in Assumptions		-		-	2,528		-		-		2,528
Changes in Methods		-		-	-		-		-		-
Salary Increases		277		223	486		388		484		1,858
CPI Increases		(139)		45	44		43		(73)		(80)
Mortality Experience		(51)		(20)	(6)		1		(96)		(172)
All Other Experience		318		166	170		55		30		739
Total Increase / (Decrease)	_	304	_	149	 3,724		1,494	_	(1,523)	_	4,148
Valuation UAAL	\$	13,145	\$	13,294	\$ 17,018	\$	18,512	\$	16,989	\$	16,989
Funded Ratio		79.9%		80.6%	77.2%		76.3%		79.3%		79.3%



^{1.} Year-to-Year Experience includes changes due to Salary, CPI, Mortality and Other Experience.

5. Member Contributions

Normal Contributions for non-PEPRA Plans

Member contributions are of two types: Normal contributions and cost-of-living contributions.

Normal contributions for each of the legacy plans (all plans except General Plan G and Safety Plan C) are defined in the following sections of the CERL:

Plan	CERL Reference	Formula
General A	31621.3	1/240th of FAC at age 55
General B	31621.1	1/120th of FAC at age 55
General C	31621	1/120th of FAC at age 60
General D	31621	1/120th of FAC at age 60
General E	N/A	Plan E is non-contributory
Safety A Safety B	31639.5 31639.25	1/200th of FAC at age 50 1/100th of FAC at age 50

Note: FAC = Final Average Compensation

Normal member contributions are determined using the Entry Age Normal Funding Method and the following actuarial assumptions:

- 1. Expected rate of return on assets.
- 2. Individual salary increase rate (wage growth + merit).
- 3. Mortality for members on service retirement.

Since new assumptions were not adopted for the 2021 valuation, we are not recommending changes to the member contribution rates for General Plans A to D and Safety Plans A and B. Member contributions are shown in Appendix D. A sample of these recommended member contribution rates is shown in Exhibit 9.

Member contribution rates for General Plan G and Safety Plan C are discussed below.

Cost-of-Living Contributions for Legacy Plans

The determination of the member cost-of-living (COLA) contributions is based on Section 31873 of the CERL. This section requires that the cost of the COLA benefit be shared equally between members and the employer. Unlike the member normal contributions, these rates are based on the actuarial cost of the benefits and reflect all assumptions used in the valuation of liabilities.

Since new assumptions were not adopted for the 2021 valuation we are not recommending changes in the member cost-of-living contribution rates. The recommended cost-of-living contribution rates, expressed as a percentage of the normal member contribution rates, are as follows:

Plan	COLA %
General A	84.46%
General B	25.90%
General C	26.81%
General D	25.94%
General E	0.00%
Safety A	87.15%
Safety B	33.03%

The relative magnitude of these amounts reflects the differences in the normal contribution rates for each plan and the different cost-of-living benefits offered by the different plans. The rate for Plan E is 0.00% since it is non-contributory.

A sample of the current member contribution rates (normal plus cost-of-living) can be found in Exhibit 9.

Full disclosure of the member rates showing both the normal and the total (normal plus cost-of-living) contribution rates can be found in Appendix D.

Member Contribution Rates for General Plan G and Safety Plan C (PEPRA Plans)

Members of the two plans developed in compliance with the California Public Employees' Pension Reform Act of 2013 (PEPRA) contribute a flat rate (i.e., does not vary by entry age) based on whether they are in the General or Safety plan. This rate is set equal to one-half of the total Normal Cost rate. We are recommending changes to the member contribution rates for these plans, as shown below, to reflect the Plan's Normal Cost rates for the 2021 valuation.

	General Plan G	Safety Plan C
All Ages: Recommended	9.08%	14.33%
All Ages: Current	9.10%	14.42%
Ratio (Recommended / Current)	99.8%	99.4%

Note that the member contribution rates for these plans are further split for purposes of this report into a "Normal" and "Cost of Living" component. The cost-of-living component for these members, as shown in Exhibit 9 on the following page, represents one-half of the cost of the COLA for these plans.

Average Member Rates

The average member contribution rate for only those active members in contributory plans at June 30, 2021 is 9.16% of covered payroll, compared to 7.87% of covered payroll for all active members including non-contributory members. The 7.87% offsets the gross normal cost to yield the employer normal cost rate. Note that covered payroll does not include pay for PEPRA plan members that is above the PEPRA compensation limit.

Exhibit 9
Sample Member Contribution Rates

	R	ecommended F	Rates (Based or	n 2021 Valuation)	
	Entry Age	Normal	Cost of Living	Total as a % of Pay	Current Rate (Total)	Ratio (New / Current)
General Men	nbers					
Plan A	25	3.24%	2.74%	5.98%	5.98%	100.0%
	35	3.99%	3.37%	7.36%	7.36%	100.0%
	45	4.83%	4.08%	8.91%	8.91%	100.0%
	55	5.13%	4.33%	9.46%	9.46%	100.0%
Plan B	25	6.47%	1.68%	8.15%	8.15%	100.0%
	35	7.98%	2.07%	10.05%	10.05%	100.0%
	45	9.66%	2.50%	12.16%	12.16%	100.0%
	55	10.25%	2.65%	12.90%	12.90%	100.0%
Plan C	25	5.52%	1.48%	7.00%	7.00%	100.0%
	35	6.80%	1.82%	8.62%	8.62%	100.0%
	45	8.33%	2.23%	10.56%	10.56%	100.0%
	55	9.68%	2.60%	12.28%	12.28%	100.0%
Plan D	25	5.52%	1.43%	6.95%	6.95%	100.0%
	35	6.80%	1.76%	8.56%	8.56%	100.0%
	45	8.33%	2.16%	10.49%	10.49%	100.0%
	55	9.68%	2.51%	12.19%	12.19%	100.0%
Plan G	All Ages	7.33%	1.75%	9.08%	9.10%	99.8%
Safety Memb	bers					
Plan A	25	4.74%	4.13%	8.87%	8.87%	100.0%
	35	5.63%	4.91%	10.54%	10.54%	100.0%
	45	6.70%	5.84%	12.54%	12.54%	100.0%
	55	6.70%	5.84%	12.54%	12.54%	100.0%
Plan B	25	9.48%	3.13%	12.61%	12.61%	100.0%
	35	11.27%	3.72%	14.99%	14.99%	100.0%
	45	13.40%	4.43%	17.83%	17.83%	100.0%
	55	13.40%	4.43%	17.83%	17.83%	100.0%
Plan C	All Ages	11.11%	3.22%	14.33%	14.42%	99.4%

Note: A portion of some of the member contribution rates is paid for ("picked up") by the employer and is not considered part of the member's contribution account for refund purposes. Such contributions are referred to as the surcharge amount and are subject to change each year. The rates shown in the table above are prior to any surcharge payments.

6. Employer Contributions

Calculated Employer Contribution Rate

Contributions to LACERA are determined using the Entry Age Normal Cost Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the actuarial cost method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibit 10 illustrates the Normal Cost Contribution Rates by type of benefit and for each plan based on this valuation. A comparison with last year is also shown.

Under the Funding Policy, the total contribution rate is set equal to the Normal Cost contribution rate plus a payment by the employer towards the UAAL. The calculation of the UAAL contribution rate is shown in Exhibit 12. A portion of the Normal Cost contribution is funded by member contributions. The remainder is paid for by the employer.

The total calculated employer contribution rates for each plan, along with a comparison to the prior year's calculated rates, can be found in Exhibit 11. These results are expressed as a percentage of payroll and annual contribution dollars. Note that LACERA's UAAL contribution rate is not determined separately for each plan but is funded evenly as a percentage of pay over salaries for all members.

For the fiscal year beginning in 2022, the total calculated employer contribution rate decreases to 24.46% from the current fiscal year rate of 24.64%. This is equal to the aggregate employer Normal Cost contribution rate of 10.88% based on the 2021 valuation, plus the layered amortization payment of the UAAL, shown in Exhibit 12. Effective with the June 30, 2019 valuation, all new UAAL layers are amortized over a 20-year period, beginning with the date the contribution is first expected to be made.

(All values as a % of Payroll)

Employer Normal Cost Contribution Rate	10.88%
Layered Amortization of UAAL	<u>13.58%</u>
Calculated Employer Contribution Rate (before phase-in)	24.46%
Deferred Recognition of 2019 Assumption Changes	0.00%
Calculated Employer Contribution Rate (with phase-in)	24.46%

At the January 2020 meeting, the Board of Investments adopted a three-year phase-in of the impact of the change in employer contribution rate resulting from the new assumptions adopted effective June 30, 2019. For the fiscal year beginning July 1, 2022, the impact of the June 30, 2019 assumption changes is fully phased in.

The phase-in approach described above resulted in smaller employer contributions than would otherwise have been payable by employers in fiscal years beginning in 2020 and 2021. While the phase-in approach allowed a gradual increase in employer contribution rates rather than a large one-time increase in the fiscal year beginning in 2020, calculated employer contributions in the long term are larger to make LACERA whole for the smaller contributions (with interest) over that two year period. We estimate that the calculated employer contribution is approximately 0.23% of pay higher effective July 1, 2022 to account for the phase-in approach.

Exhibit 10
Calculated Normal Cost Contribution Rates – June 30, 2021

						Genera						Sa	fety		Grand
	Plai	n A	Pla	an B	Plan C	Plan D	Plan E	Plan G	Total	Plan	Α	Plan B	Plan C	Total	Total
A. Normal Cost Contribution Rate															
Service Retirement	20.	77%	18	3.30%	13.36%	14.66%	10.11%	15.53%	14.15%	24.5	55%	18.68%	17.21%	18.30%	14.92%
Disability Retirement	1.	00%	1	.03%	0.70%	1.15%	0.00%	1.29%	0.99%	11.5	57%	9.38%	10.16%	9.58%	2.62%
Death	0.	27%	0	.28%	0.24%	0.37%	0.00%	0.35%	0.30%	0.4	41%	0.35%	0.31%	0.34%	0.31%
Termination	0.	45%	0	.40%	0.40%	0.97%	0.61%	0.99%	0.91%	0.8	32%	0.83%	0.98%	0.87%	0.90%
Total	22.	49%	20	.01%	14.70%	17.15%	10.72%	18.16%	16.35%	37.3	35%	29.24%	28.66%	29.09%	18.75%
B. Member Contributions	(5.4	18)%	(9.	46)%	(7.05)%	(7.98)%	0.00%	(9.08)%	(6.94)%	(11.0	0)%	(11.02)%	(14.33)%	(11.88)%	(7.87)%
C. Net Employer Normal Cost as of June 30, 2021 (A) - (B)	17.	01%	10).55%	7.65%	9.17%	10.72%	9.08%	9.41%	26.3	35%	18.22%	14.33%	17.21%	10.88%
D. Net Employer Normal Cost as of June 30, 2020	17.	13%	10).41%	7.64%	9.19%	10.74%	9.10%	9.45%	26.3	37%	17.85%	14.42%	17.07%	10.89%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.1	12)%	O).14%	0.01%	(0.02)%	(0.02)%	(0.02)%	(0.04)%	(0.0)	2)%	0.37%	(0.09)%	0.14%	(0.01)%
F. Estimated Payroll for fiscal year beginning July 1, 2022 ⁽¹⁾	\$	9	\$	2	\$ 3	\$ 3,899	\$ 1,341	\$ 2,343	\$ 7,597	\$	0	\$ 1,316	\$ 462	\$ 1,778	\$ 9,375
G. Estimated Total Normal Cost Contribution in Dollars (A x F) ⁽²⁾	\$	2	\$	-	\$ -	\$ 669	\$ 144	\$ 425	\$ 1,242	\$	-	\$ 385	\$ 132	\$ 517	\$ 1,759

^{1.} Estimated Payroll based upon annualized salary rate as of June 30, 2021 increased by 3.25% wage inflation. Dollar figures in millions.

^{2.} The timing of the Normal Cost shown in this exhibit is spread over the entire year and corresponds to payroll timing.

Exhibit 11
Total Employer Contributions

							-	Genera	ıl									Sa	fety				All
	Pla	n A	Р	lan B	Pla	an C	P	lan D	PI	lan E	P	lan G	T	Гotal	Pla	an A	PI	an B	PI	an C		Total	Plans
A. Net Employer Normal Cost																							
Basic Benefits	13.	.46%		8.49%	6	.15%		7.52%		8.86%		7.33%		7.70%	20	0.50%	1	4.43%	1	1.11%		13.57%	8.80%
Cost-of-Living Benefits	3.	.55%		2.06%	1	.50%		1.65%		1.86%		1.75%		1.71%		5.85%		3.79%		3.22%		3.64%	2.08%
3. Total June 30, 2021	17.	.01%	1	0.55%	7	.65%		9.17%	1	0.72%		9.08%		9.41%	26	6.35%	1	8.22%	1	4.33%		17.21%	10.88%
B. UAAL Contribution Rate	13.	.58%	1	3.58%	13	.58%	1	13.58%	1	3.58%		13.58%	1	3.58%	13	3.58%	1	3.58%	1	3.58%		13.58%	13.58%
C. Total June 30, 2021 Contribution Rate (A) + (B)	30.	.59%	2	24.13%	21	.23%	2	22.75%	2	24.30%	;	22.66%	2	2.99%	39	9.93%	3	1.80%	2	7.91%	, ;	30.79%	24.46%
D. Total June 30, 2020 Contribution Rate	30.	.88%	2	24.16%	21	.39%	2	22.94%	2	24.49%	:	22.85%	2	3.20%	40).12%	3	1.60%	2	8.17%	, ;	30.82%	24.64%
E. Estimated Payroll for fiscal year beginning July 1, 2022 ⁽¹⁾	\$	9	\$	2	\$	3	\$	3,899	\$	1,341	\$	2,343	\$	7,597	\$	0	\$	1,316	\$	462	\$	1,778	\$ 9,375
F. Estimated Annual Contribution (C x E)	\$	3	\$	1	\$	1	\$	887	\$	326	\$	531	\$	1,746	\$	-	\$	418	\$	129	\$	547	\$ 2,293
G. Last Year's Estimated Annual Contribution	\$	3	\$	1	\$	1	\$	897	\$	336	\$	477	\$	1,713	\$	-	\$	422	\$	109	\$	531	\$ 2,244
H. Increase / (Decrease) in Annual Contribution	\$	-	\$	-	\$	-	\$	(10)	\$	(10)	\$	54	\$	33	\$	-	\$	(4)	\$	20	\$	16	\$ 49

^{1.} Estimated Payroll based upon annualized salary rate as of June 30, 2021 increased by 3.25% wage inflation. Dollar figures in millions.

Exhibit 12
Unfunded Actuarial Accrued Liability Detail

(Dollars in Millions)

		Unfunde	ed Ac	tuarial Ac	crued Lia	ability - Amorti	zation	Detail			
Date Established	Description	ance as of e 30, 2021		erest on alance		Payment on 30, 2022 ⁽¹⁾	Balance as of June 30, 2022 ⁽²⁾		Remaining Period as of June 30, 2022 ⁽⁵⁾	Am	y 1, 2022 ortization ayment
June 30, 2009	Initial UAAL	\$ 5,567.0	\$	389.7	\$	440.6	\$	5,516.1	17 Years	\$	433.4
June 30, 2010	(Gain) / Loss ⁽³⁾	3,047.9		213.3		232.2		3,029.0	18 Years		228.4
June 30, 2011	(Gain) / Loss ⁽³⁾	1,514.7		106.0		111.4		1,509.4	19 Years		109.6
June 30, 2012	(Gain) / Loss ⁽³⁾	2,482.5		173.8		176.6		2,479.7	20 Years		173.7
June 30, 2013	(Gain) / Loss ⁽³⁾	1,403.6		98.2		99.8		1,401.9	20 Years		98.2
June 30, 2014	(Gain) / Loss	(2,599.0)		(181.9)		(184.9)		(2,596.1)	20 Years		(181.9)
June 30, 2015	(Gain) / Loss	(2,030.5)		(142.1)		(144.4)		(2,028.2)	20 Years		(142.1)
June 30, 2016	(Gain) / Loss ⁽³⁾	3,901.4		273.1		277.5		3,897.0	20 Years		273.0
June 30, 2017	(Gain) / Loss	(21.1)		(1.5)		(1.5)		(21.1)	20 Years		(1.5)
June 30, 2018	(Gain) / Loss	61.1		4.3		4.3		61.0	20 Years		4.3
June 30, 2019	(Gain) / Loss ⁽³⁾	3,935.8		275.5		299.8		3,911.4	18 Years		294.9
June 30, 2020	(Gain) / Loss	1,461.8		102.3		107.5		1,456.6	19 Years		105.7
June 30, 2021	(Gain) / Loss	(1,736.0)		(121.5)		(107.6) ⁽⁴⁾		(1,749.8)	20 Years		(122.6)
							Total	Amortization Pa	yment July 1, 2022:	\$	1,273.2
								Projected F	Payroll July 1, 2022:	\$	9,374.6
UAAL as	of June 30, 2021:	\$ 16,989.0			UAAL C	ontribution R	ate (as	a % of Payroll)	FYB July 1, 2022:		13.58%

Explanatory Notes:

- 1. Amortization Payments are based on a fixed schedule that increases by the payroll assumption each year.
- 2. The assets and liabilities used in the calculation of the UAAL are as of June 30, 2021, whereas, the contribution rates are not effective until July 1, 2022. Therefore, the UAAL is adjusted to June 30, 2022 based on the actual contribution rate for the period.
- 3. (Gain) / Loss layers include impact of assumption changes in these years.
- 4. The amortization of UAAL does not begin until July 1, 2022; therefore, the UAAL amount is adjusted by one year to reflect the actual July 1, 2021 contribution rate.
- 5. Effective with the June 30, 2019 valuation, all new UAAL layers are amortized over a 20-year period, beginning with the date the contribution is first expected to be made.

7. Supplemental Information

Governmental Accounting Standards Board (GASB) Statement No. 67 sets out requirements for defined benefit pension plan reporting and disclosures. GASB Statement No. 68 sets out requirements for accounting by state and local government employers.

Milliman provides LACERA with results relevant to Statements No. 67 and 68 in separate stand-alone financial reporting valuation reports.

For informational purposes, we have provided the following exhibits in this report that LACERA may use in the audited financial statements:

Exhibit 13: Schedule of Funding Progress

Exhibit 14: Schedule of Employer Contributions

Exhibit 15: Solvency Test

Exhibit 16: Actuarial Analysis of Financial Experience

Exhibit 17: Retirants and Beneficiaries added to / removed from Retiree Payroll

Exhibit 13, Schedule of Funding Progress, compares actuarial assets and liabilities of the Plan, based on the actuarial funding method used.

Exhibit 14, Schedule of Employer Contributions, compares the employer contributions required based on the actuarial valuation with the employer contributions actually made. Information shown in this exhibit comes from LACERA's audited financial statements.

Exhibit 15 compares the Actuarial Value of Valuation Assets to the types of Actuarial Accrued Liabilities, applying them first to Active Member contributions, then to retirees and beneficiaries, and then the remaining amount to the Active Members benefits. This is referred to as the Solvency Test.

Exhibit 16 shows the changes in actual versus expected UAAL from year to year.

Exhibit 17 reconciles the retired members and beneficiaries who have been added to and removed from the retiree payroll.

Exhibit 13
Schedule of Funding Progress

(Dollars in Thousands)

Actuarial Valuation Date	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liabilities	(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll ⁽¹⁾	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 2012 ⁽²⁾	\$ 39,039,364	\$ 50,809,425	\$ 11,770,061	76.8%	\$ 6,619,816	177.8%
June 30, 2013 ⁽²⁾	39,932,416	53,247,776	13,315,360	75.0%	6,595,902	201.9%
June 30, 2014	43,654,462	54,942,453	11,287,991	79.5%	6,672,228	169.2%
June 30, 2015	47,328,270	56,819,215	9,490,945	83.3%	6,948,738	136.6%
June 30, 2016 ⁽²⁾	49,357,847	62,199,214	12,841,367	79.4%	7,279,777	176.4%
June 30, 2017	52,166,307	65,310,803	13,144,496	79.9%	7,637,032	172.1%
June 30, 2018	55,233,108	68,527,354	13,294,246	80.6%	7,957,981	167.1%
June 30, 2019 ⁽²⁾	57,617,288	74,635,840	17,018,552	77.2%	8,370,050	203.3%
June 30, 2020	59,762,991	78,275,175	18,512,184	76.3%	8,724,151	212.2%
June 30, 2021	64,909,377	81,898,044	16,988,667	79.3%	9,062,051	187.5%

^{1.} Covered Payroll includes compensation paid to all active employees on which contributions are calculated, as reported by LACERA. Covered Payroll differs from the Active Member Valuation Payroll shown in Table C-1, which is an annualized compensation of only those members who were active on the actuarial valuation date.

^{2.} Assumption changes.

Exhibit 14 Schedule of Contributions from the Employer

(Dollars in Thousands)

Fiscal Year Ending	Actuarially Determined Employer Contribution	Ca	sh Payment	nsfer from ve Accounts	Total	Percentage of Actuarially Determined Contribution Contributed
June 30, 2012	\$ 1,078,929	\$	1,078,929	\$ -	\$ 1,078,929	100%
June 30, 2013	1,172,014		723,195	448,819	1,172,014	100%
June 30, 2014	1,320,442		1,320,442	-	1,320,442	100%
June 30, 2015	1,494,975		1,494,975	-	1,494,975	100%
June 30, 2016	1,443,130		1,443,130	-	1,443,130	100%
June 30, 2017 ⁽¹⁾	1,392,813		1,370,922	21,891	1,392,813	100%
June 30, 2018	1,564,284		1,564,284	-	1,564,284	100%
June 30, 2019	1,708,122		1,708,122	-	1,708,122	100%
June 30, 2020	1,800,137		1,800,137	-	1,800,137	100%
June 30, 2021	2,012,877		2,012,877	-	2,012,877	100%

^{1.} The County Contribution Reserve was used to offset the contribution required from the Courts in the fiscal year ended June 30, 2017.

Exhibit 15 Solvency Test

(Dollars in Millions)

			Ac	tua	arial Accrued Liab	oiliti	ies for			
Va		Actuarial Value of	Active Member		Retirees and		Active Members (Employer Financed		on of Actuarial Adabilities Covered Assets	
Actuarial Valuation Date		Valuation Assets	Contributions (A)		Beneficiaries ⁽¹⁾ (B)			(A)	(B)	(C)
June 30, 2012	\$	39,039	\$ 6,961	\$	29,118	\$	14,730	100%	100%	20%
June 30, 2013		39,932	7,837		30,980		14,430	100%	100%	8%
June 30, 2014		43,654	8,354		31,882		14,706	100%	100%	23%
June 30, 2015		47,328	8,805		32,734		15,280	100%	100%	38%
June 30, 2016		49,358	8,767		35,316		18,116	100%	100%	29%
June 30, 2017		52,166	9,482		37,077		18,752	100%	100%	30%
June 30, 2018		55,233	9,882		39,192		19,453	100%	100%	32%
June 30, 2019		57,617	10,210		42,235		22,190	100%	100%	23%
June 30, 2020		59,763	10,650		44,500		23,125	100%	100%	20%
June 30, 2021		64,909	11,115		46,774		24,009	100%	100%	29%

^{1.} Includes vested and non-vested former members.

Notes:

For the purpose of this exhibit, valuation assets are allocated, in order, to active member contribution accounts (A), the Actuarial Accrued Liability for retirees and beneficiaries (B) and the employer financed portion of active member liabilities (C). Active member contributions are always assumed to be 100% funded. Assets are then allocated to the Actuarial Accrued Liability for retirees and beneficiaries until that category is 100% funded, and then any remaining valuation assets are allocated to the employer financed portion of active member liabilities. The employer's UAAL contributions are based on a percentage of active member salaries and those contributions are projected to eliminate any unfunded liability in that category over the scheduled amortization period.

Exhibit 16
Actuarial Analysis of Financial Experience

(Dollars in Millions)

	Valuation as of June 30						
	2015	2016	2017	2018	2019	2020	2021
Unfunded Actuarial Accrued Liability	\$11,288	\$9,491	\$12,841	\$13,145	\$13,294	\$17,018	\$18,512
Expected Increase/(Decrease) from Prior Valuation	(54)	(102)	320	146	25	306	171
Salary Increases Greater/(Less) than Expected	79	162	277	223	486	388	484
CPI Greater/(Less) than Expected	(570)	(191)	(139)	45	44	43	(73)
Change in Assumptions	-	2,922	-	-	2,528	-	-
Asset Return Less/(Greater) than Expected	(1,263)	496	(421)	(411)	477	701	(2,039)
All Other Experience	11	63	267	146	164	56	(66)
Ending Unfunded Actuarial Accrued Liability	\$9,491	\$12,841	\$13,145	\$13,294	\$17,018	\$18,512	\$16,989

Exhibit 17
Retirants and Beneficiaries added to and removed from Retiree Payroll

(Dollars in Thousands)

Added to Rolls		Remove	d from Rolls	Rolls at E	nd of Year			
Valuation Date	Member Count	Annual Allowance ⁽¹⁾	Member Count	Annual Allowance ⁽¹⁾	Member Count	Annual Allowance ⁽¹⁾	% Increase in Retiree Allowance	Average Annual Allowance
June 30, 2012	3,194	\$ 193,865 ⁽²⁾	(1,795)	\$ (61,588)	56,770 ⁽³⁾	\$ 2,474,902	5.65%	\$ 43.6
June 30, 2013	3,373	205,659 ⁽²⁾	(2,057)	(69,494)	58,086 ⁽³⁾	2,611,067	5.50%	45.0
June 30, 2014	3,128	172,743 ⁽²⁾	(1,985)	(71,730)	59,229 ⁽³⁾	2,712,080	3.87%	45.8
June 30, 2015	3,501	180,549 ⁽²⁾	(2,124)	(80,028)	60,606 ⁽³⁾	2,812,601	3.71%	46.4
June 30, 2016	3,479	220,632 ⁽²⁾	(2,171)	(80,881)	61,914 ⁽³⁾	2,952,352	4.97%	47.7
June 30, 2017	3,721	245,915 ⁽²⁾	(2,311)	(89,624)	63,324 ⁽³⁾	3,108,643	5.29%	49.1
June 30, 2018	3,826	276,118 ⁽²⁾	(2,270)	(89,033)	64,880 ⁽³⁾	3,295,728	6.02%	50.8
June 30, 2019	3,978	302,022 (2)	(2,351)	(97,840)	66,507 ⁽³⁾	3,499,910	6.20%	52.6
June 30, 2020	3,930	311,206 ⁽²⁾	(2,425)	(104,914)	68,012 ⁽³⁾	3,706,202	5.89%	54.5
June 30, 2021	4,350	327,745 ⁽²⁾	(2,865)	(132,185)	69,497 ⁽³⁾	3,901,762	5.28%	56.1

^{1.} Annual allowance is the monthly benefit allowance annualized for those members counted as of June 30.

^{2.} Includes COLAs that occurred during the fiscal year and therefore were not included in the previous years' Annual Allowance totals.

^{3.} For the actuarial valuation year, Member Count includes retirees who due to timing at year end, are not yet included in the total Retired Members count disclosed in Note A - Plan Description of LACERA's ACFR for the fiscal year ended June 30, 2021.

8. Cash Flow History and Projections

Exhibits 18a and 18b contain tables and graphs that illustrate both the cash flow history for the past 10 years and a projection on the valuation basis for the next 10 years.

Contributions include both employer and member contributions. Exhibit 18a shows that net cash outflow has gradually increased over the last five years. In future years, the cash flow is expected to become increasingly negative. This is a typical pattern for a mature retirement plan where it is expected that contributions will be less than benefits and that the plan will begin drawing on the fund that has been built up over prior years.

Note that the actual cash contributions do not reflect the transfers made between reserve funds, but only cash coming into the Plan. We are assuming no further transfers, only full cash contributions. In addition, LACERA will receive dividends and interest payments from its investments. These types of payments are not considered for this analysis, which focuses solely on comparing contributions with benefit payments and administrative expenses.

The projected cash flows include contributions, statutory benefits, and administrative expenses only. They are based on the actuarial assumptions as stated in Appendix A of this valuation report. The total employer contribution rate is assumed to be 24.64% for the first year and 24.46% for the second year; total employer contributions for the remainder of the period reflect the expected recognition of asset gains and losses currently being deferred. The aggregate member rate is assumed to stay at the calculated rate for June 30, 2021 of 7.87% of payroll. Expenses are based on the expenses for the year ended June 30, 2021, increased annually with the actuarial inflation assumption of 2.75%.

Any increases or reductions in future contribution rates will increase or decrease the net cash flow. The projected cash flows do not include:

- Projected STAR benefits that have not yet been granted. STAR benefits that were vested as of January 2021 are included.
- Projected benefits payable under certain insurance contracts for a group of retired members. These
 payments are netted against the total expected retiree benefits.

Exhibit 18a

Cash Flow History and Projections – Dollars

		Cash Flow History	
Plan		Benefits &	
Year	Total	Administrative	Net
Ending	Contributions	Expenses ⁽¹⁾	Cash Flow
2012	\$ 1,586	\$ 2,439	\$ (853)
2013	1,403	2,593	(1,190)
2014	1,759	2,719	(960)
2015	1,936	2,829	(893)
2016	1,902	2,954	(1,052)
2017	1,858	3,094	(1,236)
2018	2,116	3,268	(1,152)
2019	2,304	3,475	(1,171)
2020	2,459	3,676	(1,217)
2021	2,774	3,886	(1,112)

			Cash Flow	Projections ⁽²⁾			
Plan			Ben	efits &			
Year	Т	otal	Admir	Administrative		Net	
Ending	Contr	ibutions	Expe	enses ⁽¹⁾	Cash Flow		
2022	\$	2,993	\$	4,258	\$	(1,266)	
2023		3,080		4,351		(1,271)	
2024		2,989		4,559		(1,570)	
2025		2,937		4,771		(1,835)	
2026		2,877		4,993		(2,116)	
2027		2,785		5,222		(2,437)	
2028		2,874		5,457		(2,583)	
2029		2,966		5,697		(2,731)	
2030		3,060		5,941		(2,881)	
2031		3,157		6,190		(3,033)	

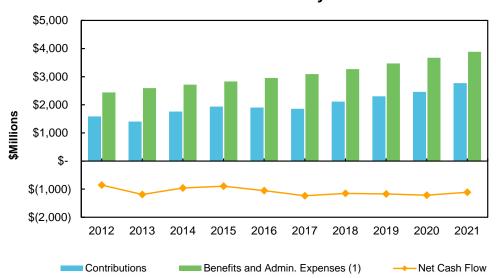
^{1.} Investment expenses are assumed to be covered by investment return.

^{2.} Future contributions reflect the expected impact of asset gains and losses currently being deferred.

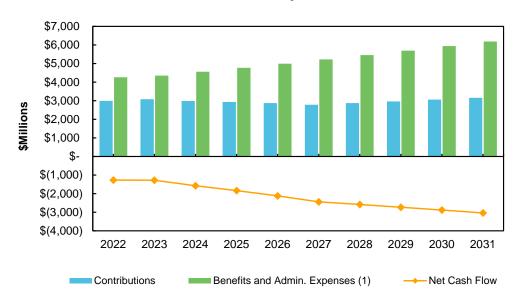
Exhibit 18b

Cash Flow History and Projections – Graphs





Cash Flow Projections(2)



- 1. Investment expenses are assumed to be covered by investment return.
- 2. Future contributions reflect the expected impact of asset gains and losses currently being deferred.

9. Risk Discussion

Please refer to the Risk Assessment report dated June 28, 2021 for a detailed analysis of the main risks applicable to LACERA. That report includes detailed identification and assessment of risks.

Overview

The results of any actuarial valuation are based on one set of reasonable assumptions. Although we believe the current assumptions provide a reasonable estimate of future expectations, it is almost certain that future experience will differ from the assumptions to some extent. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the Plan, or of the Plan's members.

Actuarial Standard of Practice No. 51 (ASOP 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions) addresses these issues by providing actuaries with guidance for assessing and disclosing the risk associated with measuring pension liabilities and the determination of pension plan contributions. Specifically, it directs the actuary to:

- Identify risks that may be significant to the Plan.
- Assess the risks identified as significant to the Plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the Plan's risks.

ASOP 51 states that if in the actuary's professional judgment, a more detailed assessment would be significantly beneficial in helping the individuals responsible for the Plan to understand the risks identified by the actuary, then the actuary should recommend that such an assessment be performed.

In addition, the California Actuarial Advisory Panel (CAAP) has adopted a set of model disclosure elements for actuarial valuation reports of public retirement systems in California. Most of these elements are included in other areas of this report. The remaining CAAP-recommended disclosures are as follows:

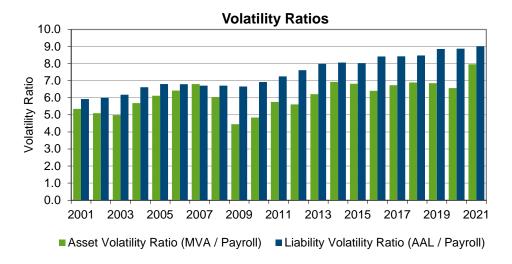
Disclosure Element	Description	Value
Gross Normal Cost \$ 1	Normal Cost allocated to valuation year, paid at mid-year.	\$ 1,729.8
Statutory Contribution \$ 1	Expected Employer Contribution paid at mid- year.	\$ 2,273.3
Asset Smoothing Ratio	Actuarial Value of Assets divided by Market Value of Assets	89.9%
Asset Volatility Ratio	Market Value of Assets divided by Payroll	8.0
Liability Volatility Ratio	Actuarial Accrued Liability divided by Payroll	9.0

^{1.} Amounts shown in millions of dollars

This Section 9 uses the framework of ASOP 51 and the Asset and Liability Volatility Ratios shown above to communicate important information about: significant risks to the Plan, the Plan's maturity, and relevant historical plan data.

Asset and Liability Volatility Ratios

Asset and Liability Volatility Ratios are a measure of the level of assets (or liabilities) to payroll. In general, a higher ratio means that the employer contribution rates (ECR) are more sensitive to changes in levels of assets or liabilities. Asset and Liability Volatility Ratios are shown below, and in Exhibit E-4.



As shown above, in the current valuation LACERA has an Asset Volatility Ratio of 8.0 and a Liability Volatility Ratio of 9.0. These ratios have increased over time as LACERA has matured. Specifically, due to the investment return of 25.2% in the fiscal year ended June 30, 2021, the assets have increased significantly more than the payroll, and therefore the Asset Volatility Ratio has increased from 6.6 to 8.0. This means that the ECR is more sensitive to changes in the level of assets now than it was just one year ago.

LACERA has accumulated a significant amount of assets relative to its payroll and by several measures is considered a mature plan. Accumulating assets to pay for future benefit obligations is responsible funding, but it does mean changes in the investment markets can have a significant impact on the ECR.

For LACERA, an 8.0 Asset Volatility Ratio means that a 10% investment gain or loss relative to the assumed 7.0% investment return assumption (that is, an investment return of -3.0% or of 17.0%) translates to a 5.7% of pay increase (or decrease) in the ECR, all other things being equal. Since LACERA uses actuarial smoothing, the increase would not be immediate, but would occur gradually over five years and could potentially be offset, or further increased, by future investment gains or losses or other factors.

The Liability Volatility Ratio measures the sensitivity of the ECR to changes in the level of liabilities, all else being equal. With a liability volatility ratio of 9.0 an increase (or decrease) in the investment return assumption of 0.5% translates to a decrease (or increase) in the ECR of approximately 4.9% of pay for LACERA.

Factors Affecting Future Results

There are a number of factors that affect future valuation results. To the extent actual experience for these factors varies from the assumptions, this will likely cause either increases or decreases in the plan's future funding level and ECR. The factors that can have the most significant impact on LACERA's valuation results are:

Investment returns

To the extent that actual investment returns differ from the assumed investment return, the Plan's future assets, ECR, and funded status may differ significantly from those presented in this valuation. Additional discussion of the impact of variance of investment returns is included below.

Compensation increases

Individual member retirement benefits are linked to that member's compensation. As such, assumptions need to be made as to a member's future compensation increases. Higher future compensation increases will generally result in larger retirement benefits, liabilities, ECRs, and a lower funded status. Conversely, lower compensation increases than assumed will generally result in smaller retirement benefits, liabilities, ECRs, and a higher funded status.

Payroll variation

In the valuation, an assumption is made for the overall rate of payroll growth of LACERA from year-to-year. To the extent that the overall rate of payroll growth is greater than assumed, the ECR may decrease since the UAAL will be amortized over a larger payroll base. The opposite will occur if the overall rate of payroll growth is lower than assumed.

This effect often will offset somewhat with individual compensation increases, discussed above.

Longevity and other demographic risks

The liabilities reported in this valuation have been calculated by assuming that members will follow specific patterns of demographic experience (e.g., mortality, retirement, termination, disability) as described in Appendix A. To the extent that actual demographic experience is different than is assumed to occur, future liabilities, ECRs, and funded status may differ from that presented in this valuation.

All of these assumptions are reviewed in detail during the triennial Investigation of Experience study, and are also reviewed annually during the valuation process. Changes in assumptions are generally recommended as part of the triennial Investigation of Experience if actual experience has been materially different than assumed or forecasts have changed significantly. Additionally, changes may be recommended and discussed at each valuation if they are deemed to be appropriate at that time.

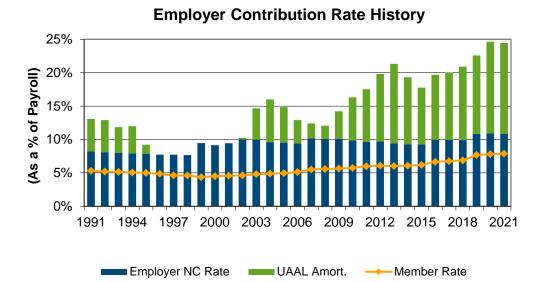
Discussion of Investment Return Risk

Of these factors, we believe the factor with the greatest potential risk to impact future valuation results for LACERA is future investment returns. For example, if actual returns fall short of the current assumption of 7.0% per year, this will cause an increase in the ECR and a decrease in the Funded Ratio, all other things being equal. Conversely, if actual returns exceed the current assumption of 7.0% per year, this will cause a decrease in the ECR and an increase in the Funded Ratio.

The magnitude of the increase or decrease in the ECR is affected by the maturity level, and specifically, the asset volatility ratio. LACERA has accumulated a significant amount of assets relative to its payroll and by several measures is considered a mature plan. Accumulating assets to pay for future benefit obligations is responsible funding, but it does mean that changes in the investment markets can have a significant impact on the ECR.

Historical Variation in Employer Contribution Rate

One way to assess future risks is to look at historical measurements. The following graph shows how the ECR has varied over the last 30 years under various investment return and assumption environments.



Appendix A Actuarial Procedures and Assumptions

The actuarial procedures and assumptions used in this valuation are described in this section. The assumptions were reviewed and changed for the June 30, 2019 actuarial valuation as a result of the 2019 triennial Investigation of Experience Study.

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 2019 Investigation of Experience Study. These are the probability that a member will leave the System for various reasons.

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).

For members who transferred between plans, entry age is based on original entry into the System.

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). 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 gains and losses 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 General Plan G and Safety Plan C, the normal cost rate is rounded up to the nearest 0.02%.

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. Under this assumption, the normal cost rates for active members 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.

Internal Revenue Code Section 415 Limit

The Internal Revenue Code Section 415 maximum benefit limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after 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.

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 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. The five-year smoothing valuation basis for all assets was adopted effective June 30, 2009.

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 are assumed payable each year in the future as they are not greater than the expected increase in the Consumer Price Index of 2.75% per year. This rate 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 now 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 2021 is \$153,671 (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.

Note that these assumptions include a projection for expected future mortality improvement. These probabilities were adopted June 30, 2019.

Males: General members: PubG-2010 Healthy Retiree Mortality Table for Males, with MP-2014 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Males multiplied by 85%, with MP- 2014 Ultimate Projection Scale.

Females: General members: PubG-2010 Healthy Retiree Mortality Table for Females multiplied by 110%, with MP-2014 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Females, with MP-2014 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.

Note that these assumptions include a projection for expected future mortality improvement. These probabilities were adopted June 30, 2019.

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-2014 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Males, with MP-2014 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-2014 Ultimate Projection Scale.

Safety members: PubS-2010 Healthy Retiree Mortality Table for Females, with MP-2014 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 ⁽¹⁾
General	Female	PubG-2010 (130%) Employee Female ⁽¹⁾
Safety	Male	PubS-2010 (100%) Employee Male ⁽¹⁾
Safety	Female	PubS-2010 (100%) Employee Female ⁽¹⁾

^{1.} Projected using the MP-2014 Ultimate projection scale.

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, 2019.

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, 2019.

Probability of Eligible Survivors

For members not currently in pay status, 77% of all males and 50% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be four 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

16% of General and 35% 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 2041. 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, 2021

 Economic assumpt

A.	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

CPI assumption.

E. CPI inflation assumption

2.75%

II. Demographic assumptions

A.	Salary increases due to service	Table A-5
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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⁽¹⁾

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⁽¹⁾

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⁽¹⁾

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

Refund of contributions on vested termination

Table A-4

^{1.} All mortality probabilities are projected using the MP-2014 Ultimate projection scale.

Table A-2
Mortality for Members Retired for Service⁽¹⁾

	Safety	Safety	General	General
Age	Male	Female	Male	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		
65 & Less	1.000%		
70	1.000%		
75	1.000%		
80	1.000%		
85	1.000%		
90	0.930%		
95	0.850%		
100	0.640%		
105	0.430%		
110	0.210%		
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 2021 is 76.9521% calculated as follows:

Age 85 probability in 2021 = Age 85 probability in 2010 with 11 years improvement

 $= 7.7648\% \times (100.0\% - 1.0\%) ^ 11$

= 6.9521%

Table A-3
Mortality for Members Retired for Disability⁽¹⁾

	Safety	Safety	General	General
Age	Male	Female	Male	Female
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)

Years of			
Service	General	Safety	
0	100%	100%	
1	100%	100%	
2	100%	100%	
3	100%	100%	
4	100%	100%	
5	32%	30%	
6	32%	30%	
7	32%	30%	
8	32%	28%	
9	31%	26%	
10	31%	24%	
11	30%	22%	
12	30%	20%	
13	29%	18%	
14	28%	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%	

4%

2%

0%

2%

2%

0%

28

29

30 & Above

Table A-5
Annual Increase in Salary⁽¹⁾

Years of			
Service	General	Safety	
<1	6.00%	9.00%	
1	5.25%	8.50%	
2	4.75%	8.00%	
3	4.10%	6.00%	
4	3.50%	4.50%	
5	3.00%	3.25%	
6	2.50%	2.50%	
7	2.00%	2.00%	
8	1.60%	1.50%	
9	1.30%	1.35%	
10	1.15%	1.20%	
11	1.00%	1.05%	
12	0.85%	0.95%	
13	0.75%	0.85%	
14	0.70%	0.75%	
15	0.65%	0.70%	
16	0.60%	0.65%	
17	0.55%	0.60%	
18	0.50%	0.55%	
19	0.45%	2.25%	
20	0.40%	0.50%	
21	0.35%	0.50%	
22	0.30%	0.50%	
23	0.25%	0.50%	
24	0.25%	3.00%	
25	0.25%	0.50%	
26	0.25%	0.50%	
27	0.25%	0.50%	
28	0.25%	0.50%	
29	0.25%	3.00%	

^{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%.

0.50%

0.25%

30 & Above

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 0.00000	0.00500 0.00500	0.00040 0.00048	0.00020 0.00020	N/A N/A	0.00064 0.00068
38 39	0.00000	0.00500	0.00048	0.00020	N/A N/A	0.00068
40	0.03000	0.00500	0.00064	0.00020	N/A N/A	0.00073
40	0.03000	0.00500	0.00064	0.00020	N/A N/A	0.00079
42	0.03000	0.00500	0.00072	0.00020	N/A N/A	0.00083
43	0.03000	0.00500	0.00084	0.00020	N/A	0.00092
44	0.03000	0.00500	0.00088	0.00024	N/A	0.00108
45	0.03000	0.00500	0.00092	0.00032	N/A	0.00108
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	0.32000	0.00500	0.00390	0.00092	N/A	0.00383
61	0.32000	0.00500	0.00420	0.00096	N/A	0.00413
62	0.32000	0.00500	0.00450	0.00100	N/A	0.00445
63	0.32000	0.00500	0.00450	0.00104	N/A	0.00481
64	0.32000	0.00500	0.00450	0.00108	N/A	0.00520
65	0.32000	0.00500	0.00450	0.00112	N/A	0.00562
66	0.25000	0.00500	0.00450	0.00116	N/A	0.00607
67 69	0.24000	0.00500	0.00450	0.00120	N/A	0.00658
68 69	0.24000	0.00500	0.00450	0.00124	N/A N/A	0.00713
	0.24000	0.00500	0.00450	0.00128		0.00775
70 71	0.24000	0.00500	0.00450	0.00132	N/A	0.00844
71 72	0.24000	0.00500	0.00450 0.00450	0.00136 0.00140	N/A N/A	0.00920 0.01004
72 73	0.24000 0.24000	0.00500 0.00500	0.00450	0.00140	N/A N/A	0.01004
73 74	0.24000	0.00500	0.00450	0.00144	N/A N/A	0.01098
74 75	1.00000	0.00000	0.00430	0.00000	N/A	0.01201
, ,	1.00000	0.00000	0.00000	0.0000	14//1	0.01010

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	0.32000	0.00500	0.00222	0.00072	N/A	0.00242
61	0.32000	0.00500	0.00236	0.00076	N/A	0.00264
62	0.32000	0.00500	0.00250	0.00080	N/A	0.00289
63	0.32000	0.00500	0.00250	0.00084	N/A	0.00317
64	0.32000	0.00500	0.00250	0.00088	N/A	0.00350
65	0.32000	0.00500	0.00250	0.00092	N/A	0.00385
66	0.25000	0.00500	0.00250	0.00096	N/A	0.00425
67	0.24000	0.00500	0.00250	0.00100	N/A	0.00471
68	0.24000	0.00500	0.00250	0.00104	N/A	0.00520
69	0.24000	0.00500	0.00250	0.00108	N/A	0.00575
70	0.24000	0.00500	0.00250	0.00112	N/A	0.00636
71	0.24000	0.00500	0.00250	0.00116	N/A	0.00703
72	0.24000	0.00500	0.00250	0.00120	N/A	0.00777
73	0.24000	0.00500	0.00250	0.00124	N/A	0.00859
74	0.24000	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
Plan D & G – Male

Age	Service Retirement Plan D	Service Retirement Plan G	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00010	0.00010	N/A	0.00043	0	0.07000
19	0.00000	0.00000	0.00010	0.00010	N/A	0.00046	1	0.05500
20	0.00000	0.00000	0.00010	0.00010	N/A	0.00044	2	0.04000
21	0.00000	0.00000	0.00010	0.00010	N/A	0.00043	3	0.03250
22	0.00000	0.00000	0.00010	0.00010	N/A	0.00040	4	0.02500
23	0.00000	0.00000	0.00010	0.00010	N/A	0.00037	5	0.02330
24	0.00000	0.00000	0.00010	0.00010	N/A	0.00035	6	0.02170
25	0.00000	0.00000	0.00010	0.00010	N/A	0.00034	7	0.02000
26	0.00000	0.00000	0.00010	0.00010	N/A	0.00036	8	0.01900
27	0.00000	0.00000	0.00010	0.00010	N/A	0.00037	9	0.01800
28	0.00000	0.00000	0.00010	0.00010	N/A	0.00040	10	0.01700
29	0.00000	0.00000	0.00010	0.00010	N/A	0.00041	11	0.01600
30	0.00000	0.00000	0.00010	0.00020	N/A	0.00043	12	0.01500
31	0.00000	0.00000	0.00010	0.00020	N/A	0.00046	13	0.01400
32	0.00000	0.00000	0.00010	0.00020	N/A	0.00048	14	0.01300
33	0.00000	0.00000	0.00016	0.00020	N/A	0.00050	15	0.01200
34	0.00000	0.00000	0.00022	0.00020	N/A	0.00053	16	0.01100
35	0.00000	0.00000	0.00028	0.00020	N/A	0.00056	17	0.01000
36	0.00000	0.00000	0.00034	0.00020	N/A	0.00060	18	0.00920
37	0.00000	0.00000	0.00040	0.00020	N/A	0.00064	19	0.00840
38	0.00000	0.00000	0.00048	0.00020	N/A	0.00068	20	0.00760
39	0.00000	0.00000	0.00056	0.00020	N/A	0.00073	21	0.00680
40	0.01500	0.00000	0.00064	0.00020	N/A	0.00079	22	0.00600
41	0.01500	0.00000	0.00072	0.00020	N/A	0.00075	23	0.00560
42	0.01500	0.00000	0.00080	0.00020	N/A	0.00092	24	0.00520
43	0.01500	0.00000	0.00084	0.00024	N/A	0.00100	25	0.00480
44	0.01500	0.00000	0.00088	0.00024	N/A	0.00108	26	0.00440
45	0.01500	0.00000	0.00092	0.00020	N/A	0.00100	27	0.00440
46	0.01500	0.00000	0.00096	0.00036	N/A	0.00118	28	0.00400
47	0.01500	0.00000	0.00100	0.00040	N/A	0.00120	29	0.00400
48	0.01500	0.00000	0.00104	0.00044	N/A	0.00152	30 & Above	0.00000
49	0.01500	0.00000	0.00104	0.00044	N/A	0.00166	00 a 7100vc	0.00000
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	0.00277		
54	0.02000	0.01600	0.00192	0.00068	N/A	0.00244		
55	0.02500	0.02000	0.00228	0.00072	N/A	0.00263		
56	0.02500	0.02000	0.00264	0.00072	N/A	0.00283		
57	0.03000	0.02400	0.00300	0.00080	N/A	0.00306		
58	0.03500	0.02800	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	0.08000	0.06400	0.00420	0.00096	N/A	0.00413		
62	0.11000	0.11000	0.00450	0.00100	N/A	0.00445		
63	0.11000	0.11000	0.00450	0.00104	N/A	0.00481		
64	0.16000	0.16000	0.00450	0.00108	N/A	0.00520		
65	0.23000	0.18000	0.00450	0.00112	N/A	0.00562		
66	0.20000	0.18000	0.00450	0.00116	N/A	0.00607		
67	0.19000	0.30000	0.00450	0.00120	N/A	0.00658		
68	0.18000	0.18000	0.00450	0.00124	N/A	0.00713		
69	0.20000	0.20000	0.00450	0.00121	N/A	0.00775		
70	0.23000	0.23000	0.00450	0.00132	N/A	0.00844		
71	0.20000	0.20000	0.00450	0.00136	N/A	0.00920		
72	0.20000	0.20000	0.00450	0.00140	N/A	0.01004		
73	0.20000	0.20000	0.00450	0.00144	N/A	0.01004		
74	0.20000	0.20000	0.00450	0.00144	N/A	0.01201		
75	1.00000	1.00000	0.00000	0.00000	N/A	0.01315		

Table A-9
Probability of Separation from Active Service for General Members
Plan D & G – Female

Age	Service Retirement Plan D	Service Retirement Plan G	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	0	0.07000
19	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	1	0.05500
20	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	2	0.04000
21	0.00000	0.00000	0.00015	0.00010	N/A	0.00016	3	0.03250
22	0.00000	0.00000	0.00015	0.00010	N/A	0.00014	4	0.02500
23	0.00000	0.00000	0.00015	0.00010	N/A	0.00013	5	0.02330
24	0.00000	0.00000	0.00015	0.00010	N/A	0.00012	6	0.02170
25	0.00000	0.00000	0.00015	0.00010	N/A	0.00012	7	0.02000
26	0.00000	0.00000	0.00015	0.00010	N/A	0.00013	8	0.01900
27	0.00000	0.00000	0.00015	0.00010	N/A	0.00014	9	0.01800
28	0.00000	0.00000	0.00015	0.00010	N/A	0.00016	10	0.01700
29	0.00000	0.00000	0.00015	0.00010	N/A	0.00017	11	0.01600
30	0.00000	0.00000	0.00015	0.00010	N/A	0.00020	12	0.01500
31	0.00000	0.00000	0.00015	0.00010	N/A	0.00021	13	0.01400
32	0.00000	0.00000	0.00015	0.00010	N/A	0.00023	14	0.01300
33	0.00000	0.00000	0.00020	0.00010	N/A	0.00025	15	0.01200
34	0.00000	0.00000	0.00025	0.00010	N/A	0.00027	16	0.01100
35	0.00000	0.00000	0.00030	0.00010	N/A	0.00030	17	0.01000
36	0.00000	0.00000	0.00035	0.00010	N/A	0.00033	18	0.00920
37	0.00000	0.00000	0.00040	0.00010	N/A	0.00036	19	0.00840
38	0.00000	0.00000	0.00042	0.00014	N/A	0.00039	20	0.00760
39	0.00000	0.00000	0.00044	0.00018	N/A	0.00043	21	0.00680
40	0.01500	0.00000	0.00046	0.00022	N/A	0.00047	22	0.00600
41	0.01500	0.00000	0.00048	0.00026	N/A	0.00052	23	0.00560
42	0.01500	0.00000	0.00050	0.00030	N/A	0.00056	24	0.00520
43	0.01500	0.00000	0.00060	0.00032	N/A	0.00061	25	0.00480
44	0.01500	0.00000	0.00070	0.00034	N/A	0.00066	26	0.00440
45	0.01500	0.00000	0.00080	0.00036	N/A	0.00073	27	0.00400
46	0.01500	0.00000	0.00090	0.00038	N/A	0.00079	28	0.00400
47	0.01500	0.00000	0.00100	0.00040	N/A	0.00086	29	0.00400
48	0.01500	0.00000	0.00110	0.00042	N/A	0.00092	30 & Above	0.00000
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	0.02500	0.02000	0.00168	0.00056	N/A	0.00160		
56	0.02500	0.02000	0.00174	0.00058	N/A	0.00173		
57	0.03000	0.02400	0.00180	0.00060	N/A	0.00187		
58	0.03500	0.02800	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	0.08000	0.06400	0.00236	0.00076	N/A	0.00264		
62	0.11000	0.11000	0.00250	0.00080	N/A	0.00289		
63	0.11000	0.11000	0.00250	0.00084	N/A	0.00317		
64	0.16000	0.16000	0.00250	0.00088	N/A	0.00350		
65	0.23000	0.18000	0.00250	0.00092	N/A	0.00385		
66	0.20000	0.18000	0.00250	0.00096	N/A	0.00425		
67	0.19000	0.30000	0.00250	0.00100	N/A	0.00471		
68	0.18000	0.18000	0.00250	0.00104	N/A	0.00520		
69	0.20000	0.20000	0.00250	0.00108	N/A	0.00575		
70	0.23000	0.23000	0.00250	0.00112	N/A	0.00636		
71	0.20000	0.20000	0.00250	0.00116	N/A	0.00703		
72	0.20000	0.20000	0.00250	0.00120	N/A	0.00777		
73	0.20000	0.20000	0.00250	0.00124	N/A	0.00859		
74 75	0.20000	0.20000	0.00250	0.00128	N/A	0.00950		
75	1.00000	1.00000	0.00000	0.00000	N/A	0.01050		

Table A-10
Probability of Separation from Active Service for General Members
Plan E – Male

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	N/A	N/A	N/A	0.00043	0	0.15000
19	0.00000	N/A	N/A	N/A	0.00046	1	0.08000
20	0.00000	N/A	N/A	N/A	0.00044	2	0.06000
21	0.00000	N/A	N/A	N/A	0.00043	3	0.04500
22	0.00000	N/A	N/A	N/A	0.00040	4	0.03500
23	0.00000	N/A	N/A	N/A	0.00037	5	0.03100
24	0.00000	N/A	N/A	N/A	0.00035	6	0.02700
25	0.00000	N/A	N/A	N/A	0.00034	7	0.02300
26	0.00000	N/A	N/A	N/A	0.00036	8	0.02200
27	0.00000	N/A	N/A	N/A	0.00037	9	0.02100
28	0.00000	N/A	N/A	N/A	0.00040	10	0.02000
29	0.00000	N/A	N/A	N/A	0.00041	11	0.01900
30	0.00000	N/A	N/A	N/A	0.00043	12	0.01800
31	0.00000	N/A	N/A	N/A	0.00046	13	0.01680
32	0.00000	N/A	N/A	N/A	0.00048	14	0.01560
33	0.00000	N/A	N/A	N/A	0.00050	15	0.01440
34	0.00000	N/A	N/A	N/A	0.00053	16	0.01320
35	0.00000	N/A	N/A	N/A	0.00056	17	0.01200
36	0.00000	N/A	N/A	N/A	0.00060	18	0.01160
37	0.00000	N/A	N/A	N/A	0.00064	19	0.01120
38	0.00000	N/A	N/A	N/A	0.00068	20	0.01080
39	0.00000	N/A	N/A	N/A	0.00073	21	0.01040
40	0.00000	N/A	N/A	N/A	0.00079	22	0.01000
41	0.00000	N/A	N/A	N/A	0.00075	23	0.01000
42	0.00000	N/A	N/A	N/A	0.00092	24	0.01000
43	0.00000	N/A	N/A	N/A	0.00100	25	0.01000
44	0.00000	N/A	N/A	N/A	0.00108	26	0.01000
45	0.00000	N/A	N/A	N/A	0.00118	27	0.01000
46	0.00000	N/A	N/A	N/A	0.00128	28	0.01000
47	0.00000	N/A	N/A	N/A	0.00139	29	0.01000
48	0.00000	N/A	N/A	N/A	0.00152	30 & Above	0.01000
49	0.00000	N/A	N/A	N/A	0.00166	00 07 10000	0.01000
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	0.00210		
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	0.20000	N/A	N/A	N/A	0.00520		
65	0.28000	N/A	N/A	N/A	0.00562		
66	0.19000	N/A	N/A	N/A	0.00607		
67	0.19000	N/A	N/A	N/A	0.00658		
68	0.19000	N/A	N/A	N/A	0.00713		
69	0.19000	N/A	N/A	N/A	0.00775		
70	0.19000	N/A	N/A	N/A	0.00844		
71	0.19000	N/A	N/A	N/A	0.00920		
72	0.19000	N/A	N/A	N/A	0.01004		
73	0.19000	N/A	N/A	N/A	0.01098		
74	0.19000	N/A	N/A	N/A	0.01201		
75	1.00000	N/A	N/A	N/A	0.01315		

Table A-11
Probability of Separation from Active Service for General Members
Plan E – Female

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	N/A	N/A	N/A	0.00017	0	0.15000
19	0.00000	N/A	N/A	N/A	0.00017	1	0.08000
20	0.00000	N/A	N/A	N/A	0.00017	2	0.06000
21	0.00000	N/A	N/A	N/A	0.00016	3	0.04500
22	0.00000	N/A	N/A	N/A	0.00014	4	0.03500
23	0.00000	N/A	N/A	N/A	0.00013	5	0.03100
24	0.00000	N/A	N/A	N/A	0.00012	6	0.02700
25	0.00000	N/A	N/A	N/A	0.00012	7	0.02300
26	0.00000	N/A	N/A	N/A	0.00013	8	0.02200
27	0.00000	N/A	N/A	N/A	0.00014	9	0.02100
28	0.00000	N/A	N/A	N/A	0.00016	10	0.02000
29	0.00000	N/A	N/A	N/A	0.00017	11	0.01900
30	0.00000	N/A	N/A	N/A	0.00020	12	0.01800
31	0.00000	N/A	N/A	N/A	0.00021	13	0.01680
32	0.00000	N/A	N/A	N/A	0.00023	14	0.01560
33	0.00000	N/A	N/A	N/A	0.00025	15	0.01440
34	0.00000	N/A	N/A	N/A	0.00027	16	0.01320
35	0.00000	N/A	N/A	N/A	0.00030	17	0.01200
36	0.00000	N/A	N/A	N/A	0.00033	18	0.01160
37	0.00000	N/A	N/A	N/A	0.00036	19	0.01120
38	0.00000	N/A	N/A	N/A	0.00039	20	0.01080
39	0.00000	N/A	N/A	N/A	0.00043	21	0.01040
40	0.00000	N/A	N/A	N/A	0.00047	22	0.01000
41	0.00000	N/A	N/A	N/A	0.00052	23	0.01000
42	0.00000	N/A	N/A	N/A	0.00056	24	0.01000
43	0.00000	N/A N/A	N/A	N/A	0.00061	25 26	0.01000
44 45	0.00000 0.00000	N/A N/A	N/A N/A	N/A N/A	0.00066 0.00073	26 27	0.01000 0.01000
46	0.00000	N/A	N/A	N/A	0.00073	28	0.01000
47	0.00000	N/A	N/A	N/A	0.00079	29	0.01000
48	0.00000	N/A	N/A	N/A	0.00092	30 & Above	0.01000
49	0.00000	N/A	N/A	N/A	0.00100	00 Q 7 100VC	0.01000
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	0.20000	N/A	N/A	N/A	0.00350		
65	0.28000	N/A	N/A	N/A	0.00385		
66	0.19000	N/A	N/A	N/A	0.00425		
67	0.19000	N/A	N/A	N/A	0.00471		
68	0.19000	N/A	N/A	N/A	0.00520		
69	0.19000	N/A	N/A	N/A	0.00575		
70	0.19000	N/A	N/A	N/A	0.00636		
71	0.19000	N/A	N/A	N/A	0.00703		
72 70	0.19000	N/A	N/A	N/A	0.00777		
73	0.19000	N/A	N/A	N/A	0.00859		
74 75	0.19000	N/A	N/A	N/A	0.00950		
75	1.00000	N/A	N/A	N/A	0.01050		

Table A-12 Probability of Separation from Active Service for Safety Members Plan A, B & C – Male

Age	Service Retirement Plans A-B	Service Retirement Plan C	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.00000	0.00000	0.00200	0.00000	0.00010	0.00037	0	0.03500
19	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	1	0.02750
20	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	2	0.02000
21	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	3	0.01500
22	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	4	0.01200
23	0.00000	0.00000	0.00200	0.00000	0.00010	0.00039	5	0.01130
24	0.00000	0.00000	0.00200	0.00000	0.00010	0.00038	6	0.01070
25	0.00000	0.00000	0.00200	0.00000	0.00010	0.00037	7	0.01000
26	0.00000	0.00000	0.00200	0.00000	0.00010	0.00038	8	0.00920
27	0.00000	0.00000	0.00200	0.00000	0.00010	0.00039	9	0.00840
28	0.00000	0.00000	0.00200	0.00000	0.00010	0.00040	10	0.00760
29	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	11	0.00680
30	0.00000	0.00000	0.00200	0.00000	0.00010	0.00041	12	0.00600
31	0.00000	0.00000	0.00200	0.00000	0.00010	0.00042	13	0.00560
32	0.00000	0.00000	0.00200	0.00000	0.00010	0.00043	14	0.00520
33	0.00000	0.00000	0.00210	0.00000	0.00010	0.00044	15	0.00480
34	0.00000	0.00000	0.00220	0.00000	0.00010	0.00045	16	0.00440
35	0.00000	0.00000	0.00230	0.00000	0.00010	0.00047	17	0.00400
36	0.00000	0.00000	0.00240	0.00000	0.00010	0.00049	18	0.00360
37	0.00000	0.00000	0.00250	0.00000	0.00010	0.00050	19	0.00320
38	0.00000	0.00000	0.00260	0.00000	0.00010	0.00053	20	0.00280
39	0.00000	0.00000	0.00270	0.00000	0.00010	0.00056	21	0.00240
40	0.00750	0.00000	0.00280	0.00000	0.00010	0.00059	22	0.00200
41	0.00750	0.00000	0.00290	0.00000	0.00010	0.00062	23	0.00200
42	0.00750	0.00000	0.00300	0.00000	0.00010	0.00067	24	0.00200
43	0.00750	0.00000	0.00310	0.00000	0.00010	0.00071	25	0.00200
44	0.00750	0.00000	0.00320	0.00000	0.00010	0.00076	26	0.00200
45	0.00750	0.00000	0.00330	0.00000	0.00010	0.00082	27	0.00200
46	0.00750	0.00000	0.00340	0.00000	0.00010	0.00088	28	0.00200
47	0.00750	0.00000	0.00350	0.00000	0.00010	0.00095	29	0.00200
48	0.00750	0.00000	0.00400	0.00000	0.00010	0.00102	30 & Above	0.00000
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 50	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 54	0.03000	0.03000	0.02000	0.00000	0.00010	0.00151		
54 55	0.15000 0.26000	0.10000 0.15000	0.02000 0.07500	0.00000 0.00000	0.00010 0.00010	0.00162 0.00175		
56			0.07500		0.00010	0.00175		
56 57	0.17000 0.17000	0.15000 0.28000	0.10000	0.00000 0.00000	0.00010	0.00190		
58	0.17000	0.28000	0.10000	0.00000	0.00010	0.00203		
59	0.27000	0.27000	0.10000	0.00000	0.00010	0.00223		
60	0.27000	0.27000	0.10000	0.00000	0.00010	0.00243		
61	0.25000	0.25000	0.05000	0.00000	0.00010	0.00204		
62	0.25000	0.25000	0.05000	0.00000	0.00010	0.00288		
63	0.25000	0.25000	0.05000	0.00000	0.00010	0.00313		
64	0.25000	0.25000	0.05000	0.00000	0.00010	0.00344		
65	1.00000	1.00000	0.00000	0.00000	0.00000	0.00373		
00	1.00000	1.00000	0.00000	0.00000	0.00000	0.00+10		

Table A-13
Probability of Separation from Active Service for Safety Members
Plan A, B & C – Female

	Service	Service						
Age	Retirement Plans A-B	Retirement Plan C	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
								
18	0.00000	0.00000	0.00300	0.00000	0.00010	0.00014	0	0.03500
19	0.00000	0.00000	0.00300	0.00000	0.00010	0.00015	1	0.02750
20	0.00000	0.00000	0.00300	0.00000	0.00010	0.00016	2	0.02000
21	0.00000	0.00000	0.00300	0.00000	0.00010	0.00017	3	0.01500
22	0.00000	0.00000	0.00300	0.00000	0.00010	0.00017	4	0.01200
23	0.00000	0.00000	0.00300	0.00000	0.00010	0.00018	5	0.01130
24	0.00000	0.00000	0.00300	0.00000	0.00010	0.00019	6	0.01070
25	0.00000	0.00000	0.00300	0.00000	0.00010	0.00020	7	0.01000
26	0.00000	0.00000	0.00300	0.00000	0.00010	0.00021	8	0.00920
27	0.00000	0.00000	0.00300	0.00000	0.00010	0.00022	9	0.00840
28	0.00000	0.00000	0.00340	0.00000	0.00010	0.00024	10	0.00760
29	0.00000	0.00000	0.00380	0.00000	0.00010	0.00025	11	0.00680
30	0.00000	0.00000	0.00420	0.00000	0.00010	0.00027	12	0.00600
31	0.00000	0.00000	0.00460	0.00000	0.00010	0.00028	13	0.00560
32	0.00000	0.00000	0.00500	0.00000	0.00010	0.00030	14	0.00520
33	0.00000	0.00000	0.00560	0.00000	0.00010	0.00032	15	0.00480
34	0.00000	0.00000	0.00620	0.00000	0.00010	0.00034	16	0.00440
35	0.00000	0.00000	0.00680	0.00000	0.00010	0.00036	17	0.00400
36	0.00000	0.00000	0.00740	0.00000	0.00010	0.00038	18	0.00360
37	0.00000	0.00000	0.00800	0.00000	0.00010	0.00041	19	0.00320
38	0.00000	0.00000	0.00840	0.00000	0.00010	0.00043	20	0.00280
39	0.00000	0.00000	0.00880	0.00000	0.00010	0.00046	21	0.00240
40	0.00750	0.00000	0.00920	0.00000	0.00010	0.00049	22	0.00200
41	0.00750	0.00000	0.00960	0.00000	0.00010	0.00052	23	0.00200
42	0.00750	0.00000	0.01000	0.00000	0.00010	0.00056	24	0.00200
43	0.00750	0.00000	0.01040	0.00000	0.00010	0.00059	25	0.00200
44	0.00750	0.00000	0.01080	0.00000	0.00010	0.00063	26	0.00200
45	0.00750	0.00000	0.01120	0.00000	0.00010	0.00067	27	0.00200
46	0.00750	0.00000	0.01160	0.00000	0.00010	0.00071	28	0.00200
47	0.00750	0.00000	0.01200	0.00000	0.00010	0.00076	29	0.00200
48	0.00750	0.00000	0.01300	0.00000	0.00010	0.00080	30 & Above	0.00000
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	0.15000	0.10000	0.03200	0.00000	0.00010	0.00116		
55	0.26000	0.15000	0.11000	0.00000	0.00010	0.00123		
56	0.17000	0.15000	0.06000	0.00000	0.00010	0.00131		
57	0.17000	0.28000	0.06000	0.00000	0.00010	0.00140		
58	0.17000	0.17000	0.06000	0.00000	0.00010	0.00148		
59	0.27000	0.27000	0.06000	0.00000	0.00010	0.00158		
60	0.27000	0.27000	0.06000	0.00000	0.00010	0.00168		
61	0.25000	0.25000	0.06000	0.00000	0.00010	0.00178		
62	0.25000	0.25000	0.06000	0.00000	0.00010	0.00190		
63	0.25000	0.25000	0.06000	0.00000	0.00010	0.00202		
64	0.25000	0.25000	0.06000	0.00000	0.00010	0.00215		
65	1.00000	1.00000	0.00000	0.00000	0.00000	0.00228		

Appendix B Summary of Plan Provisions

All actuarial calculations are based on our understanding of the statutes governing LACERA as contained in the County Employees Retirement Law (CERL) of 1937 and the California Public Employees' Pension Reform Act of 2013 (PEPRA). The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Government Code Section. This summary does not attempt to cover all the detailed provisions of the law.

MEMBERSHIP	Government Code Section
Permanent employees of Los Angeles County (County) and participating districts who work ¾ time or more are eligible for membership in LACERA.	(31551, 31552, Bylaws)
Employees eligible for safety membership (law enforcement, firefighting and specific lifeguards) become safety members on the first day of the month after date of hire. Employees who become members on or after January 1, 2013, will enter into Safety Plan C.	(31558)
All other employees become general members on the first day of the month after date of hire or the first day of the month after they make an election of either Plan D or Plan E, depending on the law in effect at that time. Employees who become members on or after January 1, 2013 will enter into General Plan G.	(31493, 31493.5, 31493.6, Bylaws)
Elective officers become members on the first day of the month after filing a declaration with the Board of Retirement (Board).	(31553, 31562)
General members in Plan E may transfer all their Plan E service credit to Plan D during an approved transfer period by making the required contributions. Transferred members relinquish, waive, and forfeit any and all vested or accrued benefits available under any other retirement plan and are entitled only to the benefits of Plan D.	(31494.1, 31494.3)

RETIREMENT PLANS

The County has established nine defined benefit plans. The following outlines the dates these plans were available, based on a member's date of entry into LACERA:

Safety Member Plans:

Plan A: Inception to August 1977

Plan B: September 1977 through December 2012

Plan C: January 2013 to present (7522.02)

General Member Plans:

Plan A: Inception through August 1977

Plan B: September 1977 through September 1978

Plan C: October 1978 through May 1979

Plan D: June 1979 through December 2012

Plan E: February 1982 through December 2012 (31487, 31496)

Plan G: January 2013 to present

(7522.02)

NOTE: After review of a new member's account, a member with prior membership may be enrolled into one of the pre-PEPRA plans.

MEMBER CONTRIBUTIONS

Plans A, B, D and General Plan C members

Contributions are based on the entry age and class of each member and are required of all members in Plans A, B, C, and D. Current member rates are shown in Appendix D. Section 5 provides additional detail on how these rates are calculated.

(31620)

Contributions cease when general members are credited with 30 years of service in a contributory plan, provided they were members of LACERA or a reciprocal plan on March 7, 1973, and continuously thereafter. All safety members are eligible for the 30-year cessation of contributions.

(31625.2, 31836.1)

Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Investments on amounts that have been on deposit for at least six months.

(31591, 31700)

In addition to the normal contributions, members pay one-half of the cost of their plan's COLA. This is discussed further in Section 5 of this report.

(31873)

General Plan G and Safety Plan C members

Members contribute 50% of the aggregate Normal Cost rate for their Plan. (7522.30)

EMPLOYER CONTRIBUTIONS

The employer (County or District) contributes to the retirement fund a percent of the total (31453, 31454 compensation provided for all members based on an actuarial valuation and 31581) recommendation of the actuary and the Board of Investments.

SERVICE RETIREMENT ALLOWANCE

Eligibility

Plans A-B: Safety members (31662.4, 31662.6, 31663.25)

Age 50 with 10 years of County service: Any age with 20 years of service; or

Plans A-D: **General members** (31672)

> Age 50 with 10 years of County service; Any age with 30 years of service; or

Age 70 and actively employed, regardless of service.

Plan C: Safety members (7522.25(d))

Age 50 with 5 years of service.

Plan E: **General members** (31491, 31491.3)

Age 65 with 10 years of service.

A reduced benefit is also payable at age 55 with 10 years of service.

Plan G: **General members** (7522.20(a))

Age 52 with 5 years of service.

Final Compensation

General Plans A-D and Safety Plans A-B (31462.3)

Average of the member's highest monthly pensionable earnings during any 12-consecutive-month period.

Plan E: Average of the member's highest monthly pensionable earnings (31488)

during any three 12-consecutive month periods.

General Plan G and Safety Plan C

Average of the member's highest monthly pensionable earnings (7522.32)during any 36-consecutive month period.

The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the

dollar limitations in Section 401(a)(17) of Title 26 of the US Code.

The amount of compensation taken into account for General Plan G and Safety Plan C members is limited to \$151,549 for 2020. The amount of compensation taken into account shall be adjusted based on changes in the Consumer Price Index for All Urban Consumers: U.S. City Average. Adjustments shall be effective annually on January 1.

(7522.10)

(31671)

(31664)

(31676.1)

SERVICE RETIREMENT ALLOWANCE (continued)

Monthly Allowance

Plans A-B: Safety members

> 1/50 x Final Compensation x Safety age factor x Years of service. (The Safety Plan A and Safety Plan B age factors are

the same.)

Plans A-D: General members

> (31676.11)1/60 x Final Compensation x a Plan specific age factor x years of service. (The General Plan C and General D age factors are (31676.14)(7522.25(d)) the same.)

Plan C: Safety members

> Final Compensation x Safety Plan percentage x Years of service.

Plan E: General members [(a)+(b)-(c)] x d where: (31491,

31491.3 (b)&(c))

(a) 2% x Final Compensation x (Years of Service (up to 35 years), plus

(b) 1 % x Final Compensation x Years of Service in excess of 35 (up to 10)

- (c) Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35) divided by 35.
- (d) Early Retirement Adjustment Factor

The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 62.

If retirement occurs prior to age 65, benefit amount is adjusted by an Early Retirement Adjustment Factor.

Plan G: General members

(7522.20(a))

(31808)

Final Compensation x General Plan percentage x Years of Service.

Social Security Integration

Plans A-C: **General Members**

> For County service covered by Social Security prior to January 1, 1983, the 1/60 factor is replaced by 1/90 for the first \$350 of compensation.

Plan D: The 1/90 factor is applied to the first \$1,050 of compensation.

SERVICE RETIREMENT ALLOWANCE (continued)

Sample Plan Age Factors

Plan	Age 50	Age 55	Age 60	Age 65 & Up	
General A	0.8850	1.1686	1.4638	1.5668	(31676.14)
General B	0.7454	1.0000	1.3093	1.5668	(31676.11)
General C&D	0.7091	0.8954	1.1500	1.4593	(31676.1)
General E	N/A	0.3748	0.6009	1.0000	(31491.3(a))
Safety A&B	1 0000	1 3099	1 3099	1 3099	(31664)

Sample Plan Age Percentages

Plan	Age 50	Age 55	Age 60	Age 65 & Up	
General G	N/A	1.30%	1.80%	2.30%*	(7522.20(a))
Safety C	2.00%	2.50%	2.70%	2.70%	(7522.25(d))

^{*}Maximum percentage for General Plan G is 2.50% at age 67.

Maximum Allowance

Plans A-D, G:	Allowance may not exceed 100% of final compensation.	(31676.1, 31676.11, 31676.14)
Plan E:	The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation if service exceeds	(31491)

Unmodified Retirement Allowance (Normal Form)

35 years.

Plans A-D, G:	Life Annuity payable to retired member with 65% continuance to an eligible survivor (or eligible children).	(31760.12, 31785.4)
Plan E:	Life Annuity payable to retired member with 55% continuance to an eligible survivor (or eligible children).	(31492.1)
Eligible survivor includes	certain domestic partners.	(31780.2)

SERVICE RETIREMENT ALLOWANCE (continued)

Optional Retirement Allowance

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional survivor allowance.

(31760)

(31760.5)

(31761)

(31810, 31811)

Unmodified Plus:

Members with eligible survivors may elect a higher percent than the

standard unmodified continuance, up to 100%. The benefit is actuarially reduced from the unmodified amount. The elected

percent of the member's reduced allowance is payable to the eligible

survivor.

Option 1: Member's allowance is reduced to pay a cash refund of any unpaid

annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an

insurable interest in the life of the member.

Option 2: 100% of member's reduced allowance is payable to a beneficiary (31762)

having an insurable interest in the life of the member.

Option 3: 50% of member's reduced allowance is payable to a beneficiary (31763)

having an insurable interest in the life of the member.

Option 4: Other % of member's reduced allowance is payable to a (31764)

beneficiary(ies) having an insurable interest in the life of the

member.

A member may not revoke and name another beneficiary if the member elects Option 2, (31782)

3, or 4.

Pension Advance

Option:

The Pension Advance Option is available to members who are fully insured under Social Security for the purpose of coordinating a member's retirement allowance with benefits receivable from Social Security. It is not available to disability retirees or members who elect Option 2, 3, or 4. The allowance is increased prior to age 62 and then reduced after 62 by amounts which have equivalent

and then reduced after 62 by amounts which have equivalent actuarial values. The automatic 65% continuance for eligible spouses of members who elect the Pension Advance Option is based on the unmodified allowance the member would have

received if the member had not elected the option.

All Allowances (31452.7, 31600)

All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that occur mid-month, the full month's payment is made.

SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility

Plans A-D, G: Any age or years of service; disability must result from

(31720)

occupational injury or disease, and member must be permanently incapacitated for the performance of duty.

Plan E: Not available under Plan E. (31487)

Monthly Allowance

Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if

eligible to retire.

(31727.4)

(31720)

(31726, 31726.5)

Normal Form Of Payment

Life Annuity with 100% continuance to a surviving spouse (or eligible children). (31786)

NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

Eligibility

Plans A-D, G: Any age with five years of service, and

permanently incapacitated for the performance of

duty.

Plan E: Not available under Plan E. (31487)

Monthly Allowance

The monthly allowance is equal to a service retirement allowance if a General member is age 65 or a Safety member is age 55; otherwise the monthly allowance is the greater of that to which the member would be entitled as service

retirement or the sum of (a) or (b) where:

General Members: (a) 90% of 1/60 of Final Compensation x years of

service, if member must rely on service in another retirement plan in order to be eligible to retire, or allowance exceeds 1/3 of final compensation.

(b) 90% of 1/60 of Final Compensation x years of service projected to age 65, not to exceed 1/3 of

Final Compensation.

Safety Members: 1/60 is replaced by 1/50 and age 65 is replaced

by age 55 in (a) and (b) above.

(31727.2)

(31727(a))

(31727(b))

Normal Form of Payment

Life Annuity with 65% continuance to a surviving spouse (or eligible children). (31760.1,

31760.12, 31785,

31785.4)

(31787)

SERVICE-CONNECTED PRE-RETIREMENT DEATH BENEFITS

Eligibility

Plans A-D, G: Active members who die in service as a result of

injury or disease arising out of and in the course of

employment.

Plan E: Not available under Plan E. (31487)

Monthly Allowance (31787)

A monthly allowance payable to an eligible survivor (or eligible children) equal to the retirement allowance the deceased member would have received under a service-connected disability retirement.

Optional Combined Benefit

(31781.3)

In lieu of the monthly allowance above, a surviving spouse may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of surviving spouse.

Death Benefit (Lump Sum)

(31781)

The member's accumulated contributions with interest, plus 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation).

Additional Allowance for Children

(31787.5)

In the case of a surviving spouse of a member who is killed in the performance of duty or who dies as the result of an accident or an injury caused by external violence or physical force, incurred in the performance of the member's duty: 25% of death allowance (whether or not the monthly allowance or combined benefit is chosen) for one child, 40% for two children, and 50% for three or more children.

Additional Amount for Spouse of Safety Member

(31787.6)

A surviving spouse of a safety member, who is killed in the performance of duty or who dies as the result of an accident or injury caused by external violence or physical force, incurred in the performance of his or her duty, is also entitled to receive a lump-sum death benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other benefits.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

NONSERVICE-CONNECTED PRE-RETIREMENT DEATH BENEFITS

Eligibility

Plans A-D, G: Active members who die while in service or while

(31780)

physically or mentally incapacitated for the

performance of duty.

Plan E: Not available under Plan E.

(31487)

Death Benefit (Lump Sum)

(31781)

The member's accumulated contributions with interest, plus 1/12 of the compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

Optional Death Benefit

In lieu of the lump-sum death benefit, the following several optional death benefits are available to provide flexibility to survivors.

First Optional Death Benefit

(31781.1,

31781.12)

If a member who would have been entitled to a non-service-connected disability retirement allowance dies prior to retirement as a result of such disability, the surviving spouse (or eligible children) may elect to receive an optional death allowance equal to 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death.

Second Optional Death Benefit

(31781.2,

31765.2)

If a member dies prior to reaching the minimum retirement age but has 10 or more years of County service, a surviving spouse (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in Section 31765 (an Option 3 benefit) or 31765.2 (a 65% continuance).

Third Optional Death Benefit

A surviving spouse of a member who dies after five years of County service may elect a combined benefit equal to:

(a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus

(31781.3)

(b) A monthly payment equal to 65% of the monthly retirement allowance to which the member would have been entitled if the member retired or could have retired for a non-service-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of surviving spouse.

(31781.1, 31781.12)

Fourth Optional Death Benefit

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary, the spouse (or eligible children) may elect to receive 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death.

(31765.1, 31765.2)

Fifth Optional Death Benefit

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary and survives the member by not less than 30 days, the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3.

(31765)

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the first optional death benefit or the lump sum, whichever is more valuable.

POSTRETIREMENT DEATH/BURIAL BENEFIT

Plans A-E: A one-time lump-sum benefit of \$5,000 is

(31789.3)

payable to the estate or to the beneficiary designated by the member upon the death of any member while receiving a retirement allowance. This is in addition to any other death or survivor benefits. The amount is currently paid by the County based on agreement with LACERA. It is not included

for valuation purposes.

DEFERRED RETIREMENT ALLOWANCE

Eligibility

Plans A, B, D and General Plan C:

Five years of county or reciprocal service. (31700)

Member contributions must be left on deposit.

Safety Plan C: Age 50 with 5 years of service. (7522.25(d))

Plan E: Age 55 with 10 years of service. (31491)

Plan G: Age 52 with 5 years of service. (7522.20(a))

DEFERRED RETIREMENT ALLOWANCE (continued)

Monthly Allowance

(31703, 31704, Plans A-D, G: Same as service retirement allowance; payable 31705)

any time after the member would have been

eligible for service retirement.

If a former member dies before the effective (31702)

date of the deferred retirement allowance, the member's accumulated contributions are paid to

the estate or to the named beneficiary.

Plan E: Same as service retirement allowance at normal (31491)

retirement age 65 or in an actuarially equivalent

reduced amount at early retirement, after

age 55.

TRANSFERS BETWEEN PLAN D AND PLAN E

Members in Plan D may transfer to Plan E on a prospective basis. Members in Plan E (31494.2,may transfer to Plan D on a prospective basis.

31494.5)

31840.8)

RECIPROCITY

All Plans: Reciprocal benefits are may be granted to (31830, 31840.4,

members who are entitled to retirement benefits from two or more retirement plans established under the CERL or from a County retirement plan and the California Public Employees' Retirement System (CalPERS). Reciprocity also applies to the members of the State Teachers' Retirement System Defined Benefit Plan.

Final Compensation may be based on service with CalPERS or another County retirement

plan, if greater.

(31835)

Vested former members are eligible for disability and death benefits from LACERA, if disabled while a member of CalPERS or another County

retirement plan, but combined benefits are

limited.

(31837, 31838,31838.5, 31839)

TRANSFER FROM CALPERS

Whenever firefighting or law enforcement functions performed by a public agency or the state subject to the California Public Employees Retirement Law are transferred to the County, fire authority, or district, employees performing those functions become members of LACERA. LACERA and CalPERS may enter into an agreement whereby the members' service credit plus the members' and the cities' or states' retirement contributions are transferred from CalPERS to LACERA.

(31657)

COST-OF-LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%.

(31870, 31870.1)

Plan A: Members (and their beneficiaries) are limited to

(31870.1)

a maximum 3% cost-of-living increase.

Plans B-D, G: Members (and their beneficiaries) are limited to

a maximum 2% cost-of-living increase.

(31870)

When the CPI exceeds 2% or 3%, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation. It may be used in future years to provide cost-of-living increases when the CPI falls below 2% or

3%, depending on the retirement plan.

Plan E: Members (and their beneficiaries) are limited to

a maximum 2% cost-of-living increase. The 2% is pro-rated based on service earned after June 4, 2002. "Elective COLA" increases for service earned prior to June 4, 2002 may be

purchased by the member.

(31495.5)

STAR PROGRAM

Contributory plan members who have a COLA Accumulation of more than 20% resulting from CPI increases that exceeded the maximum cost-of-living increases that could be granted are eligible for a supplemental cost-of-living increase effective January 1 known as the Supplemental Targeted Adjustment for Retirees Cost-of-Living Adjustment (STAR COLA). These benefits are not evaluated in this report, or as part of the actuarially required funding amount, unless they have been vested by the Board of Retirement.

(31874.3(b))

Appendix C Valuation Data and Schedules

On the following table, Exhibit C-1, we present a summary of LACERA membership at June 30, 2021 for active members. Similar information is shown in Exhibit C-2 Retired for retired members and C-2 Former for vested former members.

Note that salary amounts shown are the prior year annual pensionable earnings for those members of plans with a one-year final compensation period. For plans with a three-year final compensation period, the monthly rate of pay at June 2021 is shown.

Additional statistical data on both active and retired members is shown in the following tables. Additional detailed summaries are supplied to LACERA staff in a supplementary report.

Exhibit C-3: Age Distribution of Active Members

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members Exhibits C-4 and C-5 are shown for all plans combined as well as for each plan separately.

Data on LACERA membership as of June 30, 2021 was supplied to us by LACERA staff. Based on our review of this data and discussions with LACERA staff, all retiree and beneficiary records were included in our valuation.

All records for active and former members supplied by LACERA were included in the valuation.

Exhibit C-1
LACERA Membership – Active Members as of June 30, 2021

							Average	
				Total		Average	Monthly	Average
	Sex	Vested	NonVested	Number	Annual Salary	Age	Salary	Service
General	Members	S						
Plan A	М	25	-	25	\$ 3,672,588	74.7	\$ 12,242	45.7
	F	46	-	46	4,326,972	70.6	7,839	40.4
Plan B	M	5	-	5	518,616	69.6	8,644	34.5
	F	14	-	14	1,688,208	66.9	10,049	38.1
Plan C	M	6	-	6	507,540	66.3	7,049	41.6
	F	18	-	18	1,988,544	68.2	9,206	41.2
Plan D	M	12,291	78	12,369	1,298,890,356	51.7	8,751	19.7
	F	25,610	155	25,765	2,452,347,696	51.3	7,932	19.8
Plan E	M	4,597	196	4,793	464,613,792	55.7	8,078	23.1
	F	10,108	319	10,427	833,525,664	55.7	6,662	24.0
Plan G	M	4,077	6,666	10,743	839,899,620	39.6	6,515	4.1
	F _	7,819	13,933	21,752	1,535,543,340	38.6	5,883	4.0
Total	_	64,616	21,347	85,963	\$ 7,437,522,936	47.5	\$ 7,210	14.6
Safety N	lembers							
Plan A	М	2	-	2	\$ 326,532	66.5	\$ 13,606	34.2
	F	-	-	-	-	N/A	N/A	N/A
Plan B	M	7,256	111	7,367	1,031,002,740	46.7	11,662	19.9
	F	1,273	9	1,282	171,595,356	44.6	11,154	18.1
Plan C	M	1,080	2,754	3,834	382,158,036	31.9	8,306	3.7
	F	198	455	653	65,774,268	31.1	8,394	3.7
Total	-	9,809	3,329	13,138	\$ 1,650,856,932	41.4	\$ 10,471	14.2
Grand T	otal	74,425	24,676	99,101	\$ 9,088,379,868	46.7	\$ 7,642	14.5

Exhibit C-2
Retired LACERA Membership – Retired Members as of June 30, 2021

_	F 12,298 651,028,451 80.5 4,41 In B M 213 15,240,885 75.3 5,96 F 510 27,718,865 75.3 4,52 In C M 145 8,336,711 74.5 4,79 F 344 16,542,742 74.8 4,00 In D M 6,890 326,691,732 69.1 3,95 F 12,968 545,925,791 69.0 3,50 In E M 5,001 167,266,254 72.7 2,78 F 10,561 295,588,076 72.4 2,33 In G M 55 1,056,912 65.7 1,60 F 68 916,309 63.8 1,12										
General Me	mbers										
Plan A	М	6,775	\$	495,805,714	80.8	\$	6,098				
	F	12,298		651,028,451	80.5		4,411				
Plan B	M	213		15,240,885	75.3		5,963				
	F	510		27,718,865	75.3		4,529				
Plan C	M	145		8,336,711	74.5		4,791				
	F	344		16,542,742	74.8		4,007				
Plan D	M	6,890		326,691,732	69.1		3,951				
	F	12,968		545,925,791	69.0		3,508				
Plan E	M	5,001		167,266,254	72.7		2,787				
	F	10,561		295,588,076	72.4		2,332				
Plan G	M	55		1,056,912	65.7		1,601				
	F	68		916,309	63.8		1,123				
Total		55,828	\$	2,552,118,442	74.1	\$	3,809				
Safety Mem	bers										
Plan A	М	4,379	\$	476,183,209	77.6	\$	9,062				
	F	2,016	•	153,189,167	79.0		6,332				
Plan B	M	5,948		619,948,332	61.2		8,686				
	F	1,311		99,417,044	58.6		6,319				
Plan C	M	10		717,017	58.8		5,975				
	F	5		188,941	41.4		3,149				
Total		13,669	\$	1,349,643,710	68.8	\$	8,228				
Grand Total	1	69,497	\$	3,901,762,152	73.0	\$	4,679				

Exhibit C-2
Former LACERA Membership – Vested Former Members as of June 30, 2021⁽¹⁾
Subtotaled by Plan and Retirement Type

_	Sex	Number	Average Age
General Members			
Plan A	M	16	75.3 73.5
Plan B	F M F	35 2 7	73.5 73.5 70.9
Plan C	Г М F	7 5 9	68.0 66.4
Plan D	M F	2,537 5,319	50.0 49.3
Plan E	M F	1,002 2,173	57.4 57.4
Plan G	M F	1,498 3,457	38.4 37.6
Total	·	16,060	47.6
Safety Members			
Plan A	M F	4	69.0
Plan B	Г М F	678 123	- 44.9 45.4
Plan C	Г М F	278 45	31.9 31.2
Total	Г	1,128	41.3
Grand Total		17,188	47.2

^{1.} Includes non-vested former members who still have member contributions with LACERA

Exhibit C-2a LACERA Membership – Retired Members as of June 30, 2021 Subtotaled by Plan and Retirement Type

	Retirement			nnual Benefits		Average Monthly
Plan	Туре	Number	<u>i</u>	n Thousands	_	Benefit
General Plans:						
Plan A						
	Healthy	13,495	\$	923,824	\$	5,705
	Disabled	1,332		58,290		3,647
	Beneficiaries	4,246		164,720		3,233
	Total	19,073	\$	1,146,834	\$	5,011
Plan B		•				•
=	Healthy	603	\$	38,386	\$	5,305
	Disabled	55	*	2,114	Ψ	3,203
	Beneficiaries	65		2,460		3,153
	Total	723	<u>\$</u>	42,960	\$	4,952
Plan C	iotai	720	Ψ	42,000	Ψ	4,002
Fian C	Healthy	374	\$	21,300	\$	4,746
	Disabled	50	Ψ	1,742	Ψ	2,903
	Beneficiaries					
		65	<u>_</u>	1,838	ф -	2,357
DI D	Total	489	\$	24,880	\$	4,240
Plan D	L La alda .	45.000	•	740.004	•	0.000
	Healthy	15,923	\$	749,634	\$	3,923
	Disabled	2,256		82,472		3,046
	Beneficiaries	1,679		40,511		2,011
	Total	19,858	\$	872,617	\$	3,662
Plan E			_			
	Healthy	14,176	\$	441,452	\$	2,595
	Disabled	N/A		N/A		N/A
	Beneficiaries	1,386		21,402	_	1,287
	Total	15,562	\$	462,854	\$	2,479
Plan G						
	Healthy	105	\$	1,602	\$	1,271
	Disabled	8		243		2,526
	Beneficiaries	10		129	_	1,073
	Total	123	\$	1,974	\$	1,337
Safety Plans:						
Plan A						
	Healthy	2,047	\$	233,304	\$	9,498
	Disabled	2,731		277,908		8,480
	Beneficiaries	1,617		118,160	_	6,089
	Total	6,395	\$	629,372	\$	8,201
Plan B						
	Healthy	3,034	\$	322,963	\$	8,871
	Disabled	3,876		373,955		8,040
	Beneficiaries	349		22,447		5,360
	Total	7,259	\$	719,365	\$	8,258
Plan C		•		•		•
-	Healthy	9	\$	647	\$	5,991
	Disabled	5	*	210	*	3,493
	Beneficiaries	1		49		4,109
	Total	15	\$	906	\$	5,033
		. •	,		*	-,
Grand Totals		69,497		3,901,762		4,679

Exhibit C-2b

LACERA Membership – Retired Members as of June 30, 2021

Subtotaled by Retirement Type and Plan

			Annual Benefits		Average Monthly
Туре	Plan	Number	in Thousands	_	Benefit
Healthy Retirees					
	General A	13,495	\$ 923,824	\$	5,705
	General B	603	38,386		5,305
	General C	374	21,300		4,746
	General D	15,923	749,634		3,923
	General E	14,176	441,452		2,595
	General G	105	1,602		1,271
	Safety A	2,047	233,304		9,498
	Safety B	3,034	322,963		8,871
	Safety C	9	647		5,991
	Total	49,766	\$ 2,733,112	\$	4,577
Disabled Retirees					
	General A	1,332	\$ 58,290	\$	3,647
	General B	55	2,114		3,203
	General C	50	1,742		2,903
	General D	2,256	82,472		3,046
	General E	N/A	N/A		N/A
	General G	8	243		2,526
	Safety A	2,731	277,908		8,480
	Safety B	3,876	373,955		8,040
	Safety C	5	210		3,493
	Total	10,313	\$ 796,934	\$	6,440
Beneficiaries					
	General A	4,246	\$ 164,720	\$	3,233
	General B	65	2,460		3,153
	General C	65	1,838		2,357
	General D	1,679	40,511		2,011
	General E	1,386	21,402		1,287
	General G	10	129		1,073
	Safety A	1,617	118,160		6,089
	Safety B	349	22,447		5,360
	Safety C	1	49		4,109
	Total	9,418	\$ 371,716	\$	3,289
Grand Totals		69,497	\$ 3,901,762	\$	4,679

Exhibit C-3
Age Distribution of Active Members as of June 30, 2021

Age Groups 0-29 30-39 40-49 60-69 70+ Total 50-59 General Plans: Plan A Male 6 19 25 21 25 46 Female Plan B Male 3 2 5 2 Female 12 14 Plan C 2 6 Male 4 7 Female 11 18 Plan D 1,200 3,917 4,680 Male 6 2,299 267 12,369 Female 25,765 3 2,549 8,682 9,611 4,399 521 Plan E 4,793 Male 268 1,009 1,738 1,480 298 Female 2 4,101 497 10,427 509 1,991 3,327 Plan G 2,579 530 32 10,743 1,412 4,885 1,305 Male 3,157 10,498 4,808 2,471 760 58 21,752 Female Safety Plans: Plan A Male 2 2 Female Plan B Male 11 1,452 2,927 2,786 189 2 7,367 Female 3 339 583 345 12 1,282 Plan C Male 1,476 1,967 316 63 12 3,834 7 Female 297 301 48 653 6,367 13,067 1,732 **Grand Totals:** 23,968 26,860 27,107 99,101

Exhibit C-4
Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021
All Plans

Count													
						Years of	Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	275	283	108	50	15	1	-	-	-	<u>-</u>	-	-	732
25-29	1,233	1,327	1,036	827	656	556	-	-	-	-	_	-	5,635
30-34	1,077	1,338	1,359	1,392	1,505	3,889	574	12	-	_	-	-	11,146
35-39	644	846	893	1,013	1,059	4,171	3,333	822	41	-	-	-	12,822
40-44	427	503	535	644	692	2,614	3,610	3,042	1,203	77	-	-	13,347
45-49	279	367	383	409	462	1,731	2,526	2,867	3,617	805	65	2	13,513
50-54	207	237	262	296	302	1,276	1,861	2,154	3,565	2,537	1,663	145	14,505
55-59	142	162	175	221	224	981	1,332	1,628	2,322	1,921	2,544	950	12,602
60-64	46	87	102	112	129	652	1,040	1,176	1,654	1,094	1,526	1,486	9,104
65 & Over	15	22	45	48	55	373	697	860	1,324	670	679	907	5,695
Total Count	4,345	5,172	4,898	5,012	5,099	16,244	14,973	12,561	13,726	7,104	6,477	3,490	99,101
Compensation													
						Years of	Service						Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	58,266	68,392	63,280	69,495	71,550	45,348	-	_	_	-	-	-	63,942
25-29	58,267	65,964	68,569	72,908	75,854	78,114	-	-	-	-	-	-	68,128
30-34	66,941	68,870	71,903	72,516	77,353	81,746	87,851	89,291	-	-	-	-	76,146
35-39	71,149	73,314	80,605	79,102	80,315	88,131	97,078	92,271	108,916	-	-	-	87,075
40-44	69,831	71,910	78,790	79,436	80,509	93,294	99,664	98,377	103,300	115,418	-	-	93,735

Under 25	58,266	68,392	63,280	69,495	71,550	45,348	-	-	-	-	-	-	63,942
25-29	58,267	65,964	68,569	72,908	75,854	78,114	-	-	-	-	-	-	68,128
30-34	66,941	68,870	71,903	72,516	77,353	81,746	87,851	89,291	-	-	-	-	76,146
35-39	71,149	73,314	80,605	79,102	80,315	88,131	97,078	92,271	108,916	-	-	-	87,075
40-44	69,831	71,910	78,790	79,436	80,509	93,294	99,664	98,377	103,300	115,418	-	-	93,735
45-49	68,984	68,387	73,374	75,862	78,685	90,398	97,285	101,269	106,662	118,599	129,382	143,664	97,858
50-54	67,097	67,360	72,859	81,046	79,381	86,211	92,995	100,679	105,473	119,632	120,857	116,251	103,012
55-59	68,887	69,334	73,441	73,467	74,920	85,493	88,875	92,070	95,175	111,562	110,620	112,631	98,615
60-64	72,766	67,195	85,663	72,134	80,125	84,209	84,638	86,094	89,178	105,080	107,875	108,400	95,417
65 & Over	105,609	72,855	84,241	89,965	127,061	89,499	83,047	85,454	83,471	91,748	100,139	99,654	90,151
Avg. Annual	\$ 65,236	\$ 69,021	\$ 73,968	\$ 75,748	\$ 78,927	\$ 86,893	\$ 94,628	\$ 96,172	\$ 99,778	\$ 112,416	\$ 111,691	\$ 107,625	\$ 91,708

Exhibit C-4a Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan A

						Years	of Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	-	_	-	-	_	-	-	-	_	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	-	-	2	
65 & Over	-	-	-	-	-	-	-	4	5	7	3	50	6
Total Count	-	-	-	-	-	-	-	4	5	7	3	52	7
Compensation						Years	of Service						Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	_	_	_	-	-	_	-	-	-	_	-	-	_
25-29	_	-	-	-	_	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	-	-	74,100	74,10
65 & Over	-	-	-	-	-	-	-	102,819	122,827	104,318	94,560	116,241	113,78
Avg. Annual	\$ -							\$ 102,819	\$ 122,827	\$ 104,318	\$ 94,560	\$ 114,620	\$ 112,670

Exhibit C-4b Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan B

						Years of							Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	-	-	_	-	-	-	-	-	_	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	1	-	-	2	3
65 & Over	-	-	-	-	-	-	-	1	1	2	1	11	16
Total Count	-	-	-	-	-	-	-	1	2	2	1	13	19
Compensation	n												
						Years of							Average
Age	0-1	1-2	2-3	3-4	4-5	Years of 5-9	Service 10-14	15-19	20-24	25-29	30-34	35&Over	Average Comp.
Age Under 25	0-1	1-2	2-3	3-4	4-5			15-19	20-24	25-29	30-34	35&Over	Average Comp.
	0-1	- 1-2	2-3 - -	3-4	4-5 _ -			15-19 	20-24	<u>25-29</u> - -	30-34 - -	35&Over - -	Average Comp. - -
Under 25	0-1	1-2 - - -	2-3	3-4 - -	4-5 - - -			15-19 - - -	20-24 - - -	25-29 - - -	30-34	35&Over - - -	Average Comp. - -
Under 25 25-29	0-1 - - - -	1-2 - - -	2-3 - - -	3-4 - - -	4-5 - - - -			15-19 - - -	20-24	25-29 - - -	30-34	35&Over - - -	Average Comp. - - -
Under 25 25-29 30-34	0-1 - - - -	1-2 - - - -	2-3 - - - - -	3-4 - - - -	4-5 - - - -			15-19 - - - - -	20-24	25-29 - - - -	30-34 - - - -	35&Over	Average Comp. - - - -
Under 25 25-29 30-34 35-39	0-1 - - - - -	. 1-2	2-3 - - - - -	3-4	4-5 - - - - - -			15-19	20-24	25-29 - - - - -	30-34	35&Over	Average Comp - - - -
Under 25 25-29 30-34 35-39 40-44	0-1	1-2	2-3	3-4	4-5 - - - - - -			15-19 - - - - - -	20-24	25-29 - - - - - -	30-34	35&Over	Average Comp - - - - -
Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59	0-1 - - - - - -	1-2 - - - - - -	2-3	3-4 - - - - - - -	4-5 - - - - - -			15-19	20-24 - - - - - - -	25-29 - - - - - - -	30-34	35&Over	Average Comp - - - - - -
Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64	0-1 - - - - - - -	1-2	2-3	3-4	4-5 - - - - - - -			-	20-24 - - - - - - - - - - - - - - - - - -	25-29 - - - - - - - -	30-34	35&Over	Comp 83,536
Under 25 25-29 30-34 35-39 40-44 45-49 50-54 55-59	0-1	1-2	2-3	3-4	4-5 - - - - - - - -			- - - - - - - - -	-	25-29 - - - - - - - - - - 133,008	30-34	- - - - - - -	Comp

Exhibit C-4c Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan C

						Years	of Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	_	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	-	-	11	1
65 & Over	-	-	-	-	-	-	-	-	-	-	-	13	1:
Total Count	-	-	-	-	-	-	-	-	-	-	-	24	2
Compensation						Years	of Service						Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	-	_	-	-	_	-	-	_	-	-	_	_	_
25-29	-	-	_	_	_	_	_	_	_	_	_	-	-
30-34	-	-	-	-	_	-	-	-	-	-	-	-	-
35-39	-	-	-	-	_	-	-	-	-	-	-	-	-
40-44	-	-	-	-	_	-	-	-	-	-	-	-	-
45-49	-	-	-	-	_	-	-	-	-	-	-	-	-
50-54	-	-	-	-	_	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	-	-	90,766	90,76
65 & Over	-	-	-	-	-	-	-	-	-	-	-	115,205	115,20
Avg. Annual	\$ -	s -	\$ -	s -	\$ -	s -	s -	\$ -	s -	\$ -	s -	\$ 104.004	\$ 104,004

Exhibit C-4d Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan D

						Years	of Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	-	-	_	-	_	-	-	-	-	-	-	-
25-29	-	-	1	-	-	8	-	-	-	-	-	-	9
30-34	1	2	5	8	4	263	264	9	-	-	-	-	556
35-39	5	5	18	14	13	683	1,952	472	31	-	-	-	3,193
40-44	1	4	10	10	18	551	2,388	2,046	692	60	-	-	5,780
45-49	2	5	13	8	17	379	1,762	1,942	2,151	496	43	1	6,819
50-54	1	3	6	12	10	263	1,300	1,463	2,146	1,369	747	109	7,429
55-59	1	3	3	5	8	195	957	1,159	1,508	1,151	1,303	569	6,862
60-64	-	2	4	2	5	114	751	789	1,079	688	756	597	4,787
65 & Over	-	1	2	2	2	73	459	555	741	353	310	201	2,699
Total Count	11	25	62	61	77	2,529	9,833	8,435	8,348	4,117	3,159	1,477	38,134
Compensation	n												
							of Service	15.10		05.00	22.24		Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	81,912	-	-	55,322	-	-	-	-	-	-	58,276
30-34	54,240	54,540	77,484	81,924	84,756	82,925	72,455	79,532	-	-	-	-	77,695
35-39	116,506	117,936	96,871	92,469	96,742	95,638	88,474	83,957	102,168	-	-	-	89,660
40-44	66,228	86,934	108,572	67,558	86,513	104,351	95,247	94,332	95,778	107,735	-	-	95,921
45-49	47,514	113,503	96,138	94,158	110,238	102,221	95,718	99,581	100,175	108,912	118,529	156,840	99,732
50-54	79,560	144,356	194,874	149,937	116,710	97,429	91,883	100,504	102,964	110,014	104,726	112,884	102,149
	44,460	74,716	193,808	111,156	86,894	94,408	89,641	94,032	97,130	110,286	109,098	118,740	101,779
55-59	,												
60-64	-	158,838	122,670	104,796	161,441	94,713	86,493	89,412	93,368	110,456	112,161	115,787	100,017
	•	158,838 111,720	122,670 85,236	104,796 68,550	161,441 73,740	94,713 88,570	86,493 82,759	89,412 90,724	93,368 86,280	110,456 95,134	112,161 109,818	115,787 118,166	100,017 92,879

Exhibit C-4e Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan E

								Years o	f Service									To	otal
Age	0-1	 1-2		2-3	3-4	4-5		5-9	10-14		15-19		20-24	25-29	30-34	3	5&Over	Cc	ount
Under 25	-	-		-	-		-	-	_		-		-	-	_		_		-
25-29	-	-		-	-		-	2	-		-		-	-	-		-		2
30-34	-	-		-	-		1	44		6	-		-	-	-		-		121
35-39	-	-		-	-		-	113	3	94	147		2	-	-		-		656
40-44	-	-		-	-		-	70	4	2	455		204	3	-		-		1,224
45-49	-	-		-	-		-	80	4)5	541		659	88	3		-		1,776
50-54	-	-		-	-		1	50	3	6	454		801	513	401		18		2,614
55-59	-	-		-	-		-	64	3	20	382		627	548	962		322		3,225
60-64	-	-		-	-		-	59	2	'1	362		539	371	736		839		3,177
65 & Over	-	-		-	-		-	44	2	26	296		572	303	359		625		2,425
Total Count	-	-		-	-		2	526	2,5	0	2,637		3,404	1,826	2,461		1,804		15,220
Compensation Age		1-2		2-3	3-4	4-5		Years o	f Service		15-19		20-24	25-29	30-34	3	5&Over		erage omp.
Age		 12			- 0 4				10 14		10 10	-	20 24	 20 20	 00 04		<u>ouovoi</u>		mp.
Under 25	-	-		-	-		-	-	-		-		-	-	-		-		-
25-29	-	-		-	-		-	57,300	-		-		-	-	-		-		57,300
30-34	-	-		-	-	64,	944	79,813	62,2	86	-		-	-	-		-		68,681
35-39	-	-		-	-		-	81,281	76,3		70,836		87,702	-	-		-		75,990
40-44	-	-		-	-		-	82,798	82,8		78,765		74,787	103,072	-		-		80,050
45-49	-	-		-	-		-	88,289	81,1	8	83,137		83,739	80,264	89,784		-		83,017
50-54	-	-		-	-	65,	136	83,790	82,4	9	81,570		83,826	92,119	85,928		77,980		85,139
55-59	-	-		-	-		-	75,948	79,7	64	76,311		77,342	96,503	93,948		87,262		86,632
33-39				-	-		-	89,937	76,1	9	75,756		77,565	90,918	100,918		99,595		90,257
60-64	-	-																	
	-	-		-	-		-	111,504	79,7	20	75,133		78,697	86,034	90,980		91,059		84,874

Exhibit C-4f Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 General Plan G

						Years o	of Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	172	150	67	29	8	1	-	-	-	-	_	-	427
25-29	1,004	980	765	582	452	359	-	-	-	-	-	-	4,142
30-34	915	1,149	1,186	1,170	1,220	2,880	25	-	-	-	-	-	8,545
35-39	579	752	815	916	916	2,830	29	1	-	-	-	-	6,838
40-44	397	469	506	592	614	1,792	19	2	-	-	-	-	4,391
45-49	267	341	359	389	426	1,197	14	2	1	-	-	-	2,996
50-54	194	229	252	274	287	926	19	1	-	1	-	-	2,183
55-59	125	152	170	213	215	700	13	4	1	-	-	-	1,593
60-64	42	83	98	110	123	469	8	4	1	-	-	-	938
65 & Over	15	21	43	46	53	253	9	2	-	-	-	-	442
Total Count	3,710	4,326	4,261	4,321	4,314	11,407	136	16	3	1	-	-	32,495
Compensation													
							of Service	15.10		05.00		0500	Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	46,417	49,215	46,703	55,709	55,068	45,348	-	-	-	-	-	-	48,235
25-29	53,422	56,718	58,636	61,769	63,277	62,508	-	-	-	-	-	-	58,201
30-34	64,576	65,098	68,558	67,390	70,480	74,060	75,152	-	-	-	-	-	69,655
35-39	69,769	70,757	78,927	76,878	76,350	81,331	104,890	75,108	-	-	-	-	77,738
40-44	68,720	70,436	77,500	78,083	77,743	87,758	164,117	99,756	-	-	-	-	80,636
45-49	67,326	66,272	71,717	74,585	75,950	85,239	139,489	59,100	43,188	-	-	-	77,381
50-54	63,598	65,591	69,329	76,841	77,907	81,892	119,546	285,252	-	41,832	-	-	76,351
55-59	58,505	67,441	70,806	71,631	74,193	82,533	131,695	173,673	124,116	-	-	-	76,029
60-64	61,104	64,396	84,152	71,540	76,354	79,721	137,679	104,250	114,660	-	-	-	77,229
	40F C00	74 00 4	04 405	00.000	120.074	85,274	450.070	72,234					00.47
65 & Over	105,609	71,004	84,195	90,896	129,074	85,274	159,673	12,234	-	-	-	-	92,474

Exhibit C-4g Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 Safety Plan A

_						Years	of Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	_	-	-	-	-	-	_	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	1	-	-	
65 & Over	-	-	-	-	-	-	-	-	-	-	-	1	
Total Count	-	-	-	-	-	-	-	-	-	1	-	1	
Compensation						Years	of Service						Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	_	_	_	_	-	-	-	_	_	_	_	_	
25-29	-	_	_	_	_	_	_	-	_	_	_	-	_
30-34	-	_	_	-	_	_	-	-	-	-	_	-	-
35-39	-	-	_	-	-	-	-	-	-	-	_	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-	175,032	-	-	175,03
65 & Over	-	-	-	-	-	-	-	-	-	· -	-	151,500	151,50
Avg. Annual	\$ -	¢	\$ -	s -	\$ -	•	s -	\$ -	s -	\$ 175,032	\$ -	\$ 151,500	\$ 163,26

Exhibit C-4h Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 Safety Plan B

							f Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	-	-	-	-	-	-	_	-	_	-	_	-	-
25-29	-	-	-	-	-	14	-	-	-	-	-	-	14
30-34	2	4	1	3	7	168	205	3	-	-	-	-	393
35-39	4	9	5	4	5	216	945	202	8	-	-	-	1,398
40-44	8	5	2	4	10	95	702	536	307	14	-	-	1,683
45-49	5	4	3	2	3	40	344	380	805	221	19	1	1,827
50-54	9	-	-	6	-	20	165	234	618	654	515	18	2,239
55-59	13	1	-	1	-	7	42	82	186	222	279	59	892
60-64	3	-	-	-	-	3	10	21	34	34	34	35	174
65 & Over	-	-	-	-	-	2	3	2	5	5	6	6	29
Total Count	44	23	11	20	25	565	2,416	1,460	1,963	1,150	853	119	8,649
Compensation	1												
							f Service						Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	111,791	-	-	-	-	-	-	111,791
30-34	77,376	100,725	129,516	112,864	111,178	117,770	117,957	118,568	-	-	-	-	117,369
35-39	97,302	97,909	115,339	95,994	107,902	118,285	122,965	127,383	140,364	-	-	-	122,587
40-44	100,416	98,947	122,316	119,460	101,074	120,839	124,557	130,384	139,200	150,989	-	-	128,749
45-49	135,794	101,166	119,848	102,078	128,316	117,333	122,518	135,937	142,840	155,603	160,194	130,488	138,520
50-54	141,231	-	-	124,138	-	114,494	122,603	137,951	142,240	161,465	171,453	174,909	152,642
55-59	157,909	141,840	-	138,444	-	116,491	127,593	133,188	139,287	155,345	175,219	192,172	157,003
60-64	164,692	-	-	-	-	136,656	132,097	136,186	140,323	148,775	163,184	201,793	158,191
65 & Over	-	-	-	-	-	144,936	147,844	129,108	152,371	164,839	144,028	165,100	152,843

Exhibit C-4i Age and Service Distribution of Active Members by Count and Average Compensation as of June 30, 2021 Safety Plan C

						Years of	Service						Total
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Count
Under 25	103	133	41	21	7	-	-	_	_	_	-	-	305
25-29	229	347	270	245	204	173	-	-	-	-	-	-	1,468
30-34	159	183	167	211	273	534	4	-	-	-	-	-	1,531
35-39	56	80	55	79	125	329	13	-	-	-	-	-	737
40-44	21	25	17	38	50	106	9	3	-	-	-	-	269
45-49	5	17	8	10	16	35	1	2	1	-	-	-	95
50-54	3	5	4	4	4	17	1	2	-	-	-	-	40
55-59	3	6	2	2	1	15	-	1	-	-	-	-	30
60-64	1	2	-	-	1	7	-	-	-	-	-	-	11
65 & Over	-	-	-	-	-	1	-	-	-	-	-	-	1
Total Count	580	798	564	610	681	1,217	28	8	1	-	-	-	4,48
Compensation	ı												
		- 10				Years of		15.10		25.00		2500	Average
Age	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	78,051	90,020	90,368	88,534	90,387	-	-	-	-	-	-	-	85,931
25-29	79,509	92,075	96,663	99,367	103,720	109,068	-	-	-	-	-	-	95,797
30-34	80,498	92,013	95,145	100,015	107,136	111,444	126,141	-	-	-	-	-	101,825
35-39	79,496	91,790	96,989	101,665	106,556	113,594	118,303	-	-	-	-	-	105,008
	79,347	91,750	94,544	99,420	108,199	111,646	111,112	112,644	-	-	-	-	103,820
40-44			02.205	105,656	108,683	112,850	106,548	101,100	106,548	-	-	-	104,533
40-44 45-49	99,293	89,836	93,305										
45-49 50-54	66,788	102,199	112,236	97,740	111,672	121,773	109,236	113,286	-	-	-	-	110,098
45-49 50-54 55-59	66,788 123,844	102,199 102,514			111,672 135,636	121,773 134,016	109,236 -	113,286 140,076	-	-	-	-	110,098 126,362
45-49 50-54 55-59 60-64	66,788	102,199	112,236	97,740	111,672	121,773	•		-	-	- - -		110,098 126,362 146,281
45-49 50-54 55-59	66,788 123,844	102,199 102,514	112,236 116,838	97,740 142,308	111,672 135,636	121,773 134,016	-	140,076	- - -	- - -	- - - -	-	110,098 126,362

Exhibit C-5 Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 All Plans

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	Monthly Benefit
Under 35	-	-	-	-	-	1	9	8	18	80	17	133	\$ 1,024
35-39	-	-	-	-	-	-	2	4	8	74	29	117	2,618
40-44	-	-	-	-	-	1	2	14	57	104	41	219	2,921
45-49	-	-	-	-	-	2	26	49	75	153	64	369	3,233
50-54	-	-	-	1	11	49	106	101	173	483	339	1,263	3,723
55-59	-	-	-	2	60	128	161	166	415	1,904	1,193	4,029	5,771
60-64	-	-	5	39	100	146	166	324	1,437	3,214	1,338	6,769	5,417
65-69	-	9	45	72	112	171	365	1,409	3,067	4,917	1,871	12,038	4,774
70-74	6	76	138	135	186	469	1,611	3,194	4,269	3,673	764	14,521	4,678
75-79	17	130	203	192	485	1,473	2,944	2,832	2,433	1,330	333	12,372	4,821
80-84	46	110	146	348	1,075	1,658	1,901	1,298	850	673	223	8,328	4,427
85-89	69	89	245	588	1,209	1,025	716	466	402	413	164	5,386	4,101
90-94	57	130	355	461	626	310	207	189	232	212	71	2,850	3,708
95-99	32	96	165	175	128	64	65	71	69	67	21	953	3,421
100 & Over	14	24	33	16	15	12	8	7	15	6	-	150	2,889
Total Count	241	664	1,335	2,029	4,007	5,509	8,289	10,132	13,520	17,303	6,468	69,497	
Avg Monthly Benefit	\$ 2,420	\$ 3,081	\$ 3,165	\$ 3,591	\$ 4,559	\$ 4,552	\$ 5,248	\$ 4,578	\$ 4,619	\$ 4,757	\$ 5,104		\$ 4,679

Exhibit C-5a Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan A

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	Monthly Benefit
Under 35	-	-	-	-	-	-	1	1	3	4	-	9	\$ 644
35-39	-	-	-	-	-	-	-	2	1	3	2	8	1,590
40-44	-	-	-	-	-	-	2	4	4	1	1	12	2,066
45-49	-	-	-	-	-	-	1	3	3	-	-	7	3,007
50-54	-	-	-	1	-	4	4	5	3	3	1	21	2,442
55-59	-	-	-	-	1	2	1	6	4	8	5	27	3,520
60-64	-	-	1	3	2	5	8	16	19	31	2	87	3,570
65-69	-	4	14	12	11	24	93	218	521	205	36	1,138	5,317
70-74	2	39	41	36	49	223	566	1,215	849	219	71	3,310	5,867
75-79	11	55	84	66	299	715	1,493	1,035	354	242	85	4,439	5,705
80-84	26	65	65	241	709	948	1,034	329	217	233	96	3,963	5,032
85-89	38	57	171	433	892	669	272	165	188	207	95	3,187	4,390
90-94	33	100	279	362	501	172	101	105	144	130	49	1,976	3,739
95-99	29	78	143	156	96	44	44	54	51	48	19	762	3,346
100 & Over	11	23	33	16	11	10	5	5	9	4	-	127	3,004
Total Count	150	421	831	1,326	2,571	2,816	3,625	3,163	2,370	1,338	462	19,073	
Avg Monthly Benefit	\$ 1,806	\$ 2,498	\$ 2,543	\$ 3,091	\$ 4,399	\$ 4,560	\$ 6,125	\$ 6,192	\$ 5,986	\$ 4,585	\$ 3,843		\$ 5,011

Exhibit C-5b Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan B

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Monthly Benefit
Under 35	-	-	-	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	-	1	-	1	2,793
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	1	1	2	4,299
60-64	-	-	-	-	-	-	-	5	2	18	6	31	5,683
65-69	-	-	-	-	1	2	5	20	63	63	1	155	5,807
70-74	-	-	1	5	4	5	17	52	84	26	5	199	5,904
75-79	-	-	2	3	4	13	39	38	28	7	2	136	4,510
80-84	-	-	-	3	5	16	34	19	11	5	1	94	4,028
85-89	-	-	1	2	5	21	7	11	4	1	1	53	3,915
90-94	-	-	2	4	16	11	3	4	1	3	-	44	2,167
95-99	-	-	-	2	3	1	2	-	-	-	-	8	2,830
100 & Over	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	6	19	38	69	107	149	193	125	17	723	
Avg Monthly Benefit	\$ -	\$ -	\$ 1,466	\$ 1,470	\$ 2,076	\$ 2,475	\$ 3,728	\$ 4,800	\$ 6,430	\$ 6,799	\$ 5,209		\$ 4,952

Average

Exhibit C-5c Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan C

	Retirement Year													
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Count	Monthly Benefit	
Under 35	-	-	-	-	-	-	-	-	-	1	-	1	\$ 5,103	
35-39	-	-	-	-	-	-	-	-	-	1	-	1	5,103	
40-44	-	-	-	-	-	-	-	-	1	-	-	1	1,655	
45-49	-	-	-	-	-	-	-	-	2	-	-	2	1,504	
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-	
55-59	-	-	-	-	-	-	1	-	-	1	1	3	2,362	
60-64	-	-	-	-	-	1	-	2	4	20	6	33	4,384	
65-69	-	1	1	5	1	3	4	11	35	39	9	109	5,659	
70-74	-	-	4	1	1	2	19	19	42	25	4	117	5,462	
75-79	-	-	1	2	8	8	9	26	21	8	-	83	3,692	
80-84	-	-	-	7	8	8	15	12	6	2	2	60	2,721	
85-89	-	-	-	4	6	11	14	7	3	3	-	48	2,651	
90-94	-	-	1	2	8	6	3	2	-	3	-	25	1,576	
95-99	-	-	-	-	2	1	-	1	1	-	-	5	2,741	
100 & Over	-	-	-	-	1	-	-	-	-	-	-	1	702	
Total Count	-	1	7	21	35	40	65	80	115	103	22	489		
Avg Monthly Benefit	\$ -	\$ 1,880	\$ 1,327	\$ 1,083	\$ 1,396	\$ 2,119	\$ 2,940	\$ 3,392	\$ 5,911	\$ 6,087	\$ 6,211		\$ 4,240	

Exhibit C-5d Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan D

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Monthly Benefit
Under 35	-	-	-	-	-	-	3	2	10	38	7	60	\$ 866
35-39	-	-	-	-	-	-	1	-	1	25	13	40	1,708
40-44	-	-	-	-	-	-	-	5	25	37	17	84	2,045
45-49	-	-	-	-	-	2	7	13	27	60	17	126	2,302
50-54	-	-	-	-	3	5	18	22	73	270	189	580	2,242
55-59	-	-	-	-	8	18	45	59	250	773	387	1,540	2,862
60-64	-	-	-	5	17	40	52	182	540	1,428	841	3,105	3,939
65-69	-	-	3	6	19	50	147	451	964	2,419	934	4,993	4,348
70-74	-	1	2	16	33	98	251	551	1,485	1,637	340	4,414	3,862
75-79	-	-	2	10	36	132	301	700	887	481	96	2,645	3,493
80-84	-	-	5	12	42	123	315	404	288	179	37	1,405	2,895
85-89	-	-	2	12	33	110	183	125	73	55	23	616	2,598
90-94	-	-	1	4	24	55	43	32	22	22	6	209	2,261
95-99	-	-	-	3	10	9	4	4	2	3	1	36	1,573
100 & Over	-	-	-	-	1	-	-	1	1	2	-	5	1,095
Total Count	-	1	15	68	226	642	1,370	2,551	4,648	7,429	2,908	19,858	
Avg Monthly Benefit	\$ -	\$ 2,929	\$ 1,816	\$ 1,575	\$ 1,783	\$ 2,054	\$ 2,414	\$ 2,841	\$ 3,617	\$ 4,077	\$ 4,543		\$ 3,662

Exhibit C-5e Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan E

	Retirement Year												Average Monthly
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Benefit
Under 35	-	-	-	-	-	1	-	2	1	19	4	27	\$ 745
35-39	-	-	-	-	-	-	1	2	2	10	3	18	822
40-44	-	-	-	-	-	1	-	2	6	10	5	24	1,362
45-49	-	-	-	-	-	-	-	-	9	24	7	40	1,278
50-54	-	-	-	-	-	-	2	7	16	25	8	58	882
55-59	-	-	-	-	-	-	1	5	17	223	161	407	1,056
60-64	-	-	-	-	-	-	2	5	238	571	325	1,141	1,831
65-69	-	-	-	-	-	1	5	286	674	1,902	810	3,678	3,031
70-74	-	-	-	-	-	8	234	685	1,617	1,631	296	4,471	2,796
75-79	-	-	-	-	1	138	361	894	1,069	483	106	3,052	2,465
80-84	-	-	-	-	39	183	413	500	257	165	56	1,613	1,977
85-89	-	-	-	14	68	165	206	107	88	82	23	753	1,569
90-94	-	-	-	11	50	60	35	23	23	19	5	226	1,311
95-99	-	-	1	8	14	4	4	3	7	4	-	45	846
100 & Over	-	-	-	-	2	2	2	1	2	-	-	9	516
Total Count	-	-	1	33	174	563	1,266	2,522	4,026	5,168	1,809	15,562	
Avg Monthly Benefit	\$ -	\$ -	\$ 81	\$ 305	\$ 553	\$ 811	\$ 1,268	\$ 1,699	\$ 2,612	\$ 3,026	\$ 3,297		\$ 2,479

Exhibit C-5f Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 General Plan G

	Retirement Year												Average Monthly
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Benefit
Under 35	-	-	-	-	-	-	-	-	-	1	-	1	\$ 2,478
35-39	-	-	-	-	-	-	-	-	-	1	-	1	1,315
40-44	-	-	-	-	-	-	-	-	-	2	-	2	2,521
45-49	-	-	-	-	-	-	-	-	-	2	2	4	1,251
50-54	-	-	-	-	-	-	-	-	-	1	3	4	1,765
55-59	-	-	-	-	-	-	-	-	1	4	12	17	731
60-64	-	-	-	-	_	-	-	-	-	4	13	17	886
65-69	-	-	-	-	_	-	-	_	-	17	29	46	996
70-74	-	-	-	-	_	-	-	-	1	12	8	21	1,689
75-79	-	-	_	-	_	-	-	1	-	4	1	6	4,206
80-84	-	_	_	_	_	_	_	_	-	3	1	4	2,381
85-89	-	_	_	_	_	_	_	_	-	-	-	-	-,
90-94	-	_	_	_	_	_	_	_	_	_	_	-	_
95-99	-	_	_	_	_	_	_	_	_	_	_	_	_
100 & Over	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	-	-	-	-	-	1	2	51	69	123	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,007	\$ 2,530	\$ 1,624	\$ 1,080		\$ 1,337

Exhibit C-5g Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 Safety Plan A

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Monthly Benefit
Under 35	-	-	-	-	-	-	-	-	2	3	-	5	\$ -
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	1	1	-	2	6,820
45-49	-	-	-	-	-	-	-	-	-	1	-	1	5,252
50-54	-	-	-	-	1	-	3	-	1	-	-	5	6,259
55-59	-	-	-	-	1	1	1	-	3	3	1	10	4,369
60-64	-	-	-	-	2	1	4	1	29	14	7	58	9,168
65-69	-	4	15	19	17	32	31	170	165	40	26	519	9,881
70-74	4	36	84	58	78	108	465	485	83	85	35	1,521	9,005
75-79	6	75	111	111	129	452	708	113	60	96	42	1,903	8,448
80-84	20	45	76	84	271	378	87	32	70	85	29	1,177	7,699
85-89	31	32	71	122	204	48	34	51	45	64	22	724	6,862
90-94	24	30	71	78	26	6	21	22	41	35	11	365	6,221
95-99	3	18	21	6	3	5	11	9	8	12	1	97	5,978
100 & Over	3	1	-	-	-	-	1	-	3	-	-	8	5,138
Total Count	91	241	449	478	732	1,031	1,366	883	511	439	174	6,395	
Avg Monthly Benefit	\$ 3,432	\$ 4,107	\$ 4,461	\$ 5,848	\$ 7,523	\$ 8,578	\$ 10,022	\$ 10,419	\$ 9,085	\$ 7,232	\$ 7,405		\$ 8,201

Exhibit C-5h Distribution of Retired Members by Age and Retirement Year as of June 30, 2021 Safety Plan B

	Retirement Year												
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Monthly Benefit
Under 35	-	-	-	-	-	-	5	3	2	13	5	28	\$ 1,574
35-39	-	-	-	-	-	-	-	-	4	33	10	47	4,191
40-44	-	-	-	-	-	-	-	3	20	52	18	93	4,164
45-49	-	-	-	-	-	-	18	33	34	65	38	188	4,334
50-54	-	-	-	-	7	40	79	67	80	184	138	595	5,481
55-59	-	-	-	2	50	107	112	96	140	888	622	2,017	9,041
60-64	-	-	4	31	79	99	100	113	605	1,128	137	2,296	9,218
65-69	-	-	12	30	63	59	80	253	645	232	25	1,399	8,479
70-74	-	-	6	19	21	25	59	187	107	37	5	466	7,244
75-79	-	-	3	-	8	15	33	25	14	9	1	108	4,926
80-84	-	-	-	1	1	2	3	2	1	1	1	12	4,603
85-89	-	-	-	1	1	1	-	-	1	1	-	5	2,549
90-94	-	-	1	-	1	-	1	1	1	-	-	5	1,129
95-99	-	-	-	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	26	84	231	348	490	783	1,654	2,643	1,000	7,259	
Avg Monthly Benefit	\$ -	\$ -	\$ 2,451	\$ 2,666	\$ 3,571	\$ 3,907	\$ 4,290	\$ 6,484	\$ 8,678	\$ 9,642	\$ 10,458		\$ 8,258

Exhibit C-5i Distribution of Retired Members and Beneficiaries by Age and Retirement Year as of June 30, 2021 Safety Plan C

	Retirement Year												Average Monthly
Age	Pre-1975	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24	Total Count	Benefit
Under 35	-	-	-	-	-	-	-	-	-	1	1	2	\$ 3,294
35-39	-	-	-	-	-	-	-	-	-	1	1	2	3,522
40-44	-	-	-	-	-	-	-	-	-	1	-	1	3,035
45-49	-	-	-	-	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-	3	3	6	1,925
60-64	-	-	-	-	-	-	-	-	-	-	1	1	2,035
65-69	-	-	-	-	-	-	-	-	-	-	1	1	2,125
70-74	-	-	-	-	-	-	-	-	1	1	-	2	21,561
75-79	-	-	-	-	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-	-	-	-	-
85-89	-	-	-	-	-	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Count	-	-	-	-	-	-	-	-	1	7	7	15	
Avg Monthly Benefit	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,749	\$ 5,307	\$ 2,799		\$ 5,033

Appendix D Member Contribution Rates

This section illustrates the member normal contribution rates and the normal plus cost-of-living contribution rates by entry age.

Exhibit D-1
Normal Member Contribution Rates

			General			Safety		
Entry Age	Plan A	Plan B	Plan C	Plan D	Plan G	Plan A	Plan B	Plan C
16	2.68%	5.36%	4.57%	4.57%	7.33%	4.17%	8.34%	11.11%
17	2.74%	5.48%	4.66%	4.66%	7.33%	4.17%	8.34%	11.11%
18	2.80%	5.59%	4.76%	4.76%	7.33%	4.17%	8.34%	11.11%
19	2.86%	5.71%	4.87%	4.87%	7.33%	4.25%	8.50%	11.11%
20	2.92%	5.83%	4.97%	4.97%	7.33%	4.34%	8.67%	11.11%
21	2.98%	5.95%	5.07%	5.07%	7.33%	4.42%	8.85%	11.11%
22	3.04%	6.08%	5.18%	5.18%	7.33%	4.51%	9.03%	11.11%
23	3.10%	6.21%	5.29%	5.29%	7.33%	4.61%	9.21%	11.11%
24	3.17%	6.34%	5.40%	5.40%	7.33%	4.70%	9.40%	11.11%
25	3.24%	6.47%	5.52%	5.52%	7.33%	4.74%	9.48%	11.11%
26	3.30%	6.61%	5.63%	5.63%	7.33%	4.78%	9.55%	11.11%
27	3.37%	6.75%	5.75%	5.75%	7.33%	4.87%	9.75%	11.11%
28	3.45%	6.89%	5.87%	5.87%	7.33%	4.97%	9.95%	11.11%
29	3.52%	7.04%	6.00%	6.00%	7.33%	5.08%	10.15%	11.11%
30	3.59%	7.19%	6.12%	6.12%	7.33%	5.14%	10.28%	11.11%
31	3.67%	7.34%	6.25%	6.25%	7.33%	5.20%	10.40%	11.11%
32	3.75%	7.50%	6.38%	6.38%	7.33%	5.31%	10.61%	11.11%
33	3.83%	7.66%	6.52%	6.52%	7.33%	5.41%	10.83%	11.11%
34	3.91%	7.82%	6.66%	6.66%	7.33%	5.52%	11.04%	11.11%
35	3.99%	7.98%	6.80%	6.80%	7.33%	5.63%	11.27%	11.11%
36	4.07%	8.14%	6.95%	6.95%	7.33%	5.75%	11.49%	11.11%
37	4.15%	8.30%	7.10%	7.10%	7.33%	5.86%	11.72%	11.11%
38	4.23%	8.47%	7.25%	7.25%	7.33%	5.98%	11.95%	11.11%
39	4.32%	8.63%	7.40%	7.40%	7.33%	6.09%	12.19%	11.11%
40	4.40%	8.80%	7.55%	7.55%	7.33%	6.21%	12.43%	11.11%
41	4.49%	8.97%	7.70%	7.70%	7.33%	6.34%	12.67%	11.11%
42	4.57%	9.15%	7.85%	7.85%	7.33%	6.45%	12.91%	11.11%
43	4.66%	9.32%	8.01%	8.01%	7.33%	6.56%	13.12%	11.11%
44	4.75%	9.49%	8.17%	8.17%	7.33%	6.65%	13.30%	11.11%
45	4.83%	9.66%	8.33%	8.33%	7.33%	6.70%	13.40%	11.11%
46	4.91%	9.83%	8.49%	8.49%	7.33%	6.70%	13.40%	11.11%
47	4.99%	9.97%	8.66%	8.66%	7.33%	6.70%	13.40%	11.11%
48	5.04%	10.09%	8.82%	8.82%	7.33%	6.70%	13.40%	11.11%
49	5.09%	10.18%	8.98%	8.98%	7.33%	6.70%	13.40%	11.11%
50	5.12%	10.23%	9.14%	9.14%	7.33%	6.70%	13.40%	11.11%
51	5.13%	10.25%	9.30%	9.30%	7.33%	6.70%	13.40%	11.11%
52	5.13%	10.25%	9.43%	9.43%	7.33%	6.70%	13.40%	11.11%
53	5.13%	10.25%	9.54%	9.54%	7.33%	6.70%	13.40%	11.11%
54	5.13%	10.25%	9.63%	9.63%	7.33%	6.70%	13.40%	11.11%
55	5.13%	10.25%	9.68%	9.68%	7.33%	6.70%	13.40%	11.11%
56	5.13%	10.25%	9.70%	9.70%	7.33%	6.70%	13.40%	11.11%
57	5.13%	10.25%	9.70%	9.70%	7.33%	6.70%	13.40%	11.11%
58	5.13%	10.25%	9.70%	9.70%	7.33%	6.70%	13.40%	11.11%
59	5.13%	10.25%	9.70%	9.70%	7.33%	6.70%	13.40%	11.11%
60	5.13%	10.25%	9.70%	9.70%	7.33%	6.70%	13.40%	11.11%

Exhibit D-2
Normal Plus Cost-of-Living Member Contribution Rates

			General			Safety		
Entry Age	Plan A	Plan B	Plan C	Plan D	Plan G	Plan A	Plan B	Plan C
16	4.94%	6.75%	5.80%	5.76%	9.08%	7.80%	11.09%	14.33%
17	5.05%	6.90%	5.91%	5.87%	9.08%	7.80%	11.09%	14.33%
18	5.16%	7.04%	6.04%	5.99%	9.08%	7.80%	11.09%	14.33%
19	5.28%	7.19%	6.18%	6.13%	9.08%	7.95%	11.31%	14.33%
20	5.39%	7.34%	6.30%	6.26%	9.08%	8.12%	11.53%	14.33%
21	5.50%	7.49%	6.43%	6.39%	9.08%	8.27%	11.77%	14.33%
22	5.61%	7.65%	6.57%	6.52%	9.08%	8.44%	12.01%	14.33%
23	5.72%	7.82%	6.71%	6.66%	9.08%	8.63%	12.25%	14.33%
24	5.85%	7.98%	6.85%	6.80%	9.08%	8.80%	12.50%	14.33%
25	5.98%	8.15%	7.00%	6.95%	9.08%	8.87%	12.61%	14.33%
26	6.09%	8.32%	7.14%	7.09%	9.08%	8.95%	12.70%	14.33%
27	6.22%	8.50%	7.29%	7.24%	9.08%	9.11%	12.97%	14.33%
28	6.36%	8.67%	7.44%	7.39%	9.08%	9.30%	13.24%	14.33%
29	6.49%	8.86%	7.61%	7.56%	9.08%	9.51%	13.50%	14.33%
30	6.62%	9.05%	7.76%	7.71%	9.08%	9.62%	13.68%	14.33%
31	6.77%	9.24%	7.93%	7.87%	9.08%	9.73%	13.84%	14.33%
32	6.92%	9.44%	8.09%	8.03%	9.08%	9.94%	14.11%	14.33%
33	7.06%	9.64%	8.27%	8.21%	9.08%	10.12%	14.41%	14.33%
34	7.21%	9.85%	8.45%	8.39%	9.08%	10.33%	14.69%	14.33%
35	7.36%	10.05%	8.62%	8.56%	9.08%	10.54%	14.99%	14.33%
36	7.51%	10.25%	8.81%	8.75%	9.08%	10.76%	15.29%	14.33%
37	7.66%	10.45%	9.00%	8.94%	9.08%	10.97%	15.59%	14.33%
38	7.80%	10.66%	9.19%	9.13%	9.08%	11.19%	15.90%	14.33%
39	7.97%	10.87%	9.38%	9.32%	9.08%	11.40%	16.22%	14.33%
40	8.12%	11.08%	9.57%	9.51%	9.08%	11.62%	16.54%	14.33%
41	8.28%	11.29%	9.76%	9.70%	9.08%	11.87%	16.85%	14.33%
42	8.43%	11.52%	9.95%	9.89%	9.08%	12.07%	17.17%	14.33%
43	8.60%	11.73%	10.16%	10.09%	9.08%	12.28%	17.45%	14.33%
44	8.76%	11.95%	10.36%	10.29%	9.08%	12.45%	17.69%	14.33%
45	8.91%	12.16%	10.56%	10.49%	9.08%	12.54%	17.83%	14.33%
46	9.06%	12.38%	10.77%	10.69%	9.08%	12.54%	17.83%	14.33%
47	9.20%	12.55%	10.98%	10.91%	9.08%	12.54%	17.83%	14.33%
48	9.30%	12.70%	11.18%	11.11%	9.08%	12.54%	17.83%	14.33%
49	9.39%	12.82%	11.39%	11.31%	9.08%	12.54%	17.83%	14.33%
50	9.44%	12.88%	11.59%	11.51%	9.08%	12.54%	17.83%	14.33%
51	9.46%	12.90%	11.79%	11.71%	9.08%	12.54%	17.83%	14.33%
52	9.46%	12.90%	11.96%	11.88%	9.08%	12.54%	17.83%	14.33%
53	9.46%	12.90%	12.10%	12.01%	9.08%	12.54%	17.83%	14.33%
54	9.46%	12.90%	12.21%	12.13%	9.08%	12.54%	17.83%	14.33%
55	9.46%	12.90%	12.28%	12.19%	9.08%	12.54%	17.83%	14.33%
56	9.46%	12.90%	12.30%	12.22%	9.08%	12.54%	17.83%	14.33%
57	9.46%	12.90%	12.30%	12.22%	9.08%	12.54%	17.83%	14.33%
58	9.46%	12.90%	12.30%	12.22%	9.08%	12.54%	17.83%	14.33%
59	9.46%	12.90%	12.30%	12.22%	9.08%	12.54%	17.83%	14.33%
60	9.46%	12.90%	12.30%	12.22%	9.08%	12.54%	17.83%	14.33%

Appendix E Historical Information

This section presents historical statistical information on LACERA's membership and the calculated contribution rates.

Exhibit E-1
Active Membership Data

General Members Safety Members Total Members

Ceneral members					outery members					Total Members									
Valuation			nnual			Average			nnual				erage	-		nnual			Average
Date			alary	Average	Average	Monthly			alary	Average	Average		onthly			alary	Average	Average	Monthly
(June 30)	Number	(in n	nillions)	Age	Service	Salary	Number	(in r	nillions)	Age	Service	S	alary	Number	(in n	nillions)	Age	Service	Salary
4000	05.700	•	0.007	447	40.0		10.017	•	705	00.0	40.0	•	5.540	70 700	•	0.500	440	40.0	A 0.070
1998	65,782		2,837	44.7	12.9	\$ 3,594	10,947	\$	725	39.9	13.8	\$	5,519	76,729	\$	3,562	44.0	13.0	\$ 3,870
1999	68,652	\$	3,105	44.6	12.7	\$ 3,769	11,024	\$	753	40.0	13.7	\$	5,696	79,676	\$	3,858	43.9	12.8	\$ 4,035
2000	71,940	\$	3,353	44.4	12.5	\$ 3,884	11,264	\$	790	39.8	13.8	\$	5,849	83,204	\$	4,143	43.8	12.6	\$ 4,150
2001	75,048	\$	3,608	44.5	12.3	\$ 4,006	12,021	\$	860	39.6	13.0	\$	5,967	87,069	\$	4,468	43.9	12.4	\$ 4,277
2002	77,062	\$	3,833	44.7	12.3	\$ 4,145	12,190	\$	894	39.6	13.8	\$	6,115	89,252	\$	4,727	44.0	12.5	\$ 4,414
2003	75,995	\$	3,954	45.2	12.7	\$ 4,336	11,765	\$	899	40.1	13.7	\$	6,370	87,760	\$	4,853	44.5	12.9	\$ 4,609
2004	74,826	\$	3,967	45.6	13.1	\$ 4,418	11,409	\$	885	40.6	14.7	\$	6,467	86,235	\$	4,852	44.9	13.3	\$ 4,689
2005	75,167	\$	4,046	45.8	13.2	\$ 4,486	11,217	\$	905	41.0	14.9	\$	6,722	86,384	\$	4,951	45.2	13.4	\$ 4,777
2006	77,167	\$	4,267	45.7	13.0	\$ 4,608	11,464	\$	969	41.2	15.0	\$	7,047	88,631	\$	5,236	45.1	13.3	\$ 4,924
2007	79,829	\$	4,673	45.7	12.8	\$ 4,878	12,267	\$	1,104	40.8	14.4	\$	7,499	92,096	\$	5,777	45.1	13.0	\$ 5,227
2008	81,664	\$	5,017	45.8	12.8	\$ 5,119	12,828	\$	1,187	40.5	13.7	\$	7,714	94,492	\$	6,204	45.1	12.9	\$ 5,471
2009	82,878	\$	5,348	46.1	13.1	\$ 5,377	12,910	\$	1,240	40.8	14.0	\$	8,002	95,788		6,588	45.4	13.2	\$ 5,731
2010	81,413	\$	5,318	46.6	13.6	\$ 5,444	12,997	\$	1,257	41.3	14.5	\$	8,062	94,410	\$	6,575	45.9	13.7	\$ 5,804
2011	80,145	\$	5,295	47.0	14.0	\$ 5,506	12,641	\$	1,240	41.9	15.1	\$	8,172	92,786	\$	6,535	46.3	14.2	\$ 5,869
2012	79,467	\$	5,272	47.3	14.4	\$ 5,528	12,485	\$	1,230	42.3	15.5	\$	8,209	91,952	\$	6,502	46.7	14.6	\$ 5,892
2013	79,006	\$	5,253	47.6	14.8	\$ 5,541	12,539	\$	1,235	42.3	15.7	\$	8,207	91,545	\$	6.488	46.9	14.9	\$ 5,906
2014	79,943	\$	5,488	47.6	14.9	\$ 5,720	12,523	\$	1,253	42.6	15.8	\$	8,337	92,466	\$	6,741	47.0	15.0	\$ 6,075
2015	81,228	\$	5,706	47.6	14.8	\$ 5,854	12,446	\$	1,300	42.8	16.0	\$	8,702	93,674	\$	7,006	46.9	15.0	\$ 6,233
2016	82,916	\$	5,950	47.4	14.6	\$ 5,980	12,528	φ	1,343	42.8	16.0	φ	8,931	95,444	φ	7,293	46.8	14.8	\$ 6,367
2017	84,513	\$	6,290	47.3	14.5	\$ 6,202	12,698	\$	1,388	42.5	15.6	\$	9,110	97,211	\$	7,678	46.7	14.6	\$ 6,582
2017	64,513	φ	0,290	47.3	14.5	\$ 0,202		Φ	1,300	42.5		φ	9,110	91,211	φ	7,076	40.7		φ 0,362
2018	85,703	\$	6,610	47.2	14.4	\$ 6,428	12,771	\$	1,452	42.2	15.3	\$	9,471	98,474	\$	8,062	46.6	14.5	\$ 6,822
2019	86,392	\$	6,816	47.3	14.4	\$ 6,574	12,794	\$	1,540	42.0	15.1	\$	10,032	99,186	\$	8,356	46.6	14.5	\$ 7,020
2020	86,930	\$	7,186	47.3	14.4	\$ 6,889	13,178	\$	1,591	41.4	14.4	\$	10,058	100,108	\$	8,777	46.5	14.4	\$ 7,306
2021	85,963	\$	7,438	47.5	14.6	\$ 7,210	13,138	\$	1,651	41.4	14.2	\$	10,471	99,101	\$	9,088	46.7	14.5	\$ 7,642

Exhibit E-2 Retired Membership Data

General Members Safety Members

Total Members

Constant members					curety members					Total moniporo							
			Average						Average		_				Average		erage onthly
Number	(in n	nillions)	Age	В	enefit	Number	(in n	nillions)	Age	В	enefit	Number	(in m	nillions)	Age	В	enefit
35,462	\$	692	71.1	\$	1,626	7,425	\$	267	62.5	\$	3,001	42,887	\$	959	69.6	\$	1,864
35,837	\$	725	71.4	\$	1,686	7,674	\$	291	63.1	\$	3,166	43,511	\$	1,016	70.0	\$	1,947
36,596	\$	780	71.4	\$	1,778	8,032	\$	324	63.1	\$	3,358	44,628	\$	1,104	69.9	\$	2,062
	\$	890	71.6	\$			\$	382	63.4	\$	3,828	45,396	\$	1,272	70.1	\$	2,336
37,618	\$	914	71.8	\$	2,025	8,624	\$	403	63.7	\$	3,892	46,242	\$	1,317	70.3	\$	2,374
38,283	\$	984	71.9	\$	2,142	8,949	\$	443	63.9	\$	4,128	47,232	\$	1,427	70.4	\$	2,518
39,097	\$	1,056	72.0	\$	2,250	9,235	\$	478	64.2	\$	4,318	48,332	\$	1,534	70.5	\$	2,645
40,251	\$	1,138	72.1	\$	2,355	9,518	\$	514	64.6	\$	4,504	49,769	\$	1,652	70.7	\$	2,766
41,309	\$	1,224	72.2	\$	2,469	9,683	\$	549	65.0	\$	4,728	50,992	\$	1,773	70.8	\$	2,898
41,584	\$	1,280	72.2	\$	2,565	9,808	\$	578	65.4	\$	4,914	51,392	\$	1,858	70.9	\$	3,013
42,298	\$	1,356	72.4	\$	2,671	10,052	\$	623	65.8	\$	5,167	52,350	\$	1,979	71.1	\$	3,150
42,825	\$	1,423	72.6	\$	2,768	10,244	\$	663	66.3	\$	5,394	53,069	\$	2,086	71.4	\$	3,275
43,752	\$	1,514	72.7	\$	2,883	10,444	\$	706	66.7	\$	5,638	54,196	\$	2,220	71.6	\$	3,414
44,726	\$	1,597	72.9	\$	2,976	10,645	\$	746	67.0	\$	5,836	55,371	\$	2,343	71.7	\$	3,526
45,899	\$	1,686	73.0	\$	3,061	10,871	\$	789	67.3	\$	6,049	56,770	\$	2,475	71.9	\$	3,633
46,939	\$	1,774	73.2	\$	3,149	11,147	\$	837	67.5	\$	6,261	58,086	\$	2,611	72.1	\$	3,746
47,867	\$	1,836	73.4	\$	3,196	11,362	\$	876	67.8	\$	6,427	59,229	\$	2,712	72.3	\$	3,816
48,958	\$	1,898	73.5	\$	3,231	11,648	\$	914	68.0	\$	6,541	60,606	\$	2,813	72.5	\$	3,867
50,034	\$	1,988	73.6	\$	3,311	11,880	\$	965	68.3	\$	6,766	61,914	\$	2,952	72.6	\$	3,974
51,083	\$	2,079	73.8	\$	3,391	12,241	\$	1,030	68.4	\$	7,012	63,324	\$	3,109	72.7	\$	4,091
52,292	\$	2,192	73.9	\$	3,493	12,588	\$	1,104	68.5	\$	7,308	64,880	\$	3,296	72.8	\$	4,233
53,560	\$	2,316	73.9	\$	3,603	12,947	\$	1,184	68.6	\$	7,620	66,507	\$	3,500	72.9	\$	4,385
54,693	\$	2,436	74.0	\$	3,712	13,319	\$	1,270	68.8	\$	7,946	68,012	\$	3,706	73.0	\$	4,541
55,828	\$	2,552	74.1	\$	3,809	13,669	\$	1,350	68.8	\$	8,228	69,497	\$	3,902	73.0	\$	4,679
	35,462 35,837 36,596 37,077 37,618 38,283 39,097 40,251 41,309 41,584 42,298 42,825 43,752 44,726 45,899 46,939 47,867 48,958 50,034 51,083 52,292 53,560 54,693	Number (in mode) 35,462 \$ 35,837 \$ 36,596 \$ 37,077 \$ 37,618 \$ 38,283 \$ 39,097 \$ 40,251 \$ 41,309 \$ 41,584 \$ 42,298 \$ 42,825 \$ 43,752 \$ 44,726 \$ 45,899 \$ 46,939 \$ 47,867 \$ 48,958 \$ 50,034 \$ 51,083 \$ 52,292 \$ 53,560 \$ 54,693 \$	35,462 \$ 692 35,837 \$ 725 36,596 \$ 780 37,077 \$ 890 37,618 \$ 914 38,283 \$ 984 39,097 \$ 1,056 40,251 \$ 1,138 41,309 \$ 1,224 41,584 \$ 1,280 42,298 \$ 1,356 42,825 \$ 1,423 43,752 \$ 1,514 44,726 \$ 1,597 45,899 \$ 1,686 46,939 \$ 1,774 47,867 \$ 1,836 48,958 \$ 1,898 50,034 \$ 1,988 51,083 \$ 2,079 52,292 \$ 2,192 53,560 \$ 2,316 54,693 \$ 2,436	Number Allowance (in millions) Average Age 35,462 \$ 692 71.1 35,837 \$ 725 71.4 36,596 \$ 780 71.4 37,077 \$ 890 71.6 37,618 \$ 914 71.8 38,283 \$ 984 71.9 39,097 \$ 1,056 72.0 40,251 \$ 1,138 72.1 41,309 \$ 1,224 72.2 41,584 \$ 1,280 72.2 42,298 \$ 1,356 72.4 42,298 \$ 1,356 72.4 42,298 \$ 1,514 72.7 44,726 \$ 1,597 72.9 45,899 \$ 1,686 73.0 46,939 \$ 1,774 73.2 47,867 \$ 1,836 73.4 48,958 \$ 1,898 73.5 50,034 \$ 1,988 73.6 51,083 \$ 2,079 73.8 52,292 \$ 2,192 73.9 53,560 \$ 2,316<	Number Allowance (in millions) Average Age Mode 35,462 \$ 692 71.1 \$ 35,837 \$ 725 71.4 \$ 36,596 \$ 780 71.4 \$ 37,077 \$ 890 71.6 \$ 37,618 \$ 914 71.8 \$ 38,283 \$ 984 71.9 \$ 39,097 \$ 1,056 72.0 \$ 40,251 \$ 1,138 72.1 \$ 41,309 \$ 1,224 72.2 \$ 41,584 \$ 1,280 72.2 \$ 42,298 \$ 1,356 72.4 \$ 42,825 \$ 1,423 72.6 \$ 43,752 \$ 1,514 72.7 \$ 44,726 \$ 1,597 72.9 \$ 44,726 \$ 1,597 72.9 \$ 44,899 \$ 1,686 73.0 \$ 73.4 \$ 48,958 \$ 1,836 73.4 \$ 54,938 \$ 73.5 \$ 50,034 \$ 1,988 73.5 \$ 50,034 \$ 1,988 73.6 \$ 51,083 \$ 2,079 73.8 \$ 50,034 \$ 1,988 73.6 \$ 52,292 \$ 2,192 73.9 \$ 53,560 \$ 2,316 73.9 \$ 54,693 \$ 2,436 74.0 \$ 54,693 \$ 2,436 74.0 \$ 5	Number Allowance (in millions) Average Age Monthly Benefit 35,462 \$ 692 71.1 \$ 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1,597 72.9 <	Number Allowance (in millions) Average Age Monthly Benefit Mumber (in relations) 35,462 \$ 692 71.1 \$ 1,626 7,425 \$ 35,837 \$ 725 71.4 \$ 1,686 7,674 \$ 36,596 \$ 780 71.4 \$ 1,778 8,032 \$ 37,077 \$ 890 71.6 \$ 2,001 8,319 \$ 37,618 \$ 914 71.8 \$ 2,025 8,624 \$ \$ 39,097 \$ 1,056 72.0 \$ 2,250 9,235 \$ \$ 40,251 \$ 1,138 72.1 \$ 2,355 9,518 \$ 9,518 \$ 9,518 \$ 41,309 \$ 1,224 72.2 \$ 2,469 9,683 \$ 9,683 \$ 3,41,584 \$ 1,280 72.2 \$ 2,565 9,808 \$ 3,41,584 \$ 1,280 72.2 \$ 2,565 9,808 \$ 3,560 \$ 3,752 \$ 3,449 \$ 3,752 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,493 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494 \$ 3,494	Number Allowance (in millions) Age Monthly Benefit Number (in millions) Allowance (in millions) 35,462 \$ 692 71.1 \$ 1,626 7,425 \$ 267 35,837 \$ 725 71.4 \$ 1,686 7,674 \$ 291 36,596 \$ 780 71.4 \$ 1,778 8,032 \$ 324 37,077 \$ 890 71.6 \$ 2,001 8,319 \$ 382 37,618 \$ 914 71.8 \$ 2,025 8,624 \$ 403 38,283 \$ 984 71.9 \$ 2,142 8,949 \$ 443 39,097 \$ 1,056 72.0 \$ 2,250 9,235 \$ 478 40,251 \$ 1,138 72.1 \$ 2,355 9,518 \$ 514 41,309 \$ 1,224 72.2 \$ 2,469 9,683 \$ 549 41,584 \$ 1,280 72.2 \$ 2,565 9,808 \$ 578 42,298 \$ 1,356 72.4 \$ 2,671 10,052 \$ 623 42,825 \$ 1,423 <	Number Allowance (in millions) Age Monthly Benefit Number (in millions) Allowance (in millions) Average Age 35,462 \$ 692 71.1 \$ 1,626 7,425 \$ 267 62.5 35,837 725 71.4 \$ 1,686 7,674 \$ 291 63.1 36,596 \$ 780 71.4 \$ 1,778 8,032 \$ 324 63.1 37,077 \$ 890 71.6 \$ 2,001 8,319 \$ 382 63.4 37,618 \$ 914 71.8 \$ 2,025 8,624 \$ 403 63.7 38,283 \$ 984 71.9 \$ 2,142 8,949 \$ 443 63.9 39,097 \$ 1,056 72.0 \$ 2,250 9,235 \$ 478 64.2 40,251 \$ 1,138 72.1 \$ 2,355 9,518 \$ 514 64.6 41,309 \$ 1,224 72.2 \$ 2,469 9,683 \$ 549 65.0 41,584 \$ 1,356 72.4 \$ 2,671 10,052 \$ 623 6	Number Allowance (in millions) Average Age Monthly Benefit Number (in millions) Allowance (in millions) Average Age Mode Benefit 35,462 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Exhibit E-3 Contribution Rates

General Plans						S	afety Plans	ty Plans				Total All Plans			
Valuation					Total					Total					Total
Date	Calculated	Member	Net Employer	UAAL	Employer	Calculated	Member	Net Employer	UAAL	Employer	Calculated	Member	Net Employer	UAAL	Employer
(June 30)	Normal Cost	Contributions	Normal Cost	Rate	Contribution	Normal Cost	Contributions	Normal Cost	Rate	Contribution	Normal Cost	Contributions	Normal Cost	Rate	Contribution
1998	10.27%	3.06%	7.21%	0.00%	7.21%	25.00%	8.70%	16.30%	0.00%	16.30%	13.27%	4.21%	9.06%	0.00%	9.06%
1999	10.27%	3.20%	7.78%	0.00%		25.41%	9.12%	16.29%	0.00%		13.81%	4.21%	9.45%	0.00%	9.45%
2000	10.91%	3.33%		0.00%		25.22%	9.44%	15.78%	0.00%		13.66%	4.51%	9.15%	0.00%	9.15%
2001	11.27%	3.45%	7.82%	0.00%		25.47%	9.27%	16.20%	0.00%		14.01%	4.57%		0.00%	9.44%
2002	12.04%	3.53%		0.00%		25.92%	9.37%	16.55%	0.00%		14.66%	4.63%	10.03%	0.00%	10.24%
2002	12.0470	3.3370	0.5170	0.2170	0.7270	25.5270	3.37 70	10.5570	0.2170	10.7070	14.0070	4.0570	10.0370	0.2170	10.2470
2003	12.25%	3.72%	8.53%	4.66%	13.19%	25.89%	9.55%	16.34%	4.66%	21.00%	14.80%	4.81%	9.99%	4.66%	14.65%
2004	12.20%	3.82%	8.38%	6.41%	14.79%	24.61%	9.61%	15.00%	6.41%	21.41%	14.48%	4.88%	9.60%	6.41%	16.01%
2005	12.22%	3.91%	8.31%	5.33%		24.69%	9.68%	15.01%	5.33%		14.50%	4.97%	9.53%	5.33%	14.86%
2006	12.22%	4.07%	8.15%	3.49%		24.70%	9.70%	15.00%	3.49%		14.54%	5.12%	9.42%	3.49%	12.91%
2007	13.15%	4.38%	8.77%	2.24%	11.01%	26.04%	10.18%	15.86%	2.24%	18.10%	15.67%	5.51%	10.16%	2.24%	12.40%
2008	13.18%	4.47%	8.71%	1.99%	10.70%	26.01%	10.22%	15.79%	1.99%	17.78%	15.68%	5.59%	10.09%	1.99%	12.08%
2009	13.29%	4.57%	8.72%	4.12%	12.84%	26.08%	10.21%	15.87%	4.12%	19.99%	15.75%	5.65%	10.10%	4.12%	14.22%
2010	13.32%	4.68%	8.64%	6.47%	15.11%	25.00%	10.19%	14.81%	6.47%	21.28%	15.59%	5.75%	9.84%	6.47%	16.31%
2011	13.36%	4.91%	8.45%	7.89%	16.34%	25.09%	10.50%	14.59%	7.89%	22.48%	15.65%	6.00%	9.65%	7.89%	17.54%
2012	13.50%	5.01%	8.49%	10.09%	18.58%	25.42%	10.52%	14.90%	10.09%	24.99%	15.81%	6.08%	9.73%	10.09%	19.82%
2013	13.25%	5.01%	8.24%	11.90%	20.14%	24.67%	10.26%	14.41%	11.90%	26.31%	15.47%	6.03%	9.44%	11.90%	21.34%
2014	13.14%	5.09%	8.05%	10.04%	18.09%	24.71%	10.23%	14.48%	10.04%	24.52%	15.37%	6.08%	9.29%	10.04%	19.33%
2015	13.28%	5.22%	8.06%	8.49%	16.55%	24.71%	10.26%	14.45%	8.49%	22.94%	15.46%	6.18%	9.28%	8.49%	17.77%
2016	14.51%	5.72%	8.79%	9.73%	18.52%	25.54%	10.57%	14.97%	9.73%	24.70%	16.62%	6.65%	9.97%	9.73%	19.70%
2017	14.62%	5.87%	8.75%	10.10%	18.85%	25.69%	10.56%	15.13%	10.10%	25.23%	16.70%	6.76%	9.94%	10.10%	20.04%
2018	14.77%	6.04%	8.73%	10.99%	19.72%	25.70%	10.59%	15.11%	10.99%	26.10%	16.80%	6.88%	9.92%	10.99%	20.91%
2019	16.24%	6.74%		11.73%		28.58%	11.78%	16.80%	11.73%		18.54%	7.68%	10.86%	11.73%	22.59%
2020	16.31%	6.86%	9.45%	13.75%		28.95%	11.88%	17.07%	13.75%		18.69%	7.80%	10.89%	13.75%	24.64%
2021	16.35%	6.94%	9.41%	13.58%		29.09%	11.88%	17.07%	13.58%		18.75%	7.87%	10.88%	13.58%	24.46%
	. 5.5070	3.3470	370	. 5.5570	0070	20.0070			. 5.5570	30070			. 5.5576	.0.0070	

Exhibit E-4
Funded Status History

			Market Value Bas	sis		Actuarial Value Ba	asis				
Valuation Year	Actuarial Accrued Liability (AAL)	Market Value of Assets (MVA) ¹	Unfunded AAL (UAAL)/Surplus MVA Basis	Funded Ratio MVA Basis	Actuarial Value of Assets (AVA) ¹	Unfunded AAL (UAAL)/Surplus AVA Basis	Funded Ratio AVA Basis	Annual Total Payroll	Asset Smoothing Ratio (AVA / MVA)	Asset Volatility Ratio (MVA / Payroll)	Liability Volatility Ratio (AAL / Payroll)
1996 ²	17,300	18,600	1,300	107.5%	17,700	400	102.3%	3,356	95.2%	5.5	5.2
1997 ²	19,300	21,100	1,800	109.3%	19,600	300	101.6%	3,373	92.9%	6.3	5.7
1998	20,960	22,332	1,372	106.5%	20,851	(109)	99.5%	3,562	93.4%	6.3	5.9
1999	22,785	24,382	1,597	107.0%	23,536	751 [°]	103.3%	3,858	96.5%	6.3	5.9
2000	24,721	27,257	2,536	110.3%	25,427	706	102.9%	4,143	93.3%	6.6	6.0
2001	26,490	23,916	(2,574)	90.3%	26,490	-	100.0%	4,469	110.8%	5.4	5.9
2002	28,437	24,085	(4,352)	84.7%	28,262	(175)	99.4%	4,730	117.3%	5.1	6.0
2003	30,474	24,616	(5,858)	80.8%	26,564	(3,910)	87.2%	4,934	107.9%	5.0	6.2
2004	32,700	28,094	(4,606)	85.9%	27,089	(5,611)	82.8%	4,942	96.4%	5.7	6.6
2005	34,375	30,904	(3,471)	89.9%	29,497	(4,878)	85.8%	5,051	95.4%	6.1	6.8
2006	36,259	34,256	(2,003)	94.5%	32,820	(3,439)	90.5%	5,333	95.8%	6.4	6.8
2007	39,503	40,073	570	101.4%	37,042	(2,461)	93.8%	5,886	92.4%	6.8	6.7
2008	41,975	37,834	(4,141)	90.1%	39,662	(2,313)	94.5%	6,257	104.8%	6.0	6.7
2009	44,469	29,723	(14,746)	66.8%	39,542	(4,927)	88.9%	6,673	133.0%	4.5	6.7
2010	46,646	32,629	(14,017)	69.9%	38,839	(7,807)	83.3%	6,739	119.0%	4.8	6.9
2011	48,599	38,587	(10,012)	79.4%	39,194	(9,405)	80.6%	6,705	101.6%	5.8	7.2
2012	50,809	37,453	(13,356)	73.7%	39,039	(11,770)	76.8%	6,675	104.2%	5.6	7.6
2013	53,247	41,334	(11,913)	77.6%	39,932	(13,315)	75.0%	6,656	96.6%	6.2	8.0
2014	54,942	47,223	(7,719)	86.0%	43,654	(11,288)	79.5%	6,815	92.4%	6.9	8.1
2015	56,819	48,308	(8,511)	85.0%	47,328	(9,491)	83.3%	7,078	98.0%	6.8	8.0
2016	62,199	47,347	(14,852)	76.1%	49,358	(12,841)	79.4%	7,390	104.2%	6.4	8.4
2017	65,311	52,217	(13,094)	80.0%	52,166	(13,145)	79.9%	7,749	99.9%	6.7	8.4
2018	68,527	55,737	(12,790)	81.3%	55,233	(13,294)	80.6%	8,079	99.1%	6.9	8.5
2019	74,635	57,712	(16,923)	77.3%	57,617	(17,018)	77.2%	8,423	99.8%	6.9	8.9
2020	78,275	57,925	(20,350)	74.0%	59,763	(18,512)	76.3%	8,819	103.2%	6.6	8.9
2021	81,898	72,282	(9,616)	88.3%	64,909	(16,989)	79.3%	9,080	89.8%	8.0	9.0

^{1.} Asset values exclude non-valuation reserves

^{2.} Only rounded values are available.

Exhibit E-5
Reconciliation of Changes in Unfunded Actuarial Accrued Liability or Surplus

Valuation Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Prior Year UAAL	9,405	11,770	13,315	11,288	9,491	12,841	13,145	13,294	17,018	18,512
Normal Cost	1,237	1,430	1,163	1,068	1,118	1,246	1,243	1,352	1,553	1,634
Contributions	(1,646)	(1,455)	(1,824)	(1,936)	(1,902)	(1,880)	(2,116)	(2,303)	(2,459)	(2,774)
Interest	724	895	999	814	682	954	968	976	1,212	1,311
Changes in Assumptions/Methodology	457	511	-	-	2,922	-	-	2,528	-	-
Changes in Benefit Provisions	-	-	-	-	-	-	-	-	-	-
Expected Current Year UAAL	10,177	13,151	13,653	11,234	12,311	13,161	13,240	15,847	17,324	18,683
Actual Current Year UAAL	11,770	13,315	11,288	9,491	12,841	13,145	13,294	17,018	18,512	16,989
Total (Gain)/Loss on UAAL	1,593	164	(2,365)	(1,743)	530	(16)	54	1,171	1,188	(1,694)
Asset (Gains)/Losses	2,337	893	(1,664)	(1,263)	496	(421)	(411)	477	701	(2,039)
Salary Increases	(629)	(563)	(291)	79	162	277	223	486	388	484
All Other Actuarial (Gains)/Losses	(115)	(166)	(410)	(559)	(128)	128	242	208	99	(139)

Exhibit E-6
Reconciliation of Changes in Calculated Employer Contribution Rate

Valuation Year	Prior Year Contribution Rate	Changes in Existing Amortization Bases	Assumption/ Method Changes	Salary/Payroll Variations	Plan Amendments	Asset (Gains)/Losses	Demographic/Other (Gains)/Losses	Current Year Contribution Rate
2004	14.65%	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	16.01%
2005	16.01%	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	14.86%
2006	14.86%	-0.29%	0.00%	0.02%	0.00%	-1.82%	0.14%	12.91%
2007	12.91%	-0.28%	1.34%	0.61%	0.00%	-2.14%	-0.04%	12.40%
2008	12.40%	-0.17%	0.00%	0.21%	0.00%	-0.24%	-0.12%	12.08%
2009	12.08%	-0.04%	-1.76%	0.21%	0.00%	3.91%	-0.18%	14.22%
2010	14.22%	0.00%	-0.27%	-0.10%	0.00%	2.29%	0.17%	16.31%
2011	16.31%	0.00%	0.25%	-0.14%	0.00%	1.39%	-0.27%	17.54%
2012	17.54%	0.00%	0.54%	-0.11%	0.00%	1.92%	-0.07%	19.82%
2013	19.82%	0.00%	0.82%	-0.01%	0.00%	0.74%	-0.03%	21.34%
2014	21.34%	0.00%	0.00%	-0.15%	0.00%	-1.43%	-0.43%	19.33%
2015	19.33%	0.00%	0.00%	0.04%	0.00%	-1.04%	-0.56%	17.77%
2016	17.77%	0.00%	2.87%	0.20%	0.00%	0.39%	-0.02%	21.21%
2017	21.21%	0.00%	0.00%	0.05%	0.00%	-0.32%	0.06%	21.00%
2018	21.00%	0.00%	0.00%	0.04%	0.00%	-0.30%	0.17%	20.91%
2019	20.91%	0.00%	1.10%	0.20%	0.00%	0.42%	-0.04%	22.59%
2020	22.59%	0.00%	1.09%	0.04%	0.00%	0.58%	0.34%	24.64%
2021	24.64%	0.00%	1.10%	0.39%	0.00%	-1.69%	0.02%	24.46%

^{1.} Data not available.

Exhibit E-7 Funding Policy History

	Description of changes, if any	Effective Date	Impact on Contribution Rate	Impact on Funded Ratio	Rationale
2009	Changed from 3-year to 5-year asset smoothing. Included STAR reserve as a valuation asset. Adopted 30-year layered amortization period.	June 30, 2009	-1.68% ¹	4.40%	See June 30, 2009 valuation report.
2010	Included STAR reserve as a valuation asset.	June 30, 2010	-0.52% ¹	1.40%	See June 30, 2010 valuation report.
2011	Included STAR reserve as a valuation asset.	June 30, 2011	-0.52% ¹	1.20%	See June 30, 2011 valuation report.
2012	Included STAR reserve as a valuation asset for 2012 and future valuations (adopted February 2013).	June 30, 2012	-0.53% ¹	1.20%	See June 30, 2012 valuation report.
2019	Adopted 20-year layered amortization period for new layers. Existing layers are set to be no greater than 22 years, so they are fully amortized no later than 2042.	June 30, 2019	0.30%	0.00%	See June 30, 2019 valuation report.

^{1.} Note that savings due to inclusion of STAR reserve as valuation asset are not cumulative from year to year.

Exhibit E-8 History of Changes in Economic Assumptions

Valuation Year	Price Inflation	Wage Inflation	Real Wage Inflation ¹	Investment Return Assumption	Real Investment Return ²	Effective Date	Change in Contribution Rate	Change in Funded Ratio
2004	3.50%	3.75%	0.25%	7.75%	4.25%	July 1, 2004	1.65%	N/A ³
2007	3.50%	4.00%	0.50%	7.75%	4.25%	July 1, 2007	0.66%	-1.3%
2011	3.45%	3.95%	0.50%	7.70%	4.25%	July 1, 2011	0.25%	-0.3%
2012	3.35%	3.85%	0.50%	7.60%	4.25%	July 1, 2012	0.54%	-0.7%
2013	3.00%	3.50%	0.50%	7.50%	4.50%	July 1, 2013	0.37%	-0.1%
2016	2.75%	3.25%	0.50%	7.25%	4.50%	July 1, 2016	1.14%	-1.4%
2019	2.75%	3.25%	0.50%	7.00%	4.25%	July 1, 2019	2.20%	-2.3%

^{1.} Excess of assumed wage inflation over price inflation.

^{2.} Excess of assumed investment return over price inflation.

^{3.} Information not available.

Exhibit E-9 History of Changes in Demographic and Other Non-Economic Assumptions

	Demographic Assumption Revisions	Effective Date	Change in Contribution Rate	Change in Funded Ratio	Rationale
2004	Mortality, merit salary scale, retirement, termination, probability of refund, probability of eligible survivor revised.	July 1, 2004	-0.63%	N/A ¹	Refer to the 2004 Investigation of Experience Report.
2007	Mortality, retirement, termination, probability of refund, merit salary scale for Safety members revised.	July 1, 2007	0.68%	N/A ¹	Refer to the 2007 Investigation of Experience Report.
2010	Mortality, retirement, termination, probability of refund, assumed benefit commencement age revised.	July 1, 2010	-0.27%	-0.1%	Refer to the 2010 Investigation of Experience Report.
2013	Mortality, retirement, termination, probability of refund, merit salary scale for Safety members, probability of eligible survivor, assumption for beneficiary age, reciprocity assumption revised.	July 1, 2013	0.45%	-0.6%	Refer to the 2013 Investigation of Experience Report.
2016	Mortality, retirement, termination, probability of eligible survivor, assumed benefit commencement age, reciprocity assumption revised.	July 1, 2016	1.73%	-2.5%	Refer to the 2016 Investigation of Experience Report.
2019	Mortality, retirement, termination, probability of refund, merit salary scale, assumed benefit commencement age.	July 1, 2019	0.80%	-0.4%	2019 Investigation of Experience.

^{1.} Information not available.

Appendix F Glossary

The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to LACERA and include terms used exclusively by LACERA. Defined terms are capitalized throughout this Appendix.

Accrued Benefit

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

Actuarial Accrued Liability

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 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; and other relevant items.

Actuarial Gain (Loss)

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

Actuarial Present Value

The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.

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, as used by the actuary for the purpose of an Actuarial Valuation.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

Amortization Payment

That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

Contingency Reserve

Reserves accumulated for future earning deficiencies, investment losses, and other contingencies. Additions include investment income and other revenues; deductions include investment expense, administrative expense, interest allocated to other reserves, funding the STAR Reserve, and distributions to the Contribution Credit Reserve. Amounts are allocated to the Contingency Reserve to the extent there are positive recognized earnings to allocate. The California Government Code (Sections 31592 and 31592.2) requires the Contingency Reserve to be set at a minimum of 1.0% of the market value of total assets.

County Contribution Credit Reserve

The accumulated balance of the County's proportionate share of excess earnings as stipulated in the Retirement System Funding Agreement between LACERA and the County. Additions include distributions from excess earning during the fiscal years ending 1994 through 1998 and related earnings. Deductions include payments, as the County authorizes, for future employer contributions due LACERA and for funding a portion of the Retiree Healthcare Program under the provisions of Internal Revenue Code 401(h).

Employer Reserve

The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.

Entry Age Actuarial Cost Method

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. 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 Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

Funded Ratio

A measurement of the funded status of the Plan. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.

Funding Goal

The Funding Goal is the funded status the Board of Investments would like LACERA to achieve. The main goal is to provide benefit security for its members as well as to achieve and maintain stable employer contributions that are as low as possible. A Funded Ratio equal to 100% is the Funding Goal.

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 reamortized 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.

Member Reserve

The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.

Non-Valuation Reserves

Reserves excluded from the calculation of contribution rates, including the Contingency Reserve, the County Contribution Credit Reserve, and any other reserves specifically excluded by the Board of Investments.

Normal Cost

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

Plan Year

A 12-month period beginning July 1 and ending June 30.

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.

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.

Surplus Funding

The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability. Standard actuarial terminology defines this as the "Funding Excess." LACERA uses the term "Surplus Funding."

Unfunded Actuarial Accrued Liability

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.

Valuation Reserves

All reserves excluding the Non-Valuation Reserves.

LACERA

June 30, 2021 Actuarial Valuation of Retirement Benefits

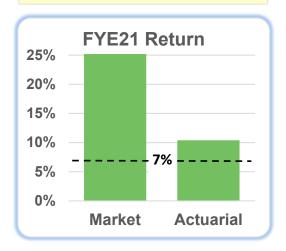
Nick Collier and Craig Glyde

DECEMBER 8, 2021

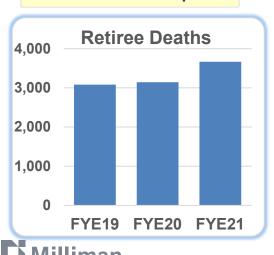


Overview

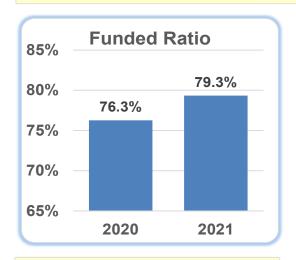
Strong 2021 return



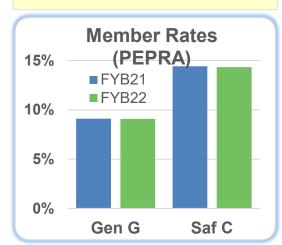
Pandemic Impact



Positive impact of strong return is moderated by asset smoothing and final phase-in of 2019 assumption changes

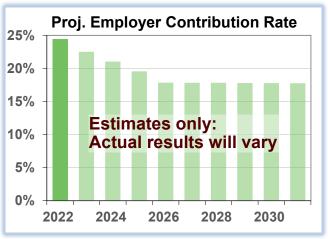


Stable member rates

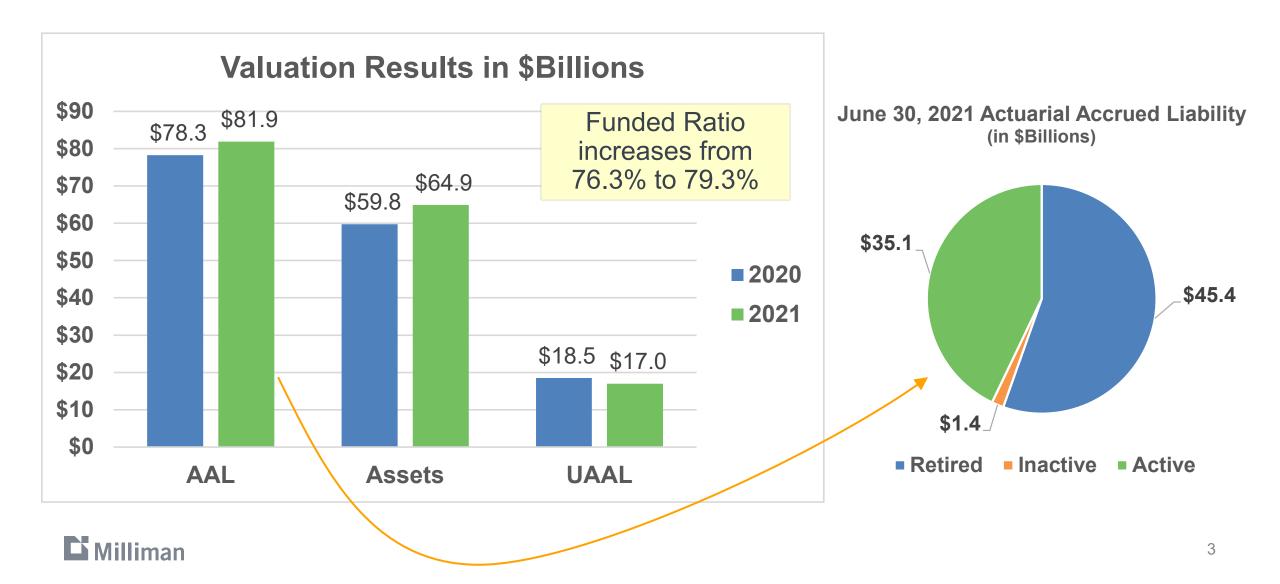




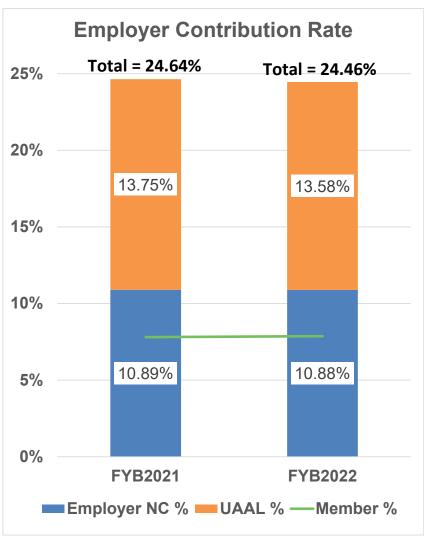
Future employer rate decreases?



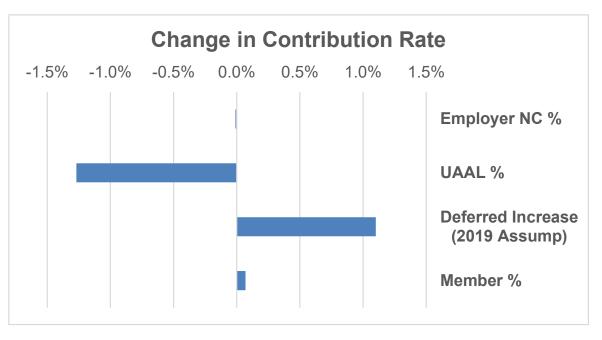
Summary of Results Assets & Liabilities



Summary of Results Employer Contribution Rates



- 24.46% is a weighted average of all plans; decrease from current rate of 24.64%
- For next 20 years, employer rate is expected to be 0.23% of pay higher than it would have been without the phase-in
- Employer contribution rate would be 0.49% higher if the STAR Reserve was excluded



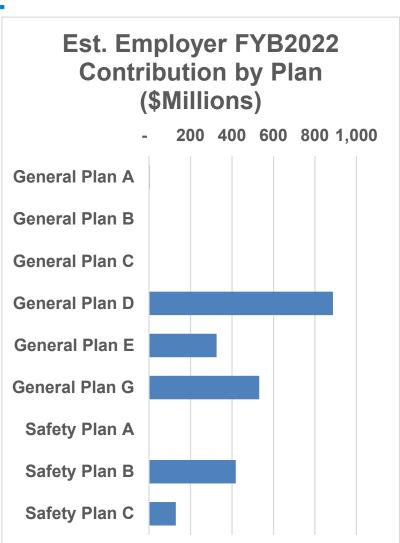


Summary of Results Employer Contribution Rates beginning July 1, 2022

	Employer Normal Cost Rate	UAAL Rate	Total Employer Contribution Rate	Change Since Last Year
General Plan A	17.01%	13.58%	30.59%	-0.29%
General Plan B	10.55%	13.58%	24.13%	-0.03%
General Plan C	7.65%	13.58%	21.23%	-0.16%
General Plan D	9.17%	13.58%	22.75%	-0.19%
General Plan E	10.72%	13.58%	24.30%	-0.19%
General Plan G	9.08%	13.58%	22.66%	-0.19%
Safety Plan A	26.35%	13.58%	39.93%	-0.19%
Safety Plan B	18.22%	13.58%	31.80%	0.20%
Safety Plan C	14.33%	13.58%	27.91%	-0.26%

Note: All rates as are shown as a percentage of payroll.





Summary of Results Member Contribution Rates beginning July 1, 2022

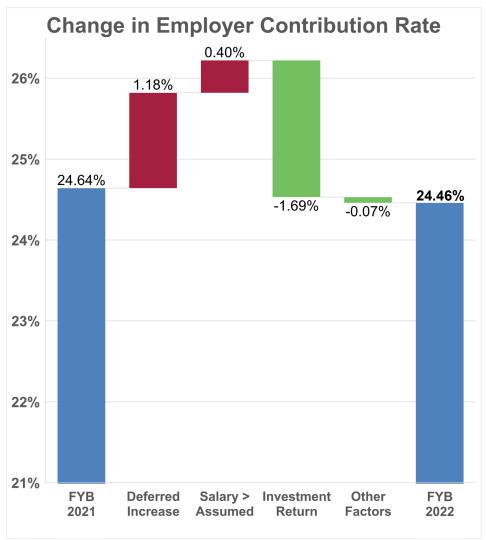
- General Plan G and Safety Plan C (PEPRA plans) members contribute one-half of plan's normal cost rate
 - Small decreases calculated for next year

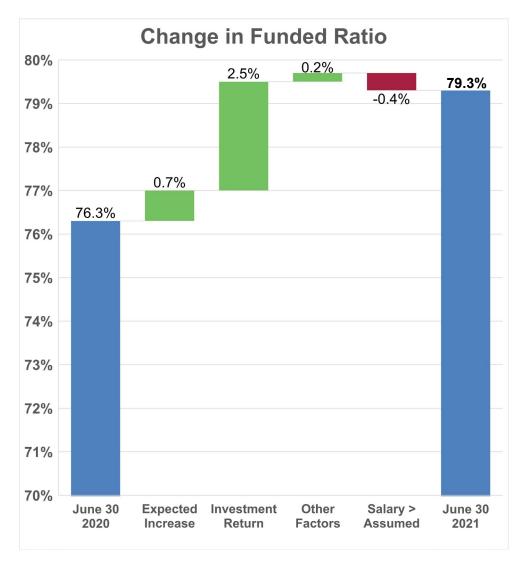
	General	Safety
	Plan G	Plan C
All Ages: Recommended	9.08%	14.33%
All Ages: Current	9.10%	14.42%
Ratio (Recommended / Current)	99.8%	99.4%

- Member contribution rates for other contributory plans (Legacy plans General A, B, C & D and Safety A & B) are determined by formula
 - Only change when certain assumptions change
 - No changes to these rates since no assumption changes in 2021
 - Next triennial Experience Study will be conducted as of June 20, 2022



Summary of Results Analysis of changes since last year







Looking Ahead

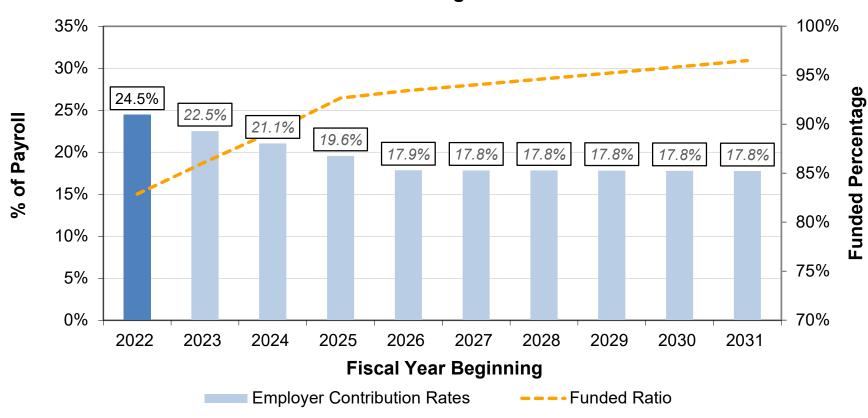
- Projection: 1 Year
 - Decrease in employer contribution rate next valuation projected to be about 2% of pay if LACERA earns 7.00% for FYE 2022
 - Projected decrease is primarily due to additional year of recognition of FYE2021 investment gain
 - Actual rate will be dependent on other factors; could see liability losses due to recent inflation
- Projection: 10 Years
 - Future employer contribution rates and funded ratios will be dependent on investment returns and other factors
 - Baseline projection shows projection with:
 - All assumptions met, no changes in assumptions

Projections based on June 30, 2021 valuation and do not reflect actual investment returns and other changes since that date.



Looking Ahead – Baseline Scenario: All Assumptions Met

Projected Employer Contribution Rate and Funded Percentage



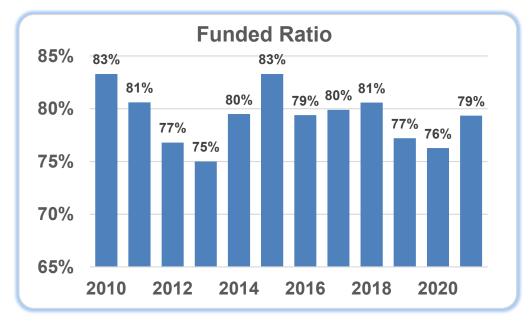
Funded Ratio projected to reach 100% at June 30, 2036, if future experience were to match assumptions

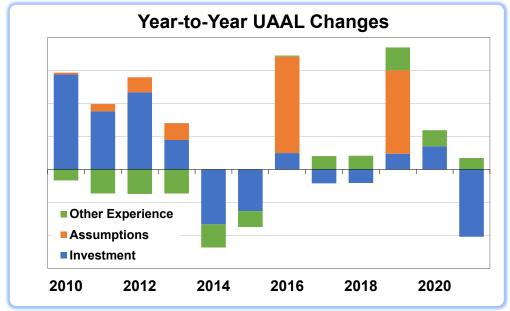
Projections assume that all actuarial assumptions are met after June 30, 2021 and reflect the scheduled recognition of asset gains and losses currently being deferred. **Actual results will vary**.



Future Variance – Risk Factors

- Risk Assessment report June 2021
 - Section 9 has summary of key risks
- Risk factors Increasing as LACERA continues to mature
 - Investment return
 - Salary increases
 - Payroll
 - Longevity and other demographic risk
 - Inflation → COLA

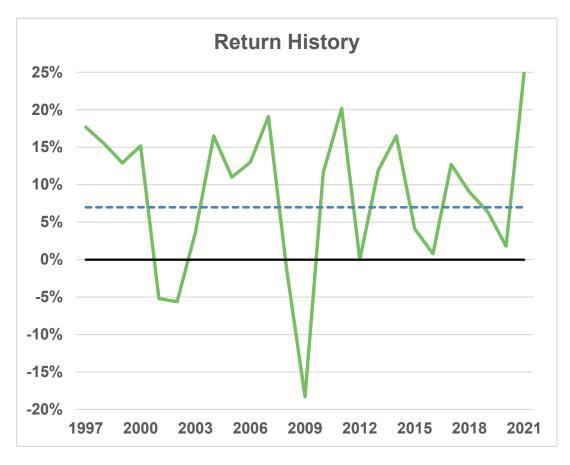






Looking Ahead – Reversion to the Mean?

- Prior analysis showed long-term return expectation of about 7%
 - If first year return is significantly greater than 7%, does that temper future expectations?
- Hypothetical reversion-to-the-mean scenario
 - Expected 10-year return was 7% and 1-year return is 25.2%
 - → Assume return of 5.15% for next 9 years to approximate 10-year return of 7%
- Projection results (next slide)
 - After initial dip, employer contribution rate is projected to return to current level of about 25% of pay
 - Funded Ratio is projected to increase to about 85%, but not as high as under baseline scenario

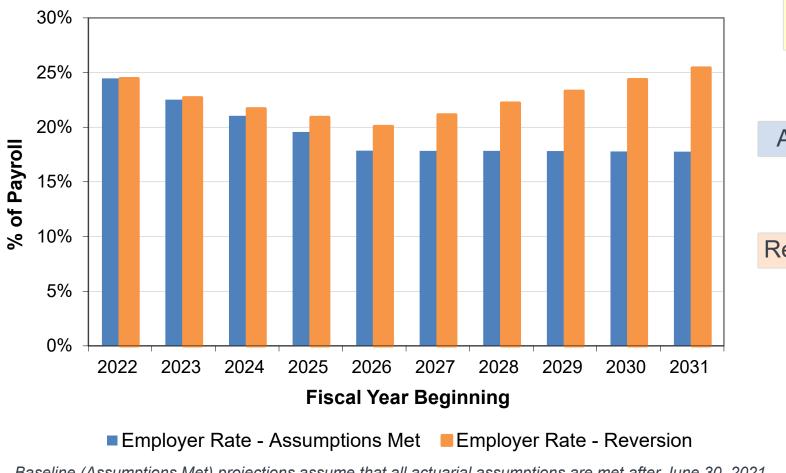


"What goes up must come down Spinning Wheel got to go 'round" - Blood, Sweat and Tears



Looking Ahead – Alternative Scenario: Reversion to Mean





Estimated Funded Ratio in 2031

Assumptions Met = 97%

Reversion Scenario = 85%

Baseline (Assumptions Met) projections assume that all actuarial assumptions are met after June 30, 2021. Reversion scenario assume 5.15% returns over next 9 years. **Actual results will vary**.



Recommendations For fiscal year beginning July 1, 2022

- Adopt new employer contribution rates as shown on slide 5, and in Exhibit 11 (page 32) of Milliman's June 30, 2021 valuation report
 - Weighted average employer contribution rate = 24.46% of pay
- Adopt new member contributions rates as follows (and shown on slide 6):
 - General Plan G = 9.08%
 - Safety Plan C = 14.33%
 - No changes to legacy plans



Questions?





Statement of Reliance and Limitation

This presentation is intended as a high-level discussion of the results of the June 30, 2021 actuarial valuation. It is based on the data, methods, assumptions and plan provisions described in our actuarial valuation report dated November 22, 2021. 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.

The results of the actuarial valuation are based on one set of reasonable assumptions. However, it is almost certain that future experience will not exactly match the assumptions. As an example, investments may perform better or worse than assumed in any single year and over any longer time horizon. It is therefore important to consider the potential impacts of these potential differences when making decisions that may affect the future financial health of the Plan, or the Plan's participants. Please refer to the Risk Assessment report dated June 28, 2021 for a detailed analysis of the main risks applicable to LACERA.





Thank you





November 29, 2021

TO: Each Trustee

Board of Investments

FROM: Jonathan Grabel

Chief Investment Officer

FOR: December 8, 2021, Board of Investments Meeting

SUBJECT: ANNUAL UPDATE AND REVIEW OF LACERA TOWARDS INCLUSION,

DIVERSITY, AND EQUITY (LACERA TIDE)

The attached presentation (**Attachment 1**) summarizes recent activities, progress, and anticipated next steps of LACERA's TIDE initiative for Trustee review and discussion at the December 8, 2021, Board of Investments meeting.

Also attached is a recent case study published online by the United Nations-affiliated Principles for Responsible Investment (UN PRI) featuring LACERA's TIDE initiative (**Attachment 2**).

Attachments

Annual Review and Update of LACERA Towards Inclusion Diversity and Equity (TIDE)



Board of Investments December 8, 2021

Investments Division

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Discussion Outline

- 1. LACERA TIDE Background and Objectives of Review
- 2. Review of Progress in Each Pillar
 - Internal Practices
 - Due Diligence
 - Active Ownership
 - Capital Formation
 - Industry Advocacy
- 3. Observations and Next Steps



About LACERA TIDE and Today's Objectives



LACERA considers organizations comprised of diverse backgrounds and managed in an inclusive and equitable manner perform better, as compelled by our fiduciary duty and enshrined in our Investment Policy Statement

LACERA consolidated various longstanding DEI initiatives under "LACERA TIDE" in 2020, as ratified by the Board in March 2021

LACERA TIDE incorporates short- and long-term objectives across activities organized under 5 pillars

We conduct an annual review of progress against stated goals, which is being presented for review and discussion today

Iterative, total team process of continuous improvement

Objectives for today's review include:

- ✓ Earnestly assess progress against stated goals
- ✓ Share observations
- ✓ Identify opportunities to enhance effectiveness

Recap of LACERA TIDE'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

Full range of tools-in-the-toolbox 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

Strategies to foster an inclusive, diverse, and equitable workplace in LACERA's Investments Division





- Further cultivate an "Allocator to Investor" mindset within the team, supporting career development
- Find effective approaches for inclusive workplace practices in both virtual and back-to-office environments



Accomplishments

- ✓ Increased intern number and opportunities throughout the year
- ✓ Deployed focused strategies to refine staff's investment acumen via cross training and collaborative projects
- ✓ Track record in recent years of internal promotions, interdivisional 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

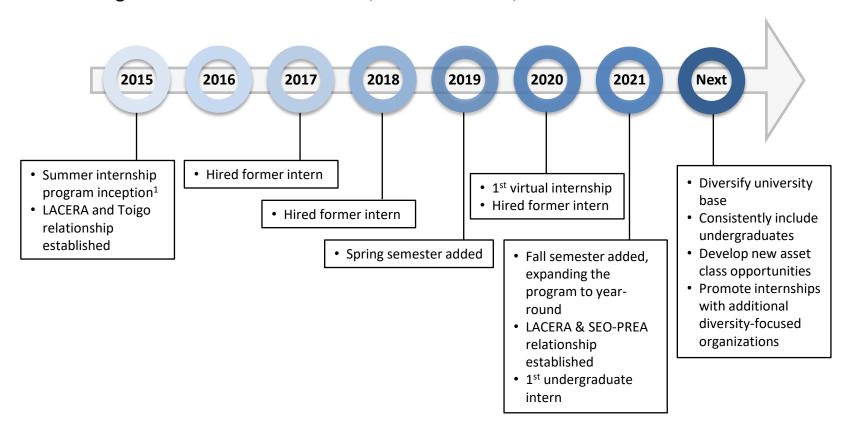






Intern Opportunities

Objective: Expand regularity and reach of Investments Division internship opportunities, aiming to enhance the familiarity of prospective careers in investments and public service, as well as benefiting LACERA's Investments Team, internal culture, and recruitment efforts



¹ Since inception in 2015, the Investments Division's internship program has hosted 10 interns.



Foster Talent with an "Allocator to Investor" Mindset



Objective: Enhance an inclusive and equitable workplace culture with diverse backgrounds to further LACERA's strategic objective to move from "Allocator to Investor"

Career Path Development

Cross-team exposures and collaborations can facilitate career progression and internal promotions. Total Fund orientation deepens each team member's expertise, helps further refine an "Allocator to 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

Recruitment Channels

Effective recruitment channels that are mindful of strategic initiatives including LACERA TIDE

Investment Acumen Cross Training

Pursuing multiple strategies to enable exposure, build familiarity and build foundation of competencies across asset classes and functional teams, including:

- ✓ cross-functional project teams
- ✓ internal investment committees
- ✓ quarterly fund performance reviews



Pillar 2: Due Diligence











Due Diligence

Strategies to evaluate, influence, and monitor current and prospective external managers and vendors



Next Steps

- Concerted push on best practices adoption
- Improve data quality and reliability in assessments
- Build cohesion in DEI manager evaluations across Fund



Accomplishments

- ✓ Year-over-year strides in firms with DEI policies and reporting
- ✓ Broad incorporation of DEI reporting provisions in new contracts
- ✓ Progress on best practices adoption, though not consistent
- ✓ Developed Manager Scorecard DEI methodology



Stated

Objectives





Board oversight

Clawbacks

Pay parity assessment

Portfolio integration

Develop Separate DEI Assessment in Manager Scorecard

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

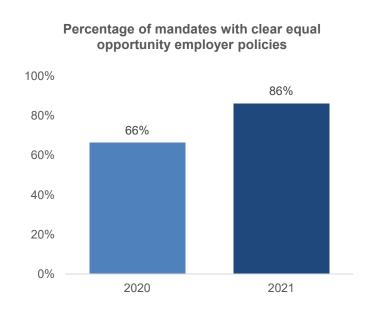
Contracting: Incorporate reporting requirements in investment contracts **Leading Governance Practices:** Encourage adoption of four practices

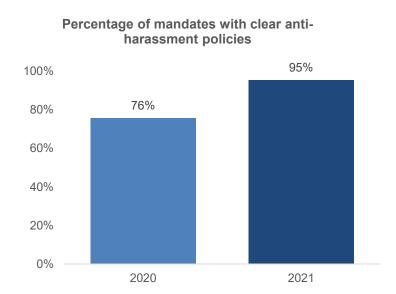




Established and Clear DEI Policies in Place

Objective: 100% of investment partners should have clear DEI policies





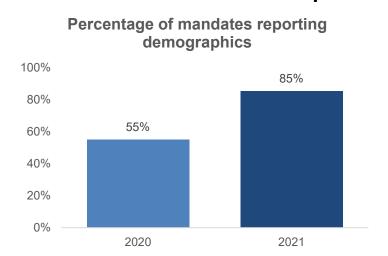
Observations

- Year-over-year progress in percentage of firms with DEI-related policies in place
- Room for further improvement; Clear policies are a core expectation of investment partners
- Non-reporters are concentrated among non-U.S. and smaller firms

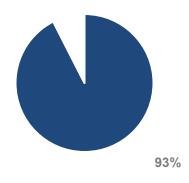


Transparency

Objective: 100% of investment partners should report available demographics of their investment teams and firm leadership¹



Percentage of new investment contracts with DEI reporting clauses²



Observations

- Strong year-over-year progress in investment partners reporting demographic information
- Nearly all executed contracts include DEI reporting provisions²
- Diversity attributes remain limited
 - EEO-1 reporting of gender and race most common in the U.S.
 - Non-US firms often limited to gender
 - About 12% of new mandates include voluntary, self-identified LGBTQ representation
- Non-reporters mostly concentrated in non-U.S. mandates
- Data quality challenges among firms; Continued persistence may improve reliability

² Since January 1, 2021; excludes 2 co-investments and one minority-owned private firm that complies with LACERA DDQ reporting requests



¹ As permissible according to local market laws, regulations, and privacy concerns



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 100% 80% 74% 60% 54% 43% 40% 33% 33% 31% 29% 25% 20% 0% 2020 2021 2021 2020 2020 2021 2020 2021 Firm integrates DEI into Firm conducts and reports pay disparity Firm maintains clawback Firm's board or executive portfolio construction committee exercises oversight of assessment by key diversity attributes, policies for senior executives such as gender and race/ethnicity and analysis DEI metrics and compliance who violate DEI policies

Observations

- Increased percentage of firms in LACERA's portfolio with board oversight and portfolio integration
- Decrease in firms reporting clawbacks and pay disparity assessments
- LACERA private market managers appear to have less developed DEI practices but have increased prevalence in portfolio
- Data "noise" may smooth out over time





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 and provisions, such as family leave and clawbacks
- ✓ Wider recruitment and hiring efforts

Recently hired small firm fulfilled its pledge to adopt a formal DEI policy and hired five new employees in the past two years, including three women and two employees from underrepresented groups

Small private equity firm started tracking demographics of recent hires (similar to EEO-1 data required of larger firms) and reports three new women on its investment team, up from zero at the time of LACERA's capital commitment

LACERA's request for workforce demographics reporting contributed to one general partner providing similar information to all limited partners

Private equity firm started reporting portfolio company management team demographics, revealing 25% of C-suite executives are women and 16% are people of color

Firm revised company policies to provide LACERA demographic reporting consistent with LACERA's due diligence and expanded attributes reporting in non-U.S. markets

Firm added new clawback policy for any executive who engages in workplace misconduct

Firm established new parental leave policy covering up to 20 weeks paid leave

Private equity firm went from 16% to 34% of workforce comprised of women and/or people of color, including 3 new Managing Directors

At least five of LACERA's private equity general partners joined ILPA's "Diversity In Action" initiative which encourages adoption of DEI best practices

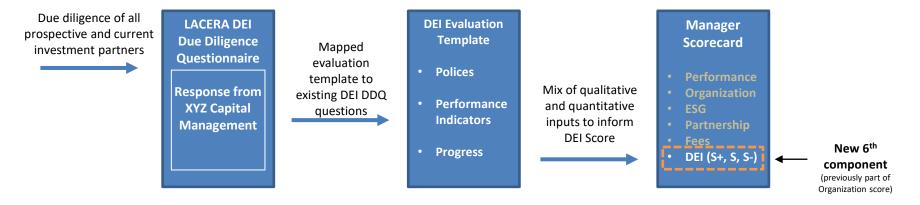
Two hedge funds adopted formal DEI policies and started tracking and reporting demographics for the first time





Manager Scorecard DEI Assessments

Development of DEI Manager Scorecard Assessment



LACERA applied methodology to assess over 100 mandates across the total portfolio

- Full team effort
- Initial scoring results are informative yet noisy
- Need further review for scrutiny and cohesion

Next steps

- Refresh analysis for lessons learned
- Consistency in rigor in assessments across mandates
- Initial results anticipated in 2022



Pillar 3: Active Ownership











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 247 directors of diverse backgrounds appointed in past 3 years
- ✓ Proxy voting supported DEI disclosures and practices
- √ 2021 engagements to clarify and encourage sound governance practices in workplace equity
- ✓ 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 the LGBTQ community
- Clarify and encourage effective DEI governance practices at engaged companies

LACERA T.I.D.E.





DEI in Proxy Voting





LACERA's Corporate Governance and Stewardship Principles Promote Corporate Board Quality and Inclusion

- ✓ Directors should have the requisite mix of skills and competencies to oversee strategy and risk on investors' behalf
- ✓ LACERA encourages companies to cast a wide net
- ✓ We expect to see a credible track record of inclusivity
- ✓ Diversity broadly considers gender, race, ethnicity, gender identities, sexual orientations, 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 1.3% of director nominees in FY2021 for failing to put forward inclusive director nominees ⁴

Board Diversity Continues to Increase Yet Remains Limited

- ✓ Women represent about 25% of U.S. board seats (up from 20% in 2019¹) and 21% of global board seats²
- ✓ New directors are more often women (44% of 2020 U.S. additions¹) and people of color (47% at large firms in 2021³)
- √ However, approximately 67% of Russell 3000 Index company boards consist of 2 or fewer directors of color¹
- ✓ There are still 300 U.S. companies (16%) have fewer than 2 women; 33 have no women 4

Increasing Scrutiny on Human Capital and Diversity, Equal Employment Opportunity, and Workplace Equity

- ✓ Assess mandatory employment-related arbitration provisions: SunRun Inc (58% support)
- ✓ Urge workplace diversity and EEO-1 report disclosure: DuPont de Nemours (84%) and Union Pacific (86%)
- ✓ Average support for requests to disclose EEO-1 reports increased to 55% from 41% last year¹
- ✓ Continued support for board diversity: Badger Meter (85%), First Community Bancshares (71%), FirstSolar Inc (91%)

⁴ Analysis by ISS and LACERA (includes companies where LACERA voted from January 1, 2021, through September 30, 2021)



¹Institutional Shareholder Services, "The Content of Their Character: How Diversity & Inclusion Continue to Drive Change", https://insights.issgovernance.com/posts/the-content-of-their-character/

² MSCI, "Women On Boards: 2020 Progress Report", https://www.msci.com/documents/10199/9ab8ea98-25fd-e843-c9e9-08f0d179bb85

³ Spencer Stuart, "2021 S&P 500 Board Diversity Snapshot", https://www.spencerstuart.com/-/media/2021/july/boarddiversity2021/2021 sp500 board diversity.pdf

Advancing Board Diversity and Workplace DEI Practices in Public Market Engagements



Corporate Board Diversity Initiative



Objective: Encourage board quality through casting a wide net for director talent, inclusive of diverse backgrounds

Initiative: 3rd year collaborative engagement with CalPERS, CalSTRS, and San Francisco ERS

Engages portfolio companies lacking diversity based on available disclosures

 Send letters inviting dialogue with board leadership to encourage robust board evaluation, refreshment, and inclusive recruitment practices

Progress Report

- 76 directors appointed at 54 of 74 targeted large U.S. firms last year (includes 35 women and 65 directors of color, of which 24 women of color)
- 247 directors appointed over past three years (female and/or people of color) to 141 boards of the 174 total targeted companies

Current FY21-22 Engagement Cycle

 57 firms engaged for gender, race/ethnicity, and LGBTQ community inclusion in board recruitment

Workplace Equity Initiative

Objective: Clarify and encourage adoption of leading governance measures for effective **DEI in workplace practices**

Initiative: Engaged **6 multinationals** that lead Business Roundtable committee to **promote DEI in society and work**

LACERA requested clarity and disclosure of the following:

- ✓ Board oversight of DEI performance metrics, trendlines, and strategy for leadership and integration;
- ✓ **Disclose key workforce demographics**, i.e. EEO-1 reports;
- ✓ Ensure robust DEI pay incentives, such as clear clawback provisions in the event of violation of DEI and antiharassment policies; and
- ✓ Proactively assess equal pay for equal work across accessible workforce data

Summary of Findings

Evolving market disclosures as firms move beyond platitudes to concrete policies, practices, and KPI's: **board oversight** is common, but not typically reported; **transparency** is increasing as more companies disclose EEO-1 reports; **clawback** policies common but may indirectly incorporate DEI commitments by referencing Codes of Ethics; **pay parity assessments** often have a limited scope (gender); Firms **improving disclosure** of exercises and process



Expand DEI Engagements in Private Market Portfolio Companies



Objective

 Advance portfolio company board diversity in private markets to ensure firms cast a wide net for director talent for the best outcomes¹

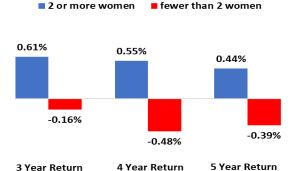
Background and Details

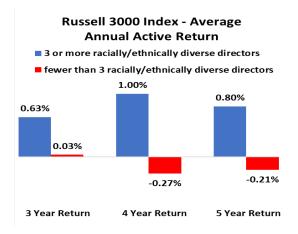
- About half of LACERA's private equity general partners report that they integrate DEI into portfolio company management
 - Not clear to what extent portfolio company board diversity is a strategic consideration
- In the private equity industry, overall portfolio company board profiles are²:
 - About half have no women³
 - 11% of directors are women
 - 3% are women of color
 - 18% are men of color

Next Steps

 Engage several current strategic general partners to encourage reporting to limited partners of portfolio company board diversity to expand clarity and focus on board diversity in private markets







¹ 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.

³ Data covering corporate board diversity at private companies is not widely available. The study analyzed 350 companies, at which 175 had no women serving on their boards.



² Him for Her & Crunchbase, "2020 Study Of Gender Diversity On Private Company Boards", https://news.crunchbase.com/news/2020-diversity-study-on-private-company-boards/

Pillar 4: Capital Formation











Capital Formation

Strategies to facilitate capital formation among firms with diverse ownership, such as emerging managers



Next Steps

- Continuously widen sourcing funnel for managers who embrace DEI to improve portfolio results
- · Enhance manager demographic and attributes reporting
- Further expand emerging manager opportunities by launching emerging manager program in Real Assets



Accomplishments

- ✓ Expanded systematic reporting on firm ownership demographics
- ✓ Created baseline analysis of capital by total firm demographics
- √ Expanded emerging manager program opportunities
 - New searches launched in hedge funds, illiquid credit, global equity, and private equity
 - New hedge funds formed in light of capital commitments



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





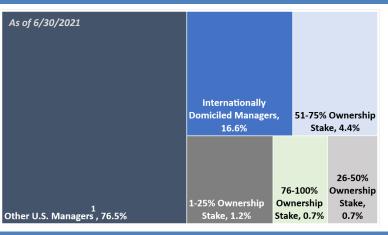




Investment Partners by Ownership Update

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 7.0% of total Fund AUM is managed by U.S.based firms with diverse ownership², up from 6.4% in 2020
- In absolute terms, assets managed by U.S.-based diverse firms increased from US\$3.7 last year to US\$5.0 billion
- 1.3% of total Fund AUM are U.S.-based with diverse ownership that are within LACERA's emerging manager programs, up from 1.2% (\$910.4 million this year from \$582.6 million last year)

Active AUM by Firm Ownership

- 11% of assets in actively-managed mandates (i.e., excluding passive index strategies) are managed by U.S.-based firms with diverse ownership, relatively even with 11% in 2020
- 1.5% of active assets under management are managed by U.S.based firms with diverse ownership that are in LACERA's emerging manager programs
 - ¹ "Other U.S. Managers" includes publicly traded companies and U.S. based managers with no reported equity ownership by women or people of color.
 - ² "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.

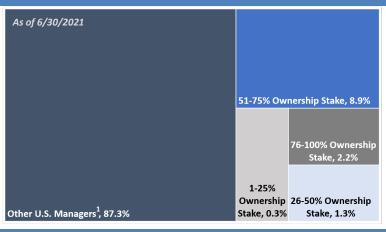




Fee Analysis by Ownership

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

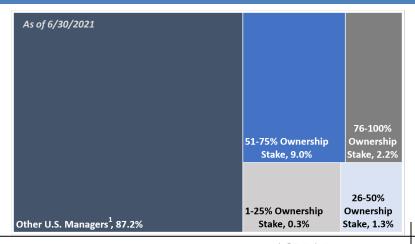


- Aggregate fees paid to U.S.-based firms with diverse ownership increased to 12.7% of total Fund fees paid, compared to 12.1% last year²
- Fees paid to emerging managers with diverse ownership increased to approximately 2.8% from about 2.1% of total Fund fees last year

Active Fees Paid by Ownership

- Fees paid to U.S.-based firms with diverse ownership in actively-managed investment mandates increased to 12.8% of total active fees paid, relative 12.2% last year
- Emerging managers with diverse ownership represent approximately 2.8% of fees for actively managed mandates, an increase from 2.1% the prior year

² LACERA emerging managers are composed of diverse-owned firms and non-diverseowned firms

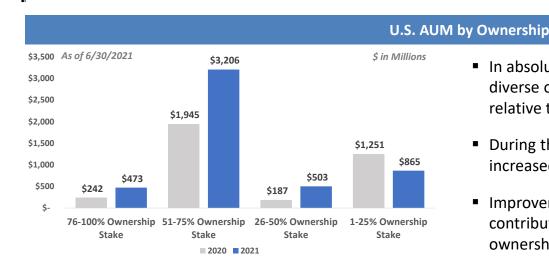




¹ "Other U.S. Managers" includes publicly traded companies that do not disclose broad employee ownership and U.S. based managers with no diverse ownership



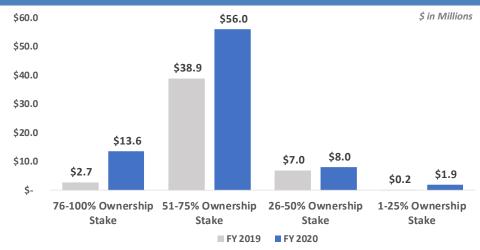
Investment Partners Trend Analysis



- In absolute dollar terms, total AUM managed by firms with diverse ownership increased by 39% to \$5.0 billion in 2021, relative to \$3.6 billion in 2020
- During the same period, LACERA's total Fund assets increased by 25% from \$58.2 billion to \$72.7 billion
- Improvements in manager reporting and monitoring also contribute to the year over year increase in demographic ownership depicted

U.S. Fees Paid By Ownership

- Total fees paid to managers with diverse ownership increased by 63% to \$81.2 million from \$48.8 million the year prior
- The largest year over year increase in fees paid to managers with diverse ownership in the 76%-100% ownership category, followed by the 26-50% ownership



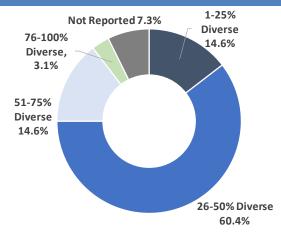




Investment Partners Demographic Attributes

Objective: Monitor capital commitments by demographics of investment partners' investment and leadership teams as new firms may be founded by talent from established firms

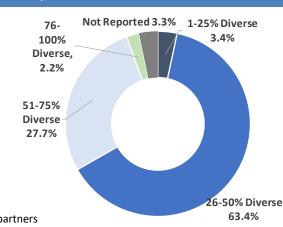
Breakdown of U.S. Managers by Combined Investment and Leadership Team Demographics¹



- Diversity represents the percentage of managers combined investment and leadership teams that are women and/or people of color, as reported to LACERA using EEO-1 categories
- Mandates are categorized by quartiles in the graph
- For example, 14.6% 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 AUM by U.S. Demographic Composition

- The demographic quartiles on the right illustrate the percentage of assets managed by quartiles
- For example, 27.7% of LACERA assets are managed by teams with 50% to 75% of their workforce comprised of women and/or people of color



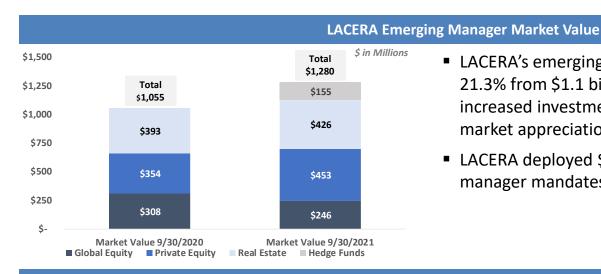
¹ Analysis conducted November 2021 based on the most recently reported data from investment partners



Broadening Inclusion through Emerging Manager Programs



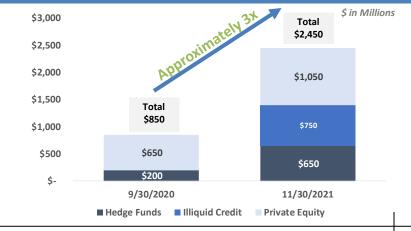
Objective: Provide access to newer firms that may generate attractive returns, stemming from flexibility provided by smaller asset bases and more nimble investment approaches



- LACERA's emerging manager market value increased 21.3% from \$1.1 billion to \$1.3 billion as a result of increased investments to emerging managers and market appreciation from 9/30/2020 to 9/30/2021
- LACERA deployed \$155 million to new emerging manager mandates in hedge funds

Expanding Total Allocation to Illiquid Asset Categories

- LACERA expanded its emerging manager target allocations nearly three-fold across several illiquid asset classes: hedge funds, illiquid credit, and private equity
- Unlike liquid asset categories that can fully invest immediately, alternative assets are committed and deployed over several years
- LACERA expects to expand its emerging manager program to Real Assets



Pillar 5: **Industry Advocacy**











Industry Advocacy

Strategies to improve LACERA's opportunity set by advancing DEI best practices across the financial services industry



Next Steps

- Continue working with CFA Society Los Angeles to host additional roundtables and inaugural conference in 2022
- Further encourage peers and business partners to enhance their DEI efforts, reporting and advocacy



Accomplishments

- ✓ Active speaking roles at about 70 industry events on DEI
- ✓ Promoted robust DEI reporting across markets and private asset classes including with ILPA, AIMA and PRI
- ✓ Hosted DEI roundtable with CFA Society Los Angeles with participation from 15 Southern California public pensions and asset managers



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

Objective: Advance industry focus on DEI by elevating LACERA's profile and engaging industry on DEI

Update: LACERA spoke at about 70 industry events on DEI, touching a range of audiences and topics



Moderate/Host

- CII corporate director panel
- Women and Diversity Exchange, Pension Bridge
- 2021 Women Investment Leader Symposium

Roundtables



- Institutional Investor Regional
- ILPA Diversity in Action
- JBN Foundation event
- CALAPRS trustee roundtable

Select events include but are not limited to:

Trusted Insight Diversity Day
Toigo Foundation Gala
UNPRI Roundtable

Emerging Manager Conferences

Institutional Investor Regional Roundtable

NASP SoCal Annual Trustee Conference

Council of Institutional Investors Conferences

EMPEA/IFC Global PE Conference

Lone Star Resilient Investing Forum

100 Women in Finance

Pacific Alliance PE & VC Capital Summit

2021 LAVCA ESG Awards

Accelerate Investors Latin & Black Women Symposium
Virtual Women's Alternative Investment Summit



Featured Speaker

- Pension Bridge Alternatives Keynote
- UNPRI Asset Owners and DEI
- Girls Who Invest
- Fundwise Forecast
- SuperReturn Technology
- RFK Compass





- Women's Alternative Investment Summit
- Accelerate Investors
- Gender Equity in PE Summit
- CII Shareholder Activism Committee





Collaborate to Advance Best Practices

Objective: Collaborate to clarify and promote adoption of DEI best practices

Update: LACERA leading emerging regional investor network on DEI and continuing active engagement of lead affinity and DEI associations



- Collaborated with CFA Society Los Angeles to host a DEI roundtable with local public pension plans and asset managers
- Shared learnings and best practices with peers on efforts to advance
 DEI internally and in broader industry
- Expanding reach with additional roundtables and a larger inaugural DEI conference anticipated for 2022





- LACERA hosted affinity groups such as New America Alliance
- Participated at NASP SoCal Annual Trustee Conference



















Improve DEI Data Availability and Reliability

Objective: Support efforts to improve availability and reliability of DEI data and disclosures for constructive due diligence

Update: Continued support of efforts to expand due diligence with particular focus on markets and asset classes where data is lagging



- LACERA participates on ILPA DEI committee
- ILPA refreshed model DEI due diligence template in 2021, including more metrics and KPI's
- LACERA encouraged private equity managers to become ILPA "Diversity in Action" signatories



- PRI developing similar universal DEI due diligence
- LACERA is PRI signatory and serves on various advisory committees
- PRI featured LACERA in asset owner DEI roundtable



 LACERA provided support for hedge fund managers to participate in Alternatives Investment Managers Association's recently launched standard DEI due diligence for the asset class





Emerging Recognition of LACERA Efforts

Objective: Provide a constructive voice for deliberate, pragmatic, meaningful focus on integrating DEI into the investment process

Update: LACERA's DEI efforts have recently been highlighted by industry partners and associations



Nominated and awarded "Runner-Up" for DEI leadership and innovation in Trusted Insight – a network of limited partners



Featured case study for integrating DEI into the investment process by the United Nations-affiliated Principles for Responsible Investment (PRI)¹

¹ PRI, "LACERA: Integrating diversity, equity and inclusion throughout the investment process", https://www.unpri.org/human-rights-case-studies/lacera-integrating-diversity-equity-and-inclusion-throughout-the-investment-process/8842.article



Observations and Next Steps



Observations

1. Notable strides in several areas, including

- 85% of investment partners reporting some DEI demographics, up from 55%
- About 250 directors of diverse backgrounds appointed to corporate boards
- Expanded emerging manager programs and opportunities for future commitments
- Consistent manager assessment tool developed

2. LACERA pursuing full Fund approach

- Standard part of diligence and monitoring of all investment mandates
- Capacity building with direct full team internal ownership
- Iterative process focused on lessons learned
- Asymmetrical progress, with faster progress in some areas than others

3. Industry is evolving

- Engagement can catalyze change; more managers are responsive to due diligence
- More candor from managers, including recognition of shortcomings
- DEI initiatives at partners are being elevated to executive oversight from HR/compliance function
- Increased industry focus to encourage pragmatic reporting

4. Yet industry challenges remain

- Diversity reporting remains limited in non-U.S. markets
- Assessing how firms cast a wide net for talent necessitates nuance market-by-market
- LACERA data indicates uneven progress, with some firms and asset classes trailing
- DEI disclosures are inconsistent in some instances year-over-year



Next Steps

1. Enhance cohesion and quality

- Reliability and consistency in investment partner assessments
- Support industry efforts to avail better, broader DEI metrics
- Standard application of LACERA's DEI diligence and evaluation methodology



2. Sharpen constructive, diplomatic agitation with investment partners

- Push past platitude responses and "marketing"
- Actively promote DEI strategies from talent pipeline to firm ownership
- Important role for all firms, both established and new firms
- Think globally as a diversified asset owner investing in over 60 global markets

LACERA T.I.D.E.

3. Elevate discussion and expand our leadership position

- Comprehensive program
- Intentional focus to enhance our effectiveness
- Be attentive to internal practices as a model

4. Focus on lasting solutions to enhance outcomes for LACERA and our members

- Be purposeful in advocacy and disseminate best practices
- Active monitoring as integrated component of manager quality alongside fees, performance, etc.
- Deliberate focus on DEI as part of "Allocator to Investor" strategic initiatives
- Be adaptable with iterative, continuous improvement



Principles for Responsible Investment Featured Case Study

https://www.unpri.org/human-rights-case-studies/lacera-integrating-diversity-equity-and-inclusion-throughout-the-investment-process/8842.article



Los Angeles County Employees Retirement Association (LACERA)

Signatory type: Asset ownerAsset owner type: Pension fund

HQ country: US

Diversity, equity, and inclusion (DEI) are integral components of our <u>investment</u> <u>process</u> and stewardship initiatives and are detailed in our <u>guiding investment policy</u>.

Why we consider DEI in our investment process and stewardship initiatives

We focus on DEI to help produce, protect, and provide the promised benefits to 170,000 beneficiaries in the most populous county in the US. Organisations that embrace and excel at cultivating diverse, equitable and inclusive workplaces benefit across numerous dimensions, including:

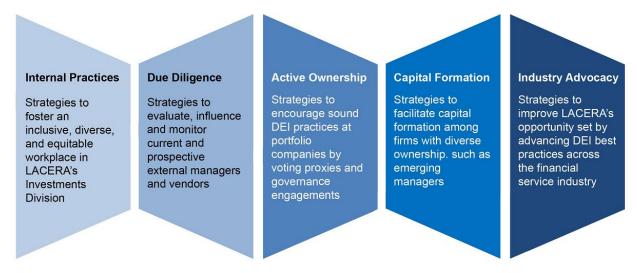
Performance
Innovation
Talent
Risk Mitigation
Compliance
Reputation
Efficiency
Diverse teams correlate with better financial performance
Diversity of thought to inform better decisions
Broader recruitment, retention, and engagement of employees
Risks of "groupthink"
Legal, regulatory risk of discrimination and harassment
Inclusion enhances employee, client, stakeholder perceptions
Wasted resources when firms are in "response mode" and reactive rather than being proactive and forward-thinking

We believe that effectively accessing and managing diverse talent leads to improved outcomes. We consider diversity broadly, including varied backgrounds, age, experience, race/ethnicity, sexual orientation, gender, gender identity, disability, religion, national origin and culture.

We evaluate all external investment partners on how they access and retain diverse and inclusive leadership and investment teams. We believe asset managers who cast the widest net for talent will deliver the best results. And we actively exercise stewardship rights through corporate engagement and proxy voting to advance DEI within portfolio companies to preserve and create value.

How we consider DEI in our investment process and stewardship initiatives

Our T.I.D.E (Towards Inclusion, Diversity and Equity) initiative pursues comprehensive strategies to advance DEI throughout all aspects of our investment process. It is driven by our fiduciary duty and organised into five core pillars:



We conduct robust upfront due diligence and monitor all asset managers who seek to manage capital on our behalf. Our standard five-part DEI due diligence allows us to assess which firms are best positioned to steward our capital based in part on their demonstrated commitment, track record, and momentum in line with our T.I.D.E objectives.

We look at asset managers' DEI policy commitments, demonstrated board oversight of DEI strategies and track records of inclusion on investment and executive teams. We also consider any history of legal or regulatory infractions related to equal employment opportunity or workplace harassment.

We assess how asset managers promote adherence to their DEI commitments, such as asking whether they conduct internal pay equity analyses or have clawback provisions in the event of employee misconduct or violation of DEI policies.

We try to discern to what extent managers are seeking to move the needle on DEI within their own practices. Recognising that we operate in an industry with historic patterns of underrepresentation, we probe if they have identified any shortcomings in achieving their DEI objectives and, if so, what they are doing to address them.

Lastly, we explore how asset managers in all asset classes incorporate DEI into their own investment research and portfolio management in the mandates they manage on our behalf.

Our due diligence of all investment partners' and asset managers' DEI practices informs an ongoing "Manager Scorecard". The Manager Scorecard includes DEI alongside factors such as performance, fees, and ESG integration to form a holistic view of asset managers' quality. Instead of separately weighting the components of the assessment, we reference absolute and relative performance on each factor to inform decisions whether to increase, decrease, or terminate allocations.

Investment management agreements include provisions where we expect asset managers to regularly report on their DEI practices so that we can continue to monitor asset managers' DEI strengths or developing risks.

Example: Recent evidence of our work on DEI

We emphasise the power of dialogue in our investment stewardship, including advancing our DEI objectives with external asset managers, industry associations, and portfolio companies.

Asset Manager Engagement: By engaging asset managers on their DEI practices, we can promote progress. For example, we recently reviewed the DEI practices of an existing asset manager with a small investment team and solid financial performance, but a weak record of gender inclusion. Through discussion, the firm committed to enhance DEI policies and identified new strategies to attract and retain diverse talent, and we will monitor the results and progress.

Industry Collaboration: We work with industry peers to advance more robust and consistent due diligence of asset managers' approach to DEI, including in private market asset classes. The Institutional Limited Partners Association and the Alternative Investment Managers Association have developed due diligence templates for industry use and work to advance leading practices.

Portfolio Company Active Ownership: We encourage sound DEI practices at portfolio companies through proxy voting and dialogues. Last year, we voted against director

ATTACHMENT 2

nominees at about 1,000 companies for failing to maintain a credible record of inclusion in board recruitment practices.

Approximately 250 women and people of colour have been appointed to corporate boards at about 150 companies that we have engaged to encourage more expansive board recruitment and governance policies inclusive of gender, race, and the LGBTQ community.



November 23, 2021

TO: Trustees – Board of Investments

FROM: Calvin Chang

Senior Investment Analyst

Noah Damsky

Senior Investment Analyst

Terra Elijah

Investment Analyst

FOR: December 8, 2021 Board of Investments Meeting

SUBJECT: ASSEMBLY BILL 2833 REPORT – FISCAL YEAR 2021

California Assembly Bill 2833 ("AB 2833") requires the public pension systems obtain information on fees, expenses, and carried interest information in connection with their investments in alternative investment vehicles and disclose, 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.

LACERA aggregated cost data from 283 alternative investment vehicles and reported the information consistent with the mandate and spirit of AB 2833. For the fiscal year ending June 30, 2021, LACERA's total alternative investment vehicle costs were \$544 million compared to \$335 million the prior fiscal year. A strong market environment compared to the prior fiscal year generated significant returns of capital for LACERA. As a result, an additional \$166 million in carried interests were paid in fiscal year 2021 which attributed to almost 80% of the total cost increase.

An overview of AB 2833 (**Attachment 1**) and the fees listed in the summary above will be reviewed at the December 8, 2021, Board of Investments meeting. An expanded view of the fees is provided (**Attachment 2**) as required by AB 2833, in addition to Section 6254.26(b) reporting (**Attachment 3**).

Attachments

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

CC:ND:TE:mm

cc: Santos H. Kreimann

Jonathan Grabel Steven Rice Investments Staff

Legal Office - Investment Team

AB 2833 Fiscal Year 2021 Report

LOS ANGELES COUNTY

Board of Investments
December 8, 2021

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

Overview of AB 2833

The intent of California Assembly Bill 2833 ("AB 2833") is to increase the transparency of fees paid by public investment funds to alternative investments¹ 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:

- 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 AB 2833

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 Section 6254.26 of the Public Records Act

Government Code Section 6254.26 (b)

Included as a subset of AB 2833, Section 6254.26(b) requires the disclosure of the following:

- 1) Name, address and vintage year of fund;
- 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;
- 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, 2020 through June 30, 2021

Functional Category ¹	Ma	nagement Fee ²	Fu	ınd Expenses ³	Са	rried Interest ⁴	Total Costs
Growth	\$	133,127,042	\$	45,056,356	\$	210,064,376	\$ 388,247,774
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
Opportunistic RE		7,381,180		2,279,333		10,241,924	19,902,437
Credit	\$	17,533,316	\$	7,711,438	\$	31,397,705	\$ 56,642,459
Bank Loans		3,833,781		805,774		-	4,639,555
Illiquid Credit		13,699,535		6,905,664		31,397,705	52,002,904
Real Assets and Inflation Hedges	\$	13,413,211	\$	3,378,539	\$	-	\$ 16,791,749
Core and Value Added RE		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
Risk Reduction and Mitigation	\$	29,182,781	\$	6,654,866	\$	46,547,625	\$ 82,385,271
Diversified Hedge Fund		29,182,781		6,654,866		46,547,625	82,385,271
Total	\$	193,256,350	\$	62,801,198	\$	288,009,706	\$ 544,067,254

¹ Cost data representative for only alternative investment vehicles within each functional asset category.

⁴ 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.



² 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.

³ 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.

Summary of Alternative Investment Fees, Expenses, and Carried Interest for the period July 1, 2019 through June 30, 2020

Functional Category ¹	Mai	nagement Fee ²	Fu	nd Expenses ³	Ca	rried Interest ⁴	Total Costs
Growth	\$	112,752,306	\$	41,603,160	\$	105,351,134	\$ 259,706,600
Global Equity		5,512,741		1,178,618		10,354,464	17,045,823
Private Equity		99,977,808		37,074,550		90,369,006	227,421,364
Opportunistic RE		7,261,758		3,349,992		4,627,664	15,239,413
Credit	\$	14,092,269	\$	4,371,736	\$	982,332	\$ 19,446,337
Bank Loans		3,414,987		700,078		-	4,115,065
Illiquid Credit		10,677,282		3,671,658		982,332	15,331,272
Real Assets and Inflation Hedges	\$	7,286,483	\$	1,467,489	\$	(963,216)	\$ 7,790,756
Core and Value Added RE		5,699,433		1,428,636		(963,216)	6,164,853
Natural Resources & Commodities		1,587,050		38,853		-	1,625,903
Risk Reduction and Mitigation	\$	22,021,739	\$	9,648,168	\$	16,221,680	\$ 47,891,586
Diversified Hedge Fund		22,021,739		9,648,168		16,221,680	47,891,586
Total	\$	156,152,797	\$	57,090,552	\$	121,591,930	\$ 334,835,279

¹ Cost data representative for only alternative investment vehicles within each functional asset category.

² 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.

³ 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.

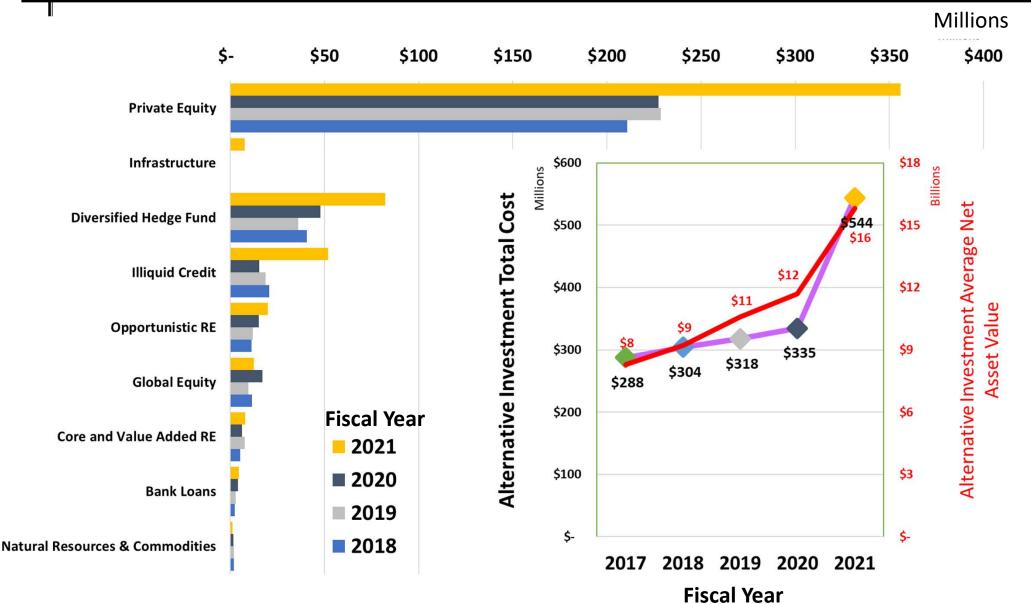
⁴ Carried interest paid or accrued to the alternative investment fund during the fiscal year. Data sources include: aggregation of cash payments to the alternative investment fund, confirmation with the alternative investment fund, financial statements and partner capital account statements, and pro rata share of the alternative investment fund's total carried interest. Negative values indicate giveback of previously accrued or paid fees.

Year-Over-Year Sources of Change

Functional Category	Sources of Change
Growth	
Global Equity	Lower carried interest due to lower returns relative to highwater mark
Private Equity	Management fee and expenses increased as a result of new vintage year fund activations while carried interest increased significantly from strong market performance
Opportunistic RE	Increased fees from increase in carried interest
Credit	
Bank Loans	Increased management fee due to increase in net asset value
Illiquid Credit	Increase in allocation and significant outperformance led to higher management fees and carried interest, respectively
Real Assets and Inflation Hedges	
Core and Value Added RE	Increased management fees dues to increase in fund assets
Infrastructure	Increased commitments led to higher fees
Natural Resources & Commodities	Nominal change due to minimal investment activity
Risk Reduction and Mitigation	
Diversified Hedge Fund	Increase in allocation and outperformance led to higher management fees and carried interest, respectively
Functional Category	Management Fund Expenses Carried Interest Total Costs

Functional Category	Ma	anagement	Fı	ınd Exnenses	Ca	arried Interest	Total Costs
Tunetional category		Fee		and Expenses			10141 00515
Private Equity	\$	19,642,172	\$	4,857,420	\$	104,005,142	\$ 128,504,735
Illiquid Credit	\$	3,022,253	\$	3,234,006	\$	30,415,373	\$ 36,671,632
Diversified Hedge Fund	\$	7,161,042	\$	(2,993,302)	\$	30,325,945	\$ 34,493,685
Infrastructure	\$	5,530,331	\$	2,100,536	\$	-	\$ 7,630,866
Opportunistic RE	\$	119,422	\$	(1,070,658)	\$	5,614,261	\$ 4,663,024
Core and Value Added RE	\$	961,408	\$	(217,909)	\$	963,216	\$ 1,706,715
Bank Loans	\$	418,794	\$	105,696	\$	-	\$ 524,490
Natural Resources & Commodities	\$	(365,011)	\$	28,423	\$	-	\$ (336,588)
Global Equity	\$	613,143	\$	(333,566)	\$	(4,906,161)	\$ (4,626,584)

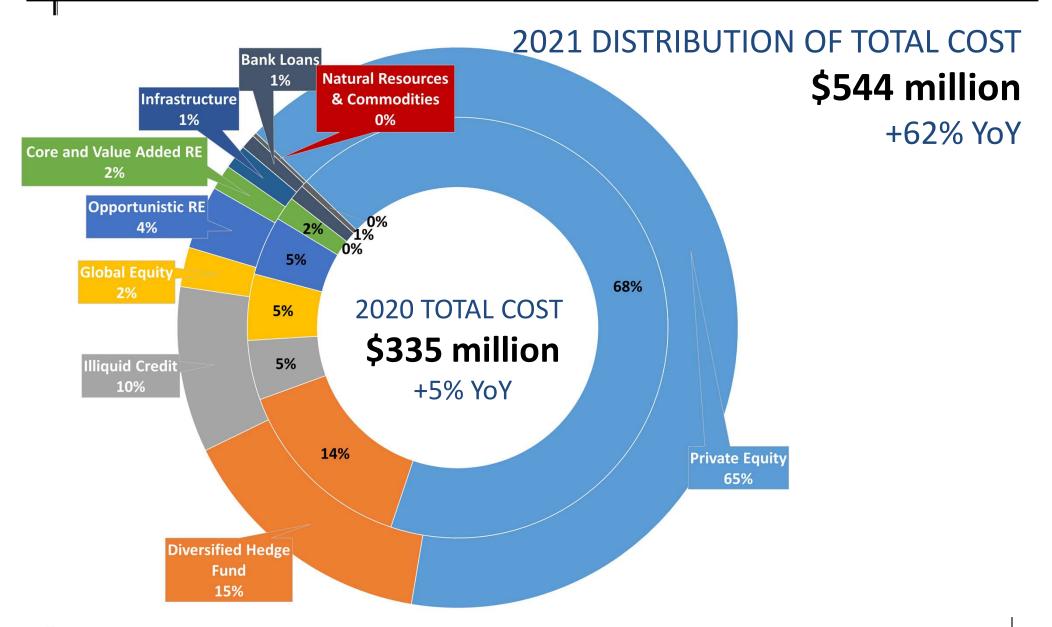
Historical Alternative Investment Total Costs



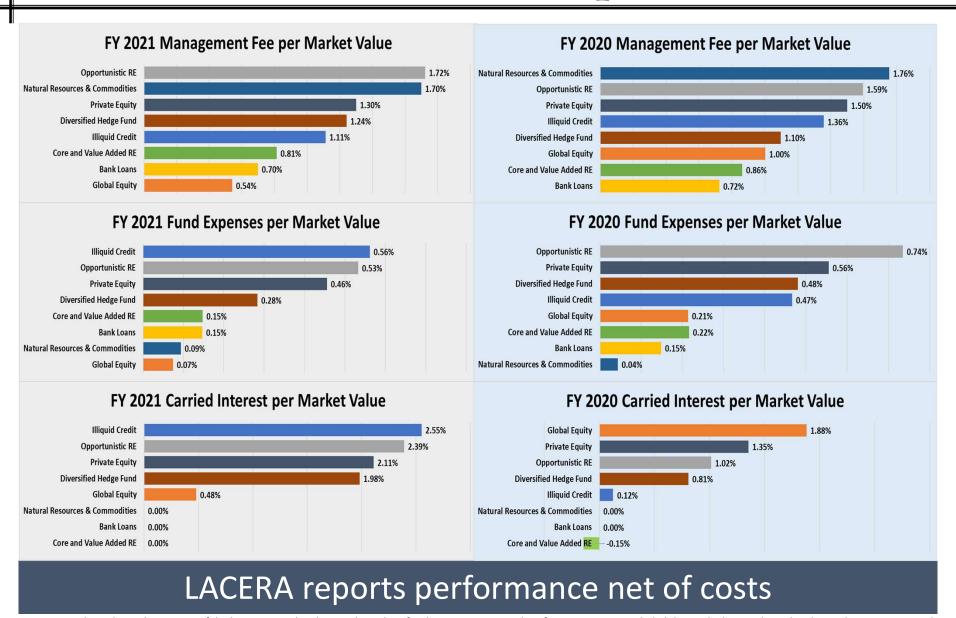
Note: Cost breakout by functional category available starting fiscal year 2018; Infrastructure alternative fund investments commenced during fiscal year 2021; Net asset value is the average of the beginning and ending market values for the respective periods.



Distribution of Total Costs Comparison



Costs Per Market Value Comparison



Note: Market value is the average of the beginning and ending market values for the respective periods; Infrastructure was excluded due to the low market value during the ramp up period, which resulted in short-term volatility in the cost ratio.

Assembly Bill 2833

Fiscal Year-Ended				A	В			C			Sum of A + B + C
Asset Category	Functional Category	Alternative Investment Fund		nagamant	Fund Expenses ²		rried erest ³	Portfolio Company Expenses ⁴	Since Inception Gross Return ⁵	Since Inception Net Return ⁶	Total Fees
Fixed Income	Illiquid Credit	BPC Opportunities Fund II, L.P.	\$	260,680	\$ 255,308	\$	-	\$ -	9.7%	8.0%	\$ 515,988
Fixed Income	Illiquid Credit	BPC Opportunities Fund III, L.P.	\$	1,597,607	\$ 477,726		-	\$ -	15.6%	11.7%	\$ 2,075,332
Fixed Income	Bank Loans	Tennenbaum Senior Loan Fund V, LLC	\$	3,833,781	\$ 805,774		-	\$ -	8.8%	7.7%	\$ 4,639,555
Global Equity	Global Equity	Cevian Capital II Master Fund, L.P.	\$	- , ,	\$ 155,364	-	-	\$ -	11.5%	9.8%	\$ 3,708,469
Global Equity	Global Equity	JANA Strategic Investment Fund V, L.P.	\$	1,099,183	\$ 196,487		,615,934	\$ -	25.5%	17.2%	\$ 1,295,670
Global Equity	Global Equity	The SFP Value Realization Master Fund Ltd	\$	1,473,595	\$ 493,202		,832,369	\$ -	18.9%	16.3%	\$ 1,966,797
Hedge Fund	Diversified Hedge Fund	AQR Liquid Enhanced Alternative Premia Fund II, L.P.	\$	-	\$ 23,205	\$	102.254	\$ -	-12.2%	-12.7%	\$ 23,205
Hedge Fund	Diversified Hedge Fund	Brevan Howard Master Fund Limited	\$	1,228,507	\$ 116,569		183,254	*	-1.1%	-1.6%	\$ 1,345,076
Hedge Fund	Diversified Hedge Fund	Capula Global Relative Value Fund, L.P. Caxton Global Investments, LLC - Class T	\$	- /- /-	\$ 1,680,975 \$ 668,951		,630,987	\$ -	9.1%	6.1%	\$ 7,605,916
Hedge Fund	Diversified Hedge Fund	· · · · · · · · · · · · · · · · · · ·	\$ \$	1,029,591 3,340,902	\$ 668,951 \$ 175,906	\$	-,757,834	\$ 43,667	1.1% 10.1%	0.5% 6.8%	\$ 1,698,542 3,560,476
Hedge Fund Hedge Fund	Diversified Hedge Fund Diversified Hedge Fund	Davidson Kempner Institutional Partners, L.P. Empyrean Capital Fund, L.P Class 2 Series N	\$	16,283	\$ 173,900		16,400	\$ 45,007	6.0%	3.8%	\$ 16,357
Hedge Fund	Diversified Hedge Fund	Exoduspoint Partners Fund, L.P Class 2 Series N	\$	10,283	\$ 200,667		165,733	\$ -	8.5%	7.1%	\$ 200,667
Hedge Fund	Diversified Hedge Fund	HBK Multi-Strategy Fund, L.P.	\$	3,925,872	\$ 1,235,429		,677,773	\$ -	8.4%	5.6%	\$ 5,161,301
Hedge Fund	Diversified Hedge Fund	HG Vora Special Opportunities Fund, LP - Series 1	\$	21,686	\$ 8,291		53,085	\$ -	8.9%	6.1%	\$ 29,977
Hedge Fund	Diversified Hedge Fund	Holocene Advisors Fund, L.P Class AI-A	\$	85,220	\$ 6,110		680,416	*	17.3%	13.2%	\$ 91,330
Hedge Fund	Diversified Hedge Fund	Hudson Bay Fund, L.P.	\$	5,309,046			,358,231	\$ -	26.7%	19.7%	\$ 6,262,497
Hedge Fund	Illiquid Credit	Magnetar Lake Credit Fund, LLC	\$	2,167,929	\$ 2,854,437		,097,053	\$ -	65.2%	56.2%	\$ 5,022,367
Hedge Fund	Illiquid Credit	Napier Park Lake Credit Fund, L.P.	\$	4,937,153	\$ 2,094,474		,537,251	\$ -	45.0%	37.0%	\$ 7,031,628
Hedge Fund	Diversified Hedge Fund	Palmetto Catastrophe Fund L.P Class H	\$	13,657	\$ 1,198		-	\$ -	13.5%	11.9%	\$ 14,854
Hedge Fund	Diversified Hedge Fund	PIMCO Tactical Opportunities Onshore Fund L.P.	\$	2,562,383	\$ 690,660	\$ 2	,473,780	\$ -	9.7%	7.9%	\$ 3,253,042
Hedge Fund	Diversified Hedge Fund	Polar Multi-Strategy Fund (US), L.P.	\$	3,985,612	\$ 68,930	\$ 21	,550,131	\$ -	32.4%	24.9%	\$ 4,054,541
Hedge Fund	Diversified Hedge Fund	San Gabriel Fund, L.P.	\$	1,739,081	\$ 780,783	\$	-	\$ -	5.8%	5.0%	\$ 2,519,864
Hedge Fund	Illiquid Credit	San Gabriel Fund 3, L.P.	\$	1,916,962	\$ 668,566	\$	-	\$ -	5.3%	4.6%	\$ 2,585,528
Private Equity	Private Equity	Accel-KKR Capital Partners CV III, L.P.	\$	-	\$ 3,529		423,201	\$ -	83.0%	69.4%	\$ 3,529
Private Equity	Private Equity	Accel-KKR Capital Partners VI, L.P.	\$	2,200,000	\$ 332,772	\$	-	\$ -	-7.0%	-57.5%	\$ 2,532,772
Private Equity	Private Equity	Accel-KKR Growth Capital Partners III, L.P.	\$	432,035	\$ 299,193	\$	-	\$ -	56.0%	29.7%	\$ 731,228
Private Equity	Private Equity	Access Foundation Partners Group II, LLC	\$	150,000	\$ 13,772		-	\$ -	37.6%	34.3%	\$ 163,772
Private Equity	Private Equity	Access Holdings Fund I, L.P.	\$)-	\$ 34,477		-	\$ -	70.3%	35.4%	\$ 195,419
Private Equity	Private Equity	Advent International GPE IX, L.P.	\$	1,500,000	\$ 485,712		-	\$ -	100.0%	74.7%	\$ 1,985,712
Private Equity	Private Equity	AE Industrial Partners Fund II, L.P.	\$	599,811	\$ 79,979		-	\$ 276,980	43.4%	37.5%	\$ 956,770
Private Equity	Private Equity	Agilitas 2020 Private Equity Fund	\$	155,153	\$ 93,805	\$	-	<u>\$</u> -	NM	NM	\$ 248,958
Private Equity	Private Equity	Alchemy Special Opportunities Fund IV, L.P.	\$	1,029,694	\$ 249,662	\$	-	\$ -	21.7%	19.8%	\$ 1,279,356
Private Equity	Private Equity	Aldrich Capital Partners Fund, L.P.	\$	166,338	\$ 29,779 \$ 12,823		-	\$ 42,078	40.0%	22.8%	\$ 238,194
Private Equity Private Equity	Private Equity Private Equity	Alsop Louie Capital II, L.P. Alsop Louie Capital III, L.P.	\$ \$	74,286	\$ 12,823 \$ 12,703		-	\$ - \$ -	N/A N/A	2.5% 15.5%	\$ 12,823 86,989
Private Equity	Private Equity	Ampersand CF, L.P.	\$	336,519	\$ 156,837	\$	-	\$ -	28.6%	15.4%	\$ 493,356
Private Equity	Private Equity	Atlantic Street Capital II, L.P.	\$	330,319	\$ 15,088	\$	6,443	\$ -	50.2%	37.0%	\$ 15,088
Private Equity	Private Equity	Atlantic Street Capital III, L.P.	\$	-	\$ 17,557	\$	978,115	\$ -	40.6%	30.5%	\$ 17,557
Private Equity	Private Equity	Atlantic Street Capital IV, L.P.	\$		\$ 112,909	S	-	\$ 9,375	61.2%	36.2%	\$ 1,084,909
Private Equity	Private Equity	Australis Partners Fund, L.P.	\$	2,062,496	\$ 236,605	S	-	\$ -	9.1%	2.0%	\$ 2,299,101
Private Equity	Private Equity	BDCM Opportunity Fund IV, L.P.	\$	1,189,641	\$ 594,596	\$	-	\$ -	N/A	9.7%	\$ 1,784,237
Private Equity	Private Equity	Bertram Growth Capital I, L.P.	\$	36,708	\$ 2,378	\$	31,527	\$ -	16.4%	11.3%	\$ 39,086
Private Equity	Private Equity	Blackfin Financial Services Fund III, L.P.	\$	2,087,517	\$ 442,826	\$	-	\$ 2,754	NM	-63.0%	\$ 2,533,098
Private Equity	Private Equity	Blackstone Capital Partners IV, L.P.	\$	_	\$ 4,871	\$	712,694	\$ -	N/A	37.5%	\$ 4,871
Private Equity	Private Equity	Blackstone Capital Partners IV - Secondary	\$	-	\$ 325	\$	47,513		N/A	14.0%	\$ 325
Private Equity	Private Equity	Blackstone Capital Partners V, L.P.	\$	-	\$ 7,714	\$	-	\$ 13,160	N/A	7.6%	\$ 20,875
Private Equity	Private Equity	Blackstone Capital Partners VI, L.P.	\$	201,425			,775,490	\$ 40,791	N/A	12.8%	\$ 279,550
Private Equity	Private Equity	Blackstone Capital Partners VII, L.P.	\$	1,991,127	\$ 212,680	\$	2,932	\$ 187,665	N/A	20.7%	\$ 2,391,473
	Private Equity	Blackstone Communications Partners I, L.P.	\$		\$ 1,492	\$		\$ 158	N/A	6.5%	\$ 1,650
Private Equity	Private Equity	BRV Aster Fund II, L.P.	\$	975,000			-	\$ 36,629	49.7%	34.4%	\$ 1,086,751
Private Equity	Private Equity	BRV Aster Fund III, L.P.	\$	388,889			-	\$ -	15.8%	-4.7%	\$ 396,439
Private Equity	Private Equity	BRV Aster Opportunity Fund II, L.P.	\$	84,028			-		0.0%	-2.0%	\$ 90,302
Private Equity	Private Equity	Carlyle Partners V, L.P.	\$	(7,359)			101,892	\$ 21,213	N/A	13.7%	\$ 21,734
Private Equity	Private Equity	Carlyle Partners VI, L.P.	\$	642,852			,517,655		N/A	17.8%	\$ 921,095
Private Equity	Private Equity	Carlye U.S. Equity Opportunity Fund II, L.P.	\$	1,599,691			-	\$ 632,495	N/A	11.9%	\$ 2,505,357
Private Equity	Private Equity	Canaan XI, L.P.	\$	1,061,284			- 220 500	\$ -	54.7%	49.6%	\$ 1,100,218
Private Equity	Private Equity	Centerbridge Capital Partners, L.P.	\$	(11,600)	\$ 16,541	\$	238,509	\$ 14,523	N/A	19.3%	\$ 19,464

Assembly Bill 2833 Fiscal Year-Ended June 30, 2021

Fiscal Year-Ended	June 30, 2021			A	В		С			_	Sum of A + B + C
Asset Category	Functional Category	Alternative Investment Fund	N	Management Fees ¹	Fund Expenses ²	Carried Interest ³	Portfolio Company Expenses ⁴	Since Inception Gross Return ⁵	Since Inception Net Return ⁶		Total Fees
Private Equity	Private Equity	Centerbridge Capital Partners II, L.P.	\$	119,222	\$ 47,491	\$ - \$	302	N/A	-5.4%	\$	167,015
Private Equity	Private Equity	Centerbridge Capital Partners III, L.P.	\$	851,649	\$ 256,213	\$ 5,153,518 \$	22,048	NM	20.5%	\$	1,129,910
Private Equity	Private Equity	Chart Capital Partners II, L.P.	\$	4,256	\$ 16,807	\$ - \$	(0)	14.1%	9.6%	\$	21,063
Private Equity	Private Equity	Clarion Investors II, L.P.	\$	34,884		\$ 1,197,604 \$	91,268	N/A	37.3%	\$	141,214
Private Equity	Private Equity	Clarion Investors III, L.P.	\$	489,454	\$ 176,326	\$ - \$	721,092	42.2%	38.2%	\$	1,386,872
Private Equity	Private Equity	Clearlake Capital Partners III, L.P.	\$	248,952	\$ 27,493	\$ 6,944,300 \$	-	N/A	40.5%	\$	276,445
Private Equity	Private Equity	Clearlake Capital Partners V, L.P.	\$	858,340	\$ 332,986	\$ 752,158 \$	-	63.9%	55.7%	\$	1,191,326
Private Equity	Private Equity	Clearlake Capital Partners VI, L.P.	\$	3,059,551	\$ 697,357	\$ - \$	- 7.474	87.8%	84.0%	\$	3,756,908
Private Equity	Private Equity	CVC Capital Partners VI (B) L.P.	\$	978,597	\$ 42,695	\$ - \$	7,474	22.6%	18.9%	\$	1,028,766
Private Equity	Private Equity	CVC Capital Partners VII, L.P.	\$ \$	3,392,220 298,053	\$ 1,286,847 \$ 131,331	S - S	2,769	33.1%	34.3% NM	\$	4,681,835 429,384
Private Equity	Private Equity	CVC Capital Partners VIII, L.P.	\$ \$				-	NM		\$	
Private Equity	Private Equity	CVC European Equity Partners III, L.P.	\$ \$	-	\$ 4,991 \$ 7,495	*	-	40.0% 22.6%	41.0%	\$	4,991
Private Equity	Private Equity	CVC European Equity Partners IV (D), L.P.	\$ \$	-	\$ 7,495	S - S	-	9.1%	16.7% 6.5%	\$	7,495 3,384
Private Equity	Private Equity	CVC European Equity Partners Tandem Fund, L.P.	\$			7	225 974	26.4%		\$	
Private Equity Private Equity	Private Equity Private Equity	CVC European Equity Partners V (A), L.P. Excellere Capital Fund II, L.P.	\$ \$	-	\$ 13,364 \$ 25,719	\$ 1,068,818 \$ \$ 2,179,119 \$	225,874	20.4% N/A	16.5% 32.0%	\$	239,238 25,719
Private Equity Private Equity	Private Equity Private Equity	Excellere Capital Fund II, L.P. Excellere Capital Fund III, L.P.	\$ \$	680,170	\$ 25,719	\$ 2,1/9,119 \$ \$ - \$	<u>-</u>	N/A N/A	21.0%	\$	957,963
Private Equity Private Equity	Private Equity Private Equity	Foundation Investment Partners, L.P.	\$	9,855	\$ 277,792 \$ 6,943	\$ 225,875 \$	5,018	N/A 49.6%	30.7%	\$	21,816
Private Equity	Private Equity	Foundation Investment Partners II, L.P.	\$	242,312	\$ 17,416	\$ 223,873	3,018 3,018	13.8%	10.8%	\$	264,421
Private Equity	Private Equity	Gateway Private Equity Fund, L.P.	\$	1,560,995	\$ 85,064	S - S	4,093	N/A	16.0%	\$	1,646,059
Private Equity	Private Equity	Gateway Private Equity Fund, E.F. Gateway Private Equity Fund-B, L.P.	\$	1,015,744	\$ 44.914	s - s	<u>-</u>	N/A N/A	36.3%	\$	1,060,657
Private Equity	Private Equity	GGV Capital IV, L.P.	\$	1,202,240	\$ 3,848,085	S - S	<u>-</u>	N/A N/A	16.6%	\$	5,050,325
Private Equity	Private Equity	GGV Capital IV, L.P.	\$	710,193	\$ 554,069	S - S	-	N/A N/A	35.2%	\$	1,264,263
Private Equity	Private Equity	GGV Capital VI Plus, L.P.	\$	710,193	\$ 12,182	\$ - \$	<u>-</u>	N/A N/A	67.8%	\$	12,182
Private Equity	Private Equity	GGV Capital VI, L.P.	\$	720,762	\$ 27,896	s - s	-	N/A	33.5%	\$	748,658
Private Equity	Private Equity	GGV Capital VII Plus, L.P.	\$	720,702	\$ 11,639	s - s	-	31.5%	21.7%	\$	11,639
Private Equity	Private Equity	GGV Capital VII, L.P.	\$	1,229,207	\$ 48,010	s - s	<u>-</u>	57.3%	32.9%	\$	1,277,218
Private Equity	Private Equity	GGV Capital VIII, L.P.	\$	450,000	\$ 69,632	\$ - \$	-	0.0%	-7.1%	\$	519,632
Private Equity	Private Equity	GGV Discovery I, L.P.	\$	223,644	\$ 13,183	s - s	-	N/A	20.2%	\$	236,827
Private Equity	Private Equity	GGV Discovery II, L.P.	\$	388,648	\$ 11,292	s - s	-	76.1%	44.4%	\$	399,939
Private Equity	Private Equity	GGV Discovery III, L.P.	\$	187,500	\$ 23,497	\$ - \$	-	68.8%	-3.0%	\$	210,997
Private Equity	Private Equity	GBOF V Feeder SCS	\$	1,446,105	\$ 196,167	s - s	22,816	23.2%	21.8%	S	1,665,087
Private Equity	Private Equity	GI Mint Holdings, L.P.	\$	138,747	\$ 163,487	\$ - \$	133,244	36.0%	4.5%	\$	435,478
Private Equity	Illiquid Credit	Glendon Opportunities Fund, L.P.	\$	734,683	\$ 66,756	\$ - \$	44,088	9.4%	7.5%	\$	845,527
Private Equity	Illiquid Credit	Glendon Opportunities Fund II, L.P.	\$	776,918	\$ 92,302	s - s	117,327	35.1%	34.1%	\$	986,548
Private Equity	Private Equity	Goode Partners Consumer Fund II, L.P.	\$	(102,118)	\$ 6,359	\$ 2,033,717 \$	177,537	11.3%	48.1%	\$	81,778
Private Equity	Private Equity	Goode Partners Consumer Fund III, L.P.	\$	107,209	\$ 16,281	S - S	38,314	11.3%	6.2%	\$	161,804
Private Equity	Private Equity	Great Point Partners III, L.P.	\$	275,946	\$ 56,796	\$ - \$	72,161	14.8%	11.3%	\$	404,903
Private Equity	Private Equity	Green Equity Investors VII, L.P.	\$	1,656,933	\$ 142,358	\$ 2,659,532 \$	-	39.3%	30.2%	\$	1,799,291
Private Equity	Private Equity	Green Equity Investors VIII, L.P.	\$	1,395,007	\$ 297,236	S - S	-	25.3%	8.9%	\$	1,692,243
Private Equity	Private Equity	Greycroft Growth, L.P.	\$	135,000	\$ 11,279	\$ - \$	-	N/A	16.5%	\$	146,279
Private Equity	Private Equity	Greycroft Growth II, L.P.	\$	150,000	\$ 7,481	\$ - \$	-	78.9%	60.2%	\$	157,481
Private Equity	Private Equity	Greycroft Partners II, L.P.	\$	55,682	\$ 15,935	\$ 601,682 \$	-	N/A	19.6%	\$	71,617
Private Equity	Private Equity	Greycroft Partners III, L.P.	\$	175,480	\$ 17,485	\$ 45,393 \$	-	N/A	17.8%	\$	192,965
Private Equity	Private Equity	Greycroft Partners IV, L.P.	\$	184,688	\$ 15,637	\$ - \$	-	N/A	36.4%	\$	200,325
Private Equity	Private Equity	Gridiron Capital Fund II, L.P.	\$	17,162	\$ 5,724	\$ - \$	-	N/A	13.6%	\$	22,886
Private Equity	Private Equity	Hellman & Friedman Capital Partners VIII, L.P.	\$	814,420	\$ 29,868	\$ 881,780 \$	4,129	N/A	25.4%	\$	848,417
Private Equity	Private Equity	Hellman & Friedman Capital Partners IX, L.P.	\$	2,248,914	\$ 663,737	\$ - \$	1,577	38.0%	34.6%	\$	2,914,228
Private Equity	Private Equity	Hellman & Friedman Capital Partners X, L.P.	\$	358,516			-	NM	NM	\$	490,558
Private Equity	Private Equity	Incline Equity Partners III, L.P.	\$	(85,672)		\$ 775,580 \$		N/A	37.2%	\$	90,517
Private Equity	Private Equity	Incline Equity Partners IV, L.P. (JPM)	\$	74,659	\$ 5,564	\$ 171,423 \$	107,381	37.6%	26.9%	\$	187,604
Private Equity	Private Equity	Incline Equity Partners IV, L.P.	\$	279,973			402,678	37.6%	26.9%	\$	703,515
Private Equity	Private Equity	Insignia Capital Partners (Parallel A), L.P.	\$	1,019,612			361,047	38.2%	27.6%	\$	1,528,077
Private Equity	Private Equity	Institutional Venture Partners XIV, L.P.	\$	1,125,000				N/A	15.0%	\$	1,149,683
Private Equity	Private Equity	Institutional Venture Partners XV, L.P.	\$	2,193,248	\$ 31,074	\$ 22,759,070 \$	-	N/A	33.8%	\$	2,224,322
Private Equity	Private Equity	Jade Equity Investors, L.P.	\$	746,248	\$ 47,226	\$ 758,087 \$	-	173.8%	108.0%	\$	793,474
Private Equity	Private Equity	JMI Equity Fund VI, L.P.	\$	-	\$ 3,952			N/A	11.5%	\$	3,952
	Private Equity	JMI Equity Fund VII, L.P.	\$	206,313	\$ 33,926	\$ 7,951,461 \$	1,289	N/A	17.7%	S	241,528

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Assembly I Fiscal Year-Ended				A	В		C				Sum of A + B + C
Asset Category	Functional Category	Alternative Investment Fund	N	Aanagement Fees ¹	Fund Expenses ²	Carried Interest ³	Portfolio Company Expenses ⁴	Since Inception Gross Return ⁵	Since Inception Net Return ⁶		Total Fees
Private Equity	Private Equity	Joy Capital I, L.P.	\$	78,125		\$ 1,022,513	\$ -	51.6%	43.3%	\$	84,809
Private Equity	Private Equity	Joy Capital II, L.P.	\$	103,125	., ., .	\$ -	\$ -	22.3%	15.0%	\$	109,568
Private Equity	Private Equity	Joy Capital III, L.P.	\$	979,091	7	\$ -	\$ -	69.0%	51.0%	\$	1,020,677
Private Equity	Private Equity	Joy Capital Opportunity, L.P.	\$	210,787	, , , , , , ,	\$ -	\$ -	39.6%	33.8%	\$	253,647
Private Equity	Private Equity	Joy Capital Opportunity, L.P. (JPM)	\$	126,472	- / / /	\$ -	\$ -	39.6%	26.2%	\$	152,188
Private Equity	Private Equity	J.P. Morgan Emerging Managers Program	\$	379,500	\$ 1,970	, , , , , , , ,	\$ -	21.4%	18.9%	\$	381,470
Private Equity	Private Equity	J.P. Morgan Emerging Managers Program II	\$	384,654	\$ -	\$ 4,079,939	\$ -	38.7%	36.1%	\$	384,654
Private Equity	Private Equity	J.P. Morgan Emerging Managers Program III	\$	374,444			\$ -	36.8%	33.1%	\$	408,033
Private Equity Private Equity	Private Equity Private Equity	J.P. Morgan Emerging Managers Program IV Juggernaut Capital Partners II, L.P.	\$ \$	433,856 973,052		\$ - \$ 9,369,009	\$ - \$ 48,399	18.2% 20.3%	15.3% 14.2%	\$	525,300 1,186,166
Private Equity	Private Equity	Juggernaut Capital Partners III, L.P.	\$	1,310,577			\$ 55,438	0.0%	11.9%	\$	1,672,453
Private Equity	Private Equity	Juggernaut Capital Partners IV, L.P.	\$	1,967,539	\$ 397,726	•	\$ 94,961	46.5%	34.6%	\$	2,460,226
Private Equity	Private Equity	JZI Fund III, L.P.	\$	54,144			\$ 94,901	N/A	11.2%	\$	148,160
Private Equity	Private Equity	KarpReilly Capital Partners II, L.P.	\$	50,363		\$ -	\$ -	7.9%	5.8%	\$	64,318
Private Equity	Private Equity	Kerogen Expansion Fund, L.P.	\$	132,025	\$ 27,862		\$ -	19.7%	13.0%	\$	159,887
Private Equity	Private Equity	LAV Biosciences Fund IV, L.P.	\$	839,962		\$ -	\$ 2,844	54.3%	43.6%	\$	918,465
Private Equity	Private Equity	LAV Biosciences Fund V, L.P.	\$	822,229		\$ -	\$ -	63.5%	48.2%	\$	927,297
Private Equity	Private Equity	LAV Biosciences Fund VI, L.P.	\$	273,162			\$ -	21.7%	-4.7%	\$	345,495
Private Equity	Private Equity	LAV Biosciences Fund VI Opportunities, L.P.	\$	-	\$ 33,521	\$ -	\$ -	39.9%	2.6%	\$	33,521
Private Equity	Private Equity	Lightyear Fund III, L.P.	\$	150,586	\$ 43,377	\$ -	\$ -	31.1%	24.9%	\$	193,963
Private Equity	Private Equity	Lightyear Fund IV, L.P.	\$	1,601,662	\$ 206,350	\$ 4,933,932	\$ -	29.0%	20.5%	\$	1,808,012
Private Equity	Private Equity	Lightyear Fund V, L.P.	\$	1,583,062	\$ 500,615	\$ -	\$ 50,227	20.7%	-4.9%	\$	2,133,904
Private Equity	Private Equity	Marlin Equity IV, L.P.	\$	-	\$ 28,015	\$ -	\$ 451,780	13.8%	9.4%	\$	479,795
Private Equity	Private Equity	MBK Partners Fund III, L.P.	\$	900,658		, , , , , , ,	\$ -	25.2%	18.9%	\$	937,134
Private Equity	Private Equity	MBK Partners Fund IV, L.P.	\$	640,982	\$ 254,118		\$ -	47.2%	35.8%	\$	895,100
Private Equity	Private Equity	MBK Partners Fund V, L.P.	\$	848,630	\$ 169,542		\$ -	NM	105.8%	\$	1,018,172
Private Equity	Private Equity	Mercato Partners Growth II, L.P.	\$	105,000			\$ -	18.3%	16.0%	\$	105,000
Private Equity	Private Equity	Moelis Capital Partners Opp. Fund I-B LP	\$	22,704			\$ 28,602	20.0%	16.6%	\$	78,448
Private Equity	Private Equity	Montefiore Investment V, S.L.P.	\$	896,646		\$ -	\$ -	1.0%	-42.1%	\$	1,217,602
Private Equity	Private Equity	NeoTribe Ventures I, L.P.	\$	112,500	\$ 5,646	\$ -	\$ -	175.0%	19.0%	\$	118,146
Private Equity	Private Equity	NeoTribe Ventures II, L.P.	\$	238,735		\$ -	\$ -	13.0%	-26.5%	\$	247,391
Private Equity	Private Equity	New Mainstream Capital II, L.P.	\$	26,077	\$ 21,340		\$ 87,891	N/A	10.3%	\$	135,308
Private Equity	Private Equity	NexPhase Capital Fund IV, L.P.	\$	212,220			\$ 126,770	65.4%	69.2%	\$	401,592
Private Equity	Private Equity	Next Coast Ventures I, L.P.	\$ \$	87,036 296,400		\$ -	\$ - \$ -	53.5%	41.9%	\$ \$	94,574
Private Equity	Private Equity Illiquid Credit	Next Coast Ventures II, L.P.	\$	1,083,527	\$ 20,328 \$ 136,218	\$ - \$ -	\$ - \$ 7,430	4.6% 7.3%	-3.8% 5.1%	\$	316,728 1,227,175
Private Equity Private Equity	Illiquid Credit	Oaktree Opportunities Fund IX, L.P. Oaktree Opportunities Fund VIII, L.P.	\$	2,948			\$ 4,723	12.9%	9.1%	\$	22,473
Private Equity	Illiquid Credit	Oaktree Opportunities Fund VIII, L.P. Oaktree Opportunities Fund VIII b, L.P.	\$	221,128		\$ (230,097)	\$ 7,492	9.5%	6.8%	\$	272,798
Private Equity	Illiquid Credit	OCM Opportunities Fund V, L.P.	\$	-		\$ 3,087	\$ 7,492	18.4%	14.1%	\$	5,561
Private Equity	Private Equity	OCM Opportunities Fund VI, L.P.	\$		\$ 2,260	\$ 1,483	\$ -	11.9%	8.8%	\$	2,260
Private Equity	Illiquid Credit	OCM Opportunities Fund VII, L.P.	\$	_		\$ -	\$ -	10.1%	7.3%	\$	9,482
Private Equity	Illiquid Credit	OCM Opportunities Fund VII, E.F.	\$	-			\$ -	21.8%	16.5%	\$	4,793
Private Equity	Private Equity	One Rock Capital Partners II, L.P.	\$	950,760			\$ 327,296	26.6%	20.1%	\$	1,324,612
Private Equity	Private Equity	One Rock Capital Partners III, L.P.	\$	912,502		\$ -	\$ 587,497	N/A	-4.5%	\$	1,761,602
Private Equity	Private Equity	Onex Partners II, L.P.	\$	-		\$ -	\$ 794	N/A	12.7%	\$	4,931
Private Equity	Private Equity	Onex Partners III, L.P.	\$	100,267		\$ -	\$ 13,764	N/A	11.3%	\$	153,649
Private Equity	Private Equity	Onex Partners IV, L.P.	\$	781,077		\$ -	\$ 55,909	N/A	8.3%	\$	899,598
Private Equity	Private Equity	Onex Partners V, L.P.	\$	3,301,425	\$ 502,241		\$ 1,177	29.5%	14.8%	\$	3,804,843
Private Equity	Private Equity	Osceola Fund I, L.P.	\$	126,134				9.7%		\$	361,414
Private Equity	Private Equity	PAI Europe VII, L.P.	\$	2,683,951			\$ -	23.8%		\$	3,431,058
Private Equity	Private Equity	Palladium Equity Partners IV, L.P.	\$	621,087				16.7%	10.1%	\$	1,150,185
Private Equity	Private Equity	Palm Beach Capital Fund IV, L.P.	\$	-	\$ 52,503			37.4%	31.5%	\$	223,277
Private Equity	Private Equity	Peak Rock Capital Fund, L.P.	\$	76,531	\$ -			34.6%	21.4%	\$	76,531
Private Equity	Private Equity	Peloton Equity II, L.P.	\$	970,879				57.5%	51.8%	\$	1,029,076
Private Equity	Private Equity	Permira Europe III, L.P.	\$	-	\$ 8,404			N/A	25.8%	\$	8,404
Private Equity	Private Equity	RedBird Capital Partners Series 2019, L.P.	\$	<u> </u>	\$ 279,529			31.0%	15.1%	\$	1,538,064
Private Equity	Private Equity	Revelstoke Capital Partners Single Asset Fund I, L.P.	\$	387,213				51.7%	45.9%	\$	410,144
Private Equity	Private Equity	Riverside Capital Appreciation Fund VI, L.P.	\$	1,020,003	\$ 143,739	\$ 1,951,117	\$ -	N/A	11.8%	\$	1,163,742

Assembly Bill 2833 Fiscal Year-Ended June 30, 2021

Fiscal Year-Ended	d June 30, 2021			A	В		С				Sum of $A + B + C$
Asset Category	Functional Category	Alternative Investment Fund	M	anagement Fees ¹	Fund Expenses ²	Carried Interest ³	Portfolio Company Expenses ⁴	Since Inception Gross Return ⁵	Since Inception Net Return ⁶		Total Fees
Private Equity	Private Equity	Riverside Micro-Cap Fund V, L.P.	\$	906,857	\$ 109,897	\$ -	\$ -	43.6%	22.1%	\$	1,016,754
Private Equity	Private Equity	Rizvi Opportunistic Equity Fund II	\$	41,708	• ., .	\$ -	\$ -	N/A	14.6%	\$	49,128
Private Equity	Private Equity	Silverhawk Capital Partners II, L.P.	\$	-	. ,	\$ 16,087	\$ -	N/A	20.6%	\$	9,085
Private Equity	Private Equity	Silver Lake Partners III, L.P.	\$	-	\$ 9,898	,	\$ -	N/A	18.4%	\$	9,898
Private Equity	Private Equity	Silver Lake Partners IV, L.P.	\$	698,629			\$ 18,434	N/A	28.5%	\$	777,941
Private Equity	Private Equity	Silver Lake Partners V, L.P.	\$	1,605,183		\$ 3,467,839	\$ 57,727	39.0%	34.9%	\$	1,980,882
Private Equity	Private Equity	Silver Lake Partners VI, L.P.	\$ \$	2,676,783 33,672		\$ - \$ 1,908,659	\$ 54,881 \$ -	70.0%	39.4%	\$ \$	3,622,174
Private Equity	Private Equity Private Equity	Silver Oak Services Partners II, L.P. Sinovation Fund IV, L.P.	\$ \$	1,875,000		\$ 1,908,639	\$ - \$ -	N/A 46.2%	27.1% 22.2%	\$	75,930 1,932,702
Private Equity Private Equity	Private Equity	Siris Partners III, L.P.	\$	743,635	\$ 37,702 \$ 41,794		\$ 21,354	40.276 N/A	14.1%	\$	806,783
Private Equity	Private Equity Private Equity	Siris Partners IV, L.P.	\$	1,639,202		\$ -	\$ 74,684	25.7%	20.2%	S	1,870,906
Private Equity	Private Equity Private Equity	Southfield Capital III, L.P.	\$	229,574		\$ -	\$ 74,064	NM	NM	\$	342,071
Private Equity	Private Equity	Southvest Fund V, L.P.	\$				\$ 12,012	N/A	15.6%	\$	18,390
Private Equity	Private Equity	Sterling Investment Partners III, L.P.	\$	(2)		,	\$ 2,897,667	37.0%	24.6%	S	3,097,270
Private Equity	Private Equity	Sterling Investment Partners IV, L.P.	\$	3,308,072		\$ -	\$ 640,585	NM	NM	\$	5,332,621
Private Equity	Private Equity	STG VI, L.P.	\$	358,630		\$ -	\$ 040,565	NM	NM	S	498,295
Private Equity	Private Equity	Storm Ventures Fund V, L.P.	\$	687,549		\$ -	\$ -	31.7%	22.5%	\$	715,352
Private Equity	Private Equity	Storm Ventures Fund VI, L.P.	\$	709,478			\$ -	58.2%	30.3%	\$	712,399
Private Equity	Private Equity	Summit Park I-A	\$	-		\$ -	\$ -	N/A	26.7%	\$	9,665
Private Equity	Private Equity	Summit Park II, L.P.	\$	_			\$ -	N/A	29.4%	\$	14,024
Private Equity	Private Equity	Summit Park III, L.P.	\$	147,854			\$ -	0.3%	-4.4%	\$	153,339
Private Equity	Private Equity	Summit Partners Europe Growth Equity Fund III	\$	383,248		\$ -	\$ 219	2.0%	-13.5%	\$	624,109
Private Equity	Private Equity	Summit Partners Growth Equity Fund VIII-A, L.P.	\$	782,208		\$ 2,667,162	\$ 1,394	N/A	27.5%	\$	808,878
Private Equity	Private Equity	Summit Partners Private Equity Fund VII-A, L.P.	\$	-	\$ 2,370	\$ 603,396	\$ -	18.0%	10.8%	\$	2,370
Private Equity	Private Equity	Summit Partners Venture Capital Fund II-A, L.P.	\$	-	\$ 1,476	\$ 70,393	\$ -	32.0%	19.3%	\$	1,476
Private Equity	Private Equity	Summit Ventures VI-A, L.P.	\$	-	\$ 1,735	\$ 116,994	\$ -	27.0%	15.4%	\$	1,735
Private Equity	Private Equity	TA XIII, L.P.	\$	1,114,167	\$ 313,497	\$ 638,079	\$ -	73.7%	56.7%	\$	1,427,664
Private Equity	Private Equity	TCV V, L.P.	\$	(30,244)	\$ 18,692	\$ 233,547	\$ -	14.7%	10.6%	\$	(11,552)
Private Equity	Private Equity	TCV VI, L.P.	\$	(24,926)	\$ 18,407	\$ 1,516,710	\$ -	19.7%	12.3%	\$	(6,520)
Private Equity	Private Equity	TCV VII, L.P.	\$	(280,129)	\$ 26,040	\$ 4,284,014	\$ -	N/A	23.4%	\$	(254,089)
Private Equity	Private Equity	Ten Coves Capital I, L.P.	\$	22,748	, , , , ,	\$ 1,557,524	\$ -	N/A	92.5%	\$	35,423
Private Equity	Private Equity	Ten Coves Capital II, L.P.	\$	114,166		\$ -	\$ -	N/A	22.3%	\$	153,262
Private Equity	Private Equity	Ten Coves Capital III, L.P.	\$	69,496			\$ -	NM	-33.6%	\$	116,712
Private Equity	Natural Resources & Commodities	The Energy & Minerals Group Fund III, L.P.	\$	1,222,039		\$ -	\$ 22,431	-7.5%	-9.4%	\$	1,289,315
Private Equity	Private Equity	The Fifth Alcuin Fund Limited Partnership	\$	(12,690)	* - ,	\$ -	\$ 89,834	NM	-0.1%	\$	122,147
Private Equity	Private Equity	Thoma Bravo Discover Fund III, L.P.	\$	769,562	, ,,,,	\$ -	\$ 328	34.5%	0.8%	\$	881,651
Private Equity	Private Equity	Thoma Bravo Fund XIV, L.P.	\$	495,833		\$ -	\$ 387,055	51.6%	-1.7%	\$	988,495
Private Equity	Private Equity	TPG Partners IV, L.P.	\$	-			\$ -	N/A	15.2%	\$	22,687
Private Equity	Private Equity	Triton Fund V, L.P.	\$	2,366,882	\$ 2,277,973	\$ -	\$ 1,057,242	18.0%	17.9%	\$	5,702,097
Private Equity	Private Equity	Undisclosed ⁷	\$	3,993,208		4 .0,0,0,00	\$ -	N/A	14.6%	\$	4,876,915
Private Equity	Private Equity	USV 2019, L.P.	\$	215,518	\$ 38,157		\$ -	201.7%	135.3%	\$	253,675
Private Equity	Private Equity	USV Opportunity 2019, L.P.	\$	107,805		\$ -	\$ -	46.5%	32.9%	\$	113,932
Private Equity	Private Equity	Vinci Capital Partners III, L.P.	\$	860,137		\$ -	\$ -	36.1%	17.8%	\$	898,260
Private Equity	Private Equity	Vista Equity Partners Fund III, L.P.	\$	50,532	\$ 26,242		\$ -	N/A	27.9%	\$	76,774
Private Equity	Private Equity	Vista Equity Partners Fund IV, L.P.	\$	653,294		\$ -	\$ -	N/A	15.8%	\$	716,988
Private Equity	Private Equity	Vista Equity Partners Fund V, L.P.	\$	1,838,785		\$ -	\$ -	N/A	21.7%	\$	1,977,298
Private Equity	Private Equity	Vista Equity Partners Fund VI, L.P.	\$	2,989,842	\$ 132,456	\$ 18,089,064	\$ -	N/A	22.2%	\$	3,122,298
Private Equity	Private Equity	Vista Equity Partners Fund VII, L.P.	\$	2,942,397	*/		\$ -	24.2%	11.5%	\$	3,038,193
	Private Equity	Warren Equity Partners Fund II, L.P.	\$	145,760						\$	221,415
	Private Equity	Warren Equity Partners Fund III, L.P.	\$,	\$ 28,346			NM	NM	\$	239,352
Private Equity	Private Equity	Wynnchurch Capital Partners V, L.P.	\$		\$ 45,256			104.3%	69.8%	\$	1,669,868
Real Asset	Infrastructure	DIF Infrastructure VI, L.P.	\$	3,444,955				NM 0.0%	NM -4.2%	\$	4,557,204
Real Asset	Infrastructure Infrastructure	Grain Spectrum Holdings III, L.P. Pan-Europe Infrastructure III, L.P.	\$	204,338 1.881.037			\$ 35,529			\$	257,406
Real Asset		,	\$, ,	, , , , ,		\$ 711,199	15.6%	-0.6%	\$	2,816,256
Real Estate Real Estate	Opportunistic RE	Aermont Capital Real Estate Fund IV SCSp	\$,	\$ 57,522 \$ 25,491		<u>\$</u> -	NM	-11.6%	9	948,611
K POL H CTOTA	Core and Value Added RE	AEW Value Investors Asia III, L.P.	\$	625,000				10.0%	8.1%	3	660,481
Real Estate	Opportunistic RE	AG Asia Realty Fund IV, L.P.	\$	1,345,681	\$ 184,833	\$ -	\$ -	6.1%	4.3%	•	1,530,514

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Fiscal Year-Ended	1 June 30, 2021			A		В		L L			Sum of A + B + C
Asset Category	Functional Category	Alternative Investment Fund	ľ	Management Fees ¹	Fun	d Expenses ²	Carried Interest ³	Portfolio Company Expenses ⁴	Since Inception Gross Return ⁵	Since Inception Net Return ⁶	Total Fees
Real Estate	Core and Value Added RE	Bain Capital Real Estate Fund I-A, L.P.	\$	1,400,000	\$	364,263	\$ -	\$ -	18.9%	17.5%	\$ 1,764,263
Real Estate	Core and Value Added RE	CapMan Nordic Real Estate II FCP-RAIF	\$	494,458	\$	90,560	\$ -	\$ -	17.0%	12.4%	\$ 585,018
Real Estate	Core and Value Added RE	CapMan Nordic Real Estate III FCP-RAIF	\$	395,615	\$	122,221	\$ -	\$ -	40.3%	-0.9%	\$ 517,836
Real Estate	Opportunistic RE	Capri Urban Investors, LLC	\$	167,280	\$	-	\$ -	\$ -	N/A	-13.0%	\$ 167,280
Real Estate	Opportunistic RE	Carlyle Europe Real Estate Partners III, L.P.	\$	22,689	\$	6,502	\$ -	\$ -	4.0%	0.9%	\$ 29,191
Real Estate	Opportunistic RE	CityView Bay Area Fund II, L.P.	\$	1,522,611	\$	198,902	\$ -	\$ 322,40	15.5%	13.2%	\$ 2,043,913
Real Estate	Opportunistic RE	CityView Southern California Fund II, L.P.	\$	39,512	\$	229,581	\$ 9,942,511	\$ -	19.5%	17.2%	\$ 269,093
Real Estate	Opportunistic RE	CityView Western Fund I, L.P.	\$	1,349,836	\$	741,962	\$ -	\$ -	17.7%	14.4%	\$ 2,091,798
Real Estate	Core and Value Added RE	Core Property Index Fund	\$	31,769	\$	74,028	\$ -	\$ -	1.6%	1.1%	\$ 105,797
Real Estate	Opportunistic RE	Europa Fund III, L.P.	\$	-	\$	9,986	\$ 299,413	\$ -	15.0%	10.0%	\$ 9,986
Real Estate	Opportunistic RE	Europa Fund IV, L.P.	\$	488,561	\$	129,407	\$ -	\$ -	7.4%	3.2%	\$ 617,968
Real Estate	Core and Value Added RE	Heitman Asia-Pacific Property Investors, L.P.	\$	331,544	\$	155,853	\$ -	\$ -	6.5%	4.1%	\$ 487,397
Real Estate	Core and Value Added RE	Invesco Real Estate Asia Fund, L.P.	\$	1,089,262	\$	(168,020)	\$ -	\$ 210,40	8.6%	7.8%	\$ 1,131,646
Real Estate	Core and Value Added RE	Prologis European Logistics Fund, L.P.	\$	1,719,990	\$	199,836	\$ -	\$ 126,10	2 11.7%	10.5%	\$ 2,045,927
Real Estate	Core and Value Added RE	RREEF Core Plus Industrial Fund, L.P.	\$	573,203	\$	-	\$ -	\$ -	17.4%	17.0%	\$ 573,203
Real Estate	Opportunistic RE	Starwood Capital Hospitality Fund II, L.P.	\$	313,502	\$	28,890	\$ -	\$ -	10.8%	8.5%	\$ 342,392
Real Estate	Opportunistic RE	TPG Real Estate Partners III, L.P.	\$	661,309	\$	227,748	\$ -	\$ -	38.0%	22.0%	\$ 889,057

Sum of A + B + C

¹ 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.

² Fund expenses paid or accrued to 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.

³ Carried interest paid to the alternative investment fund, financial statements and partner capital account statements, and pro rata share of 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 accrued or paid fees.

⁴ LACERA's pro rata share of fees and expenses paid by the portfolio companies to the general partner or related parties.

⁵ 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.

⁶ Since-inception money-weighted net returns for Private Equity and Real Asset asset categories were calculated by LACERA using all the outflows to and inflows from the underlying fund investments, including eash 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. Real Estate since-inception IRR were provided by StepStone Group (asset category advisor). Hedge Fund, Fixed Income, and Global Equity (excluding JANA Strategic Investment Fund V) are cumulative geometric returns for holding periods less 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.

⁷ 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.

Fiscal Year-Ended June 30, 2021											
Functional Category	Name ^l	Address	Vintage Year ¹	Commitment	Contribution ³	Distributions ⁴	Distribution Plus Market Value ⁵	Since Inception Net Return ⁶	vestment Multiple	Dollar amount of the total fees paid on a fiscal year-end basis	Dollar amount of cash profit received on a fiscal year-end basis ⁹
	Fixed Income										Dasis
Illiquid Credit	BPC Opportunities Fund II, L.P.	1620 26th Street, Suite 6000N, Santa Monica, CA 90404	2014	\$ 150,000,000		\$ 181,206,897	\$ 197,278,325	8.0%		\$ 515,988	N/A
Illiquid Credit	BPC Opportunities Fund III, L.P.	1620 26th Street, Suite 6000N, Santa Monica, CA 90404	2016	\$ 170,000,000		\$ 28,563,708	\$ 238,389,314	11.7%	1.40x	\$ 2,075,332	N/A
Bank Loans	Tennenbaum Senior Loan Fund V, LLC	2951 28th Street, Suite 1000, Santa Monica, CA 90405	2014	\$ 475,000,000	\$ 436,466,576	\$ -	\$ 585,391,004	7.7%	1.34x	\$ 4,639,555	N/A
Global Equity	Global Equity Cevian Capital II Master Fund, L.P.	LaMotte Chambers, St. Helier, Jersey JE1-1BJ, United Kingdom	2016	\$ 250,000,000	\$ 250,000,000	\$ -	\$ 389,048,702	9.8%	1.56x	\$ 3,708,469	N/A
Global Equity Global Equity	JANA Strategic Investment Fund V, L.P	1330 Avenue of the Americas, 32nd Floor, New York, NY 10019	2016	\$ 120,000,000		\$ 439,028,505		17.2%		\$ 1,295,670	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		\$ -	\$ 190,928,993	16.3%	1.91x	\$ 1,966,797	N/A
	Hedge Fund								·		
Diversified Hedge Func	AQR Liquid Enhanced Alternative Premia Fund II, L.P	Two Greenwich Plaza, 4th Floor, Greenwich, CT 06830	2019	\$ 75,000,000		\$ 52,291,149		-12.7%	0.70x	\$ 23,205	\$ (22,708,851
Diversified Hedge Func	Brevan Howard Master Fund Limited	55 Baker Street, London W1U 8EW, United Kingdom	2021	\$ 250,000,000		\$ -	\$ 246,039,615	-1.6%	0.98x	\$ 1,345,076	
Diversified Hedge Func	Capula Global Relative Value Fund, L.P.	7 Clarges Street, London W1J 8AE, United Kingdom	2019	\$ 367,000,000		\$ 27,454,501		6.1%	1.10x	\$ 7,605,916	
Diversified Hedge Func	Caxton Global Investments, LLC - Class T	500 Park Avenue, New York, NY 10022	2021	\$ 200,000,000		\$ -	\$ 201,022,902	0.5%	1101%	\$ 1,698,542	
Diversified Hedge Func Diversified Hedge Func	Davidson Kempner Institutional Partners, L.P. Empyrean Capital Fund, L.P Class 2 Series N	520 Madison Avenue, 30th Floor, New York, NY 10022 10250 Constellation Blvd, Ste 2950, Los Angeles, CA 90067	2018 2015	\$ 200,000,000 \$ 22,570,495		\$ - \$ 26,370,147	\$ 243,294,129 \$ 26,370,147	6.8%		\$ 3,560,476 \$ 16,357	
Diversified Hedge Func	Exoduspoint Partners Fund, L.P Class 2 Series N	65 East 55th Street, 9th Floor, New York, NY 10022	2013	\$ 22,370,493		\$ 20,334,711		7.1%		\$ 200,667	
Diversified Hedge Func	HBK Multi-Strategy Fund, L.P.	2101 Cedar Springs Road, Suite 700, Dallas, TX 75201	2018	\$ 300,000,000		\$ 20,334,711		5.6%		\$ 5,161,301	
Diversified Hedge Func	HG Vora Special Opportunities Fund, LP - Series 1	330 Madison Avenue, 20th Floor, New York, NY 10017	2017	\$ 25,000,000		\$ 27,381,694		6.1%		\$ 29,977	
Diversified Hedge Func	Holocene Advisors Fund, L.P Class AI-A	15 East 26th Street, Suite 601, New York, NY 10010	2017	\$ 25,000,000		\$ 36,704,408		13.2%		\$ 91,330	
Diversified Hedge Func	Hudson Bay Fund, L.P.	777 3rd Avenue, 30th Floor, New York, NY 10017	2020	\$ 400,000,000		\$ -	\$ 466,623,764	19.7%	1.17x	\$ 6,262,497	
Illiquid Credit	Magnetar Lake Credit Fund, LLC	1603 Orrington Avenue,13th Floor,Evanston,60201,IL,United States	2020	\$ 317,500,000	\$ 317,500,000	\$ 8,000,000	\$ 405,749,197	56.2%	1.28x	\$ 5,022,367	\$ (58,767
Illiquid Credit	Napier Park Lake Credit Fund, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2020	\$ 488,500,000	\$ 488,500,000	\$ -	\$ 657,988,845	37.0%	1.35x	\$ 7,031,628	
Diversified Hedge Func	Palmetto Catastrophe Fund L.P Class H	31 Victoria Street, 3rd Floor West, HM 10, Hamilton, Bermuda	2018	\$ 16,568,505		\$ 15,793,611		11.9%		\$ 14,854	
Diversified Hedge Func	PIMCO Tactical Opportunities Onshore Fund L.P.	650 Newport Center Drive, Newport Beach, CA 92660	2018	\$ 225,000,000		\$ -	\$ 276,466,649	7.9%		\$ 3,253,042	
Diversified Hedge Func	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		\$ -	\$ 464,539,602	24.9%		\$ 4,054,541	
Diversified Hedge Func	San Gabriel Fund, L.P.	101 Barclay Street, 20th Floor West, New York, NY 10286	2011	\$ 397,525,000		\$ 424,600,000		5.0%		\$ 2,519,864	
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	\$ 300,500,000	\$ 347,178,199	4.6%	1.16x	\$ 2,585,528	\$ 25,019,765
Private Equity	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	s -	\$ 8,558,447
Private Equity	ABRY Partners VIII, L.P.	888 Boylston Street, 16th Floor, Boston, MA 02199	2014	\$ 35,000,000		\$ 44,820,102		9.7%	1.22x	S -	\$ 8,229,165
Private Equity	Accel IV, L.P.	428 University Avenue, Palo Alto, CA 94301	1993	\$ 5,000,000		\$ 40,440,003		78.0%		\$ -	
Private Equity	Accel V, L.P.	428 University Avenue, Palo Alto, CA 94301	1996	\$ 9,000,000		\$ 176,580,105		188.4%		\$ -	\$ 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	\$ 3,608,474	-7.4%		\$ 1,514	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		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		\$ 4,494,408		14.5%		\$ 1,113	N/A
Private Equity	Accel-KKR Capital Partners CV III, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 16,000,000		\$ 2,855,619		69.4%		\$ 3,529	N/A
Private Equity	Accel-KKR Capital Partners VI, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 110,000,000		\$ -	\$ 3,075,922	-57.5%	0.56x	\$ 2,532,772	N/A
Private Equity	Accel-KKR Growth Capital Partners III, L.P.	2500 Sand Hill Road, Menlo Park, CA 94025	2019	\$ 50,000,000		\$ -	\$ 27,519,711	29.7%	110 110	\$ 731,228	N/A
Private Equity	Access Foundation Partners Group II, LLC Access Holdings Fund I, L.P.	6 East Eager Street, Baltimore, MD 21202 6 East Eager Street, Baltimore, MD 21202	2019 2019	\$ 30,000,000 \$ 15,000,000		*	\$ 36,700,030 \$ 10,544,108	34.3% 35.4%		\$ 163,772 \$ 195,419	N/A N/A
Private Equity Private Equity	Advent International GPE IX, L.P.	160 Victoria Street, London SW1E 5LB, United Kingdom	2019	\$ 100,000,000		\$ - \$ 7,996,007		74.7%		\$ 1,985,712	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		\$ 2,298,099		45.1%		\$ 956,770	N/A
Private Equity	Agilitas 2020 Private Equity Fund	105 Piccadilly, 5th Floor, London W1J 7NJ, United Kingdom	2020	\$ 14,702,287		\$ -	\$ (6,424)) NM		\$ 248,958	N/A
Private Equity	Alchemy Plan (Pasadena), L.P.	21 Palmer Street, London SW1H 0AD, United Kingdom	2005	\$ 44,416,660		\$ 32,514,365		1.7%		\$ -	\$ 3,942,089
Private Equity	Alchemy Special Opportunities Fund IV, L.P	21 Palmer Street, London SW1H 0AD, United Kingdom	2018	\$ 89,368,119	\$ 17,528,044	\$ 2,275,126	\$ 20,660,661	19.8%	1.18x	\$ 1,279,356	N/A
Private Equity	Aldrich Capital Partners Fund, L.P.	8614 Westwood Center Drive, Suite 710, VA 22182	2018	\$ 10,000,000		\$ -	\$ 10,363,989	22.8%		\$ 238,194	N/A
Private Equity	Alsop Louie Capital II, L.P.	50 Pacific Avenue, San Francisco, CA 94111	2010	\$ 5,000,000		\$ -	•	2.5%		\$ 12,823	N/A
Private Equity	Alsop Louie Capital III, L.P.	50 Pacific Avenue, San Francisco, CA 94111	2015	\$ 5,000,000		\$ 628,968		15.5%		\$ 86,989	N/A
Private Equity	Alta California Partners II, L.P.	One Embarcadero Center, 37th Floor, San Francisco, CA 94111	1998	\$ 15,000,000		\$ 10,576,049		-5.6%		\$ -	\$ (4,423,951
Private Equity	Alta California Partners III, L.P.	One Embarcadero Center, 37th Floor, San Francisco, CA 94111 55 William Street, Suite 240, Wellesley, MA 02481	2000 2020	\$ 15,000,000 \$ 70,000,000		\$ 17,101,670		2.2% 15.4%		\$ - \$ 493,356	\$ 2,527,594 N/A
Private Equity Private Equity	Ampersand CF, L.P. Apax Europe IV-A, L.P.	Third Floor Royal Bank Place, 1 Glategny Esplanade, St. Peter Port, GY1 2HJ Guernsey	1999	\$ 19,543,836		\$ - \$ 27,299,661		7.1%		\$ 493,330	\$ 7,220,398
Private Equity	Apax Europe V-A, L.P.	Third Floor Royal Bank Place, 1 Glategny Esplanade, St. Peter Port, GY1 2HJ Guernsey	2001	\$ 57,967,184		\$ 125,378,810		36.1%		\$ -	\$ 66,330,943
Private Equity	Apollo Investment Fund III, L.P	2 Manhattanville Road, 2nd Floor, Suite 203, Purchase, NY 10577	1995	\$ 15,000,000		\$ 24,695,084		9.6%		\$ -	, ,
Private Equity	Apollo Investment Fund IV, L.P	2 Manhattanville Road, 2nd Floor, Suite 203, Purchase, NY 10577	1998	\$ 50,000,000		\$ 84,562,235		8.5%		\$ 45,716	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		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		\$ 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		\$ 13,357,475		37.0%		\$ 15,088	N/A
Private Equity	Atlantic Street Capital III, L.P.	300 Main Street, Suite 801, Stamford, CT, 06901	2015	\$ 10,000,000		\$ 6,842,986		30.5%		\$ 17,557	N/A
Private Equity	Atlantic Street Capital IV, L.P.	300 Main Street, Suite 801, Stamford, CT, 06901	2019	\$ 50,000,000		\$ 1,417		36.2%		\$ 1,084,909	N/A
Private Equity	Aurora Equity Partners II, L.P.	10877 Wilshire Boulevard, Suite 2100, Los Angeles, CA 90024	1998	\$ 30,000,000		\$ 47,497,863		4.7%		\$ -	\$ 13,705,832
Private Equity	Austin Ventures IX, L.P.	300 West Sixth Street, Suite 2300, Austin, TX 78701 300 West Sixth Street, Suite 2300, Austin, TX 78701	2006 1999	\$ 7,600,000 \$ 5,000,000		\$ 10,453,298 \$ 4,035,874		5.1%	1.36x 0.81x	S -	\$ 2,788,564 \$ (964,126
Private Equity Private Equity	Austin Ventures VII, L.P. Austin Ventures VIII, L.P.	300 West Sixth Street, Suite 2300, Austin, 1X /8/01 300 West Sixth Street, Suite 2300, Austin, TX 78701	2001	\$ 5,000,000		\$ 4,035,874 \$ 18,908,284		6.9%		\$ -	\$ (964,126
Private Equity	Australis Partners Fund, L.P.	675 Third Avenue, New York, NY 10017	2016	\$ 125,000,000		\$ 2,521,903		2.0%		\$ 2,299,101	N/A
Private Equity	BDCM Opportunity Fund IV, L.P.	One Sound Shore Drive, Suite 200, Greenwich, CT 6830	2015	\$ 100,000,000		\$ 64,242,533		9.7%		\$ 1,784,237	N/A
Private Equity	Behrman Capital II, L.P.	One Letterman Drive, Suite D4900, San Francisco, CA 94129	1998	\$ 34,101,071		\$ 41,945,892		3.0%		\$ -	
Private Equity	Behrman Capital III, L.P.	One Letterman Drive, Suite D4900, San Francisco, CA 94129	2000	\$ 35,000,000		\$ 62,109,146		11.8%		\$ -	
Private Equity	Berkshire Fund III, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1993	\$ 5,000,000		\$ 18,502,393		55.1%		\$ -	
Private Equity	Berkshire Fund IV, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1996	\$ 20,000,000		\$ 49,899,467		33.4%	2.60x	\$ -	
Private Equity	Berkshire Fund V, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	1998	\$ 40,000,000		\$ 100,517,633		23.0%		\$ -	
Private Equity	Berkshire Fund VI, L.P.	200 Clarendon Street, 35th Floor, Boston, MA 02116	2002	\$ 60,000,000				25.1%		\$ -	
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

Fiscal Year-Ended June 30, 2021			T								
Functional Category	Name ^l	Address ¹	Vintage Year ¹	Commitment	Contribution ³	Distributions ⁴	Distribution Plus Market Value⁵	Since Inception Net Return ⁶	Investment Multiple		Dollar amount of cash profit received on a fiscal year-end
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	s - s	\$ 50,174,768
Private Equity	Bertram Growth Capital I, L.P.	950 Tower Lane, Foster City, CA 94404	2006	\$ 10,000,000	\$ 9,404,833 \$	13,783,439	17,194,846	11.3%	1.83x	\$ 39,086	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		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	\$ 103,679,644	\$ 15,478,289 \$	- :		-63.0%	0.70x	\$ 2,533,098	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		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	\$ 3,144,791 \$	3,957,861		14.0%	1.28x	\$ 325	N/A
Private Equity	Blackstone Capital Partners IV, L.P.	345 Park Avenue, New York, NY 10154	2003 2006	\$ 75,000,000 \$ 74,054,134	\$ 90,134,221 \$ \$ 73,985,581 \$	211,560,359 122,264,012		37.5% 7.6%	2.36x 1.68x	\$ 4,871 \$ 20.875	N/A
Private Equity	Blackstone Capital Partners V, L.P. Blackstone Capital Partners VI, L.P.	345 Park Avenue, New York, NY 10154 345 Park Avenue, New York, NY 10154	2010	\$ 75,000,000	\$ 75,985,381 \$ \$ 85,908,839 \$	96,836,081		12.8%	1.69x	\$ 20,875 \$ 279,550	N/A N/A
Private Equity Private Equity	Blackstone Capital Partners VII, L.P.	345 Park Avenue, New York, NY 10154	2016	\$ 180,000,000	\$ 188,393,780 \$	43,705,817		20.7%	1.54x	\$ 2,391,473	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	33,906,752	6.5%	1.23x	\$ 1,650	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		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 \$	1,983,605		1.9%	1.06x	\$ 75,959	N/A
Private Equity	Brinson International Partners Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606	1998	\$ 49,256,579	\$ 53,350,625 \$	91,171,098		11.2%	1.74x	\$ 10,800	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		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	\$ 36,927,993 \$	4,905,160		34.4%	2.06x	\$ 1,086,751	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	\$ 4,500,000 \$	- (,,	-2.0%	0.98x	\$ 90,302	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	\$ 11,000,000 \$	- 1		-4.7%	0.97x	\$ 396,439	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		14.6%	2.44x	\$ 3,930	N/A
Private Equity	Canaan XI, L.P.	285 Riverside Avenue, Suite 250, Westport, CT 06880 285 Riverside Avenue, Suite 250, Westport, CT 06880	2018 2020	\$ 50,000,000 \$ 100,000,000	\$ 40,000,000 \$ \$ 18,500,000 \$	- :	,,,,,,,	49.6%	2.24x	\$ 1,100,218 \$ -	N/A N/A
Private Equity	Canaan XII, L.P. Candover 2005 Fund, L.P.	12 Charles II Street, 3rd Floor, London SW1Y 4QU, United Kingdom	2020	\$ 78,210,646	\$ 93,797,310 \$	51,259,958		-11.7%	0.94x 0.55x	s - s	\$ (42,537,352)
Private Equity Private Equity	Cardinal Health Partners, L.P.	230 Nassau Street, Princeton, NJ 08542	1997	\$ 10,000,000	\$ 10,000,000 \$	18,733,679		9.7%	0.33x 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	\$ 195,558,914 \$	42,412,602		11.9%	1.39x	\$ 2,505,357	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		6.0%	1.08x	\$ - \$	
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		25.7%	2.40x	s - s	\$ 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		22.9%	2.19x	s - s	
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	s - s	
Private Equity	Carlyle Partners V, L.P.	1001 Pennsylvania Avenue N.W., Suite 220 South, Washington, D.C. 20004	2007	\$ 75,000,000	\$ 68,482,291 \$	121,208,896	3 131,284,235	13.7%	1.92x	\$ 21,734	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	\$ 167,882,233 \$	121,094,864	327,329,563	17.8%	1.95x	\$ 921,095	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	134,038,936	19.3%	2.25x	\$ 19,464	N/A
Private Equity	Centerbridge Capital Partners II, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2010	\$ 50,000,000	\$ 57,795,257 \$	38,010,683	\$ 46,882,750	-5.4%	0.81x	\$ 167,015	N/A
Private Equity	Centerbridge Capital Partners III, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2014	\$ 75,000,000	\$ 100,209,394 \$	65,151,203	152,574,953	20.5%	1.52x	\$ 1,129,910	N/A
Private Equity	Centerbridge Capital Partners IV, L.P.	375 Park Avenue, 12th Floor, New York, NY 10152	2021	\$ 150,000,000	\$ - \$	- :		NM	NM	\$ -	N/A
Private Equity	Chart Capital Partners II, L.P.	53 Forest Avenue, Old Greenwich, CT, 10019	2010	\$ 6,700,000	\$ 8,626,374 \$	12,515,689		9.6%	1.53x	\$ 21,063	N/A
Private Equity	CHP II, L.P.	230 Nassau Street, Princeton, NJ 08540	2000	\$ 10,000,000	\$ 10,000,000 \$	15,266,971		12.6%	1.53x	\$ 1,220	N/A
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		9.9%	1.86x	\$ 15,787 \$	\$ 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		10.1%	1.37x	\$ - \$	\$ 9,314,641
Private Equity	Clarion Investors II, L.P.	527 Madison Avenue, 10th Floor, New York, NY 10022	2013 2018	\$ 7,500,000 \$ 42,500,000	\$ 7,230,833 \$ \$ 11,456,320 \$	15,187,132 820,058		37.3% 38.2%	2.82x 1.39x	\$ 141,214 \$ 1,386,872	N/A
Private Equity	Clarion Investors III, L.P. Clearlake Capital Partners III, L.P.	527 Madison Avenue, 10th Floor, New York, NY 10022 233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2018	\$ 42,500,000 \$ 75,000,000	\$ 11,456,320 \$ \$ 144.136.697 \$	296,700,233		40.5%	2.33x	\$ 1,386,872 \$ 276,445	N/A N/A
Private Equity Private Equity	Clearlake Capital Partners IV, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401 233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2012	\$ 77,000,000	\$ 123,768,971 \$	140,206,360		31.0%	1.87x	\$ 565,049	N/A
Private Equity	Clearlake Capital Partners V, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2018	\$ 100,000,000	\$ 106.269.913 \$	85,702,092		55.7%	2.26x	\$ 1,191,326	N/A
Private Equity	Clearlake Capital Partners VI, L.P.	233 Wilshire Boulevard, Suite 800, Santa Monica, CA 90401	2020	\$ 160,000,000	\$ 77,632,503 \$	1,334,184		84.0%	1.47x	\$ 3,756,908	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		-20.0%	0.24x	\$ - \$	
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		-4.6%	0.79x	\$ - \$	
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 1, 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		5.7%	1.45x	\$ - \$	
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		8.6%	1.62x	\$ - \$, ,
Private Equity	CVC Capital Partners VI (B) L.P.	111 Strand, London WC2R OAG, United Kingdom	2013	\$ 116,390,296	\$ 128,737,706 \$	78,794,410		18.9%	1.84x	\$ 1,028,766	N/A
Private Equity	CVC Capital Partners VII, L.P.	111 Strand, London WC2R OAG, United Kingdom	2017	\$ 230,150,931	\$ 144,843,797 \$	3,301,263		34.3%	1.64x	\$ 4,681,835	N/A
Private Equity	CVC Capital Partners VIII, L.P.	111 Strand, London WC2R OAG, United Kingdom	2020	\$ 237,180,114	\$ - \$	110 702 600	(426,943)	NM	NM	\$ 429,384	N/A
Private Equity	CVC European Equity Partners II, L.P.	111 Strand, London WC2R OAG, United Kingdom	1998 2001	\$ 50,000,000 \$ 30,000,000	\$ 46,360,215 \$ \$ 29,566,313 \$	110,703,608 83,252,788		18.9% 41.0%	2.39x 2.88x	\$ - \$ \$ 4.991	\$ 64,343,393 N/A
Private Equity	CVC European Equity Partners III, L.P.	111 Strand, London WC2R OAG, United Kingdom 111 Strand, London WC2R OAG, United Kingdom	2001		\$ 29,566,313 \$ \$ 69,978,928 \$	137,317,386		16.7%	2.88x 1.96x	\$ 4,991	N/A N/A
Private Equity Private Equity	CVC European Equity Partners IV (D), L.P. CVC European Equity Partners Tandem Fund, L.P.	111 Strand, London WC2R OAG, United Kingdom 111 Strand, London WC2R OAG, United Kingdom	2006	\$ 76,176,092 \$ 30,472,328	\$ 09,978,928 \$ \$ 28.711.984 \$	38,530,687		6.5%	1.96x 1.34x	\$ 3,384	N/A N/A
Private Equity	CVC European Equity Partners V (A), L.P.	111 Strand, London WC2R OAG, United Kingdom	2008	\$ 87,670,992	\$ 101.491.902 \$	190,822,013		16.5%	1.92x	\$ 239,238	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		23.0%	2.51x	\$ - \$	
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		-0.5%	0.97x	s - s	\$ (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	, ,	2.6%	1.21x	s - s	
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		6.0%	1.28x	s - s	
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		-3.1%	0.72x	\$ - \$	
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, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2007	\$ 25,000,000	\$ 21,410,078 \$	45,443,673	\$ 45,443,673	32.7%	2.12x	\$ - \$	\$ 24,033,595
Private Equity	Excellere Capital Fund II, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2011	\$ 50,000,000		71,672,266		32.0%	2.16x	\$ 25,719	N/A
Private Equity	Excellere Capital Fund III, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2016	\$ 70,000,000		7,885,634		21.0%	1.49x	\$ 957,963	N/A
Private Equity	Excellere Capital Fund IV, L.P.	3033 East First Avenue, Suite 700, Denver, CO 80206	2021	\$ 100,000,000		- :		NM	NM		N/A
Private Equity	Exponent Private Equity Partners II, L.P.	2 London Bridge, London SE1 9RA, United Kingdom	2007	\$ 42,422,912		61,948,392		8.9%	1.50x	\$ - \$	
Private Equity	Exponent Private Equity Partners, L.P.	2 London Bridge, London SE1 9RA, United Kingdom 21 Custom House Street, 10th Floor, Boston, MA 02110	2004 2003	\$ 46,301,651		69,894,805 37,695,417		7.2%	1.32x	\$ - \$ \$ - \$	
Private Equity	Falcon Mezzanine Partners, L.P.			\$ 20,000,000				26.0%	1.93x		\$ 18,135,809

Fiscal Year-Ended June 30, 2021							Distribution Plus	Since Inception Net		Dollar amount of the	Dollar amount of cash profit received
Functional Category	Name ¹	Address	Vintage Year ¹	Commitment	Contribution ³	Distributions ⁴	Market Value	Return ⁶	Investment Multiple	total fees paid on a fiscal year-end basis	on a fiscal year-end
Private Equity	First Data Corporation	5565 Glenridge Connector NE, Suite 2000, Atlanta, GA 30342	1992	\$ 5,000,000 \$	5,000,000	\$ 24,897,520			4.98x	\$ -	\$ 19,897,520
Natural Resources & Commodities	First Reserve Fund X, L.P.	290 Harbor Drive, Stamford, CT 06902 290 Harbor Drive, Stamford, CT 06902	2004 2006	\$ 50,000,000 \$ \$ 60,000,000 \$	50,000,000	\$ 91,380,804 \$ 39,646,621	\$ 91,380,804 \$ 39,646,621		1.83x 0.66x		\$ 41,380,804 \$ (20,353,379)
Private Equity Private Equity	First Reserve Fund XI, L.P. First Reserve Fund XII, L.P.	290 Harbor Drive, Stamford, CT 06902 290 Harbor Drive, Stamford, CT 06902	2006	\$ 60,000,000 \$ \$ 100,000,000 \$	5 101,822,018				0.66x 0.68x	\$ - \$ -	. (.) ,
Private Equity	First Reserve Fund AH, L.F. Forward Ventures IV, L.P.	4747 Executive Drive, Suite 700, San Diego, CA 92121	2000	\$ 10,000,000 \$	10,051,899				0.63x	\$ -	
Private Equity	Foundation Investment Partners, L.P	50 Curzon Street, 3rd Floor, London W1J 7UW, United Kingdom	2015	\$ 5,519,685 \$	6,084,775	\$ 8,173,128			1.47x	\$ 21,816	N/A
Private Equity	Foundation Investment Partners II, L.P	50 Curzon Street, 3rd Floor, London W1J 7UW, United Kingdom	2018	\$ 15,720,901 \$	10,041,363	\$ - :	,		1.13x	\$ 264,421	N/A
Private Equity	Gateway Private Equity Fund, L.P.	18575 Jamboree Road, 7th Floor, Irvine, CA 92612	2010	\$ 300,000,000 \$	290,834,247				2.08x	\$ 1,646,059	N/A
Private Equity	Gateway Private Equity Fund-B, L.P.	18575 Jamboree Road, 7th Floor, Irvine, CA 92612	2015 2016	\$ 300,000,000 \$	261,319,950	\$ 106,752,292			2.92x	\$ 1,060,657	N/A
Private Equity Private Equity	GBOF V Feeder SCS Geocapital IV, L.P.	Herculesplein 104, 3584, AA Utrecht, Netherlands 1821 Hillandale Road, Suite 1 B-341, Durham, NC 27705	1996	\$ 86,159,654 \$ \$ 9,000,000 \$	83,520,850 9,000,000	\$ 26,688,237 S \$ 15,606,095	\$ 142,613,308 \$ 15,606,095		1.71x 1.73x	\$ 1,665,087 \$ -	N/A \$ 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	\$ 49,193,959	\$ 143,930,778		2.86x	\$ 5,050,325	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	\$ 45,013,850				\$ 1,264,263	N/A
Private Equity	GGV Capital VI Plus, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2017	\$ 15,000,000 \$	14,100,000	\$ -	\$ 48,564,964	67.8%	3.44x	\$ 12,182	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	\$ - :	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		2.65x	\$ 748,658	N/A
Private Equity	GGV Capital VII Plus, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019	\$ 16,000,000 \$	15,440,000	\$ - :			1.24x	\$ 11,639	N/A
Private Equity	GGV Capital VII, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019 2021	\$ 64,000,000 \$ \$ 18,000,000 \$	55,360,000 1,980,000	\$ - :	, ,,,,,,,,,		1.41x NM	\$ 1,277,218 \$ -	N/A N/A
Private Equity Private Equity	GGV Capital VIII Plus, L.P. GGV Capital VIII, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025 2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2021	\$ 72,000,000 \$	12,960,000	\$ - :			0.96x	\$ 519,632	N/A 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			1.83x	\$ 236,827	N/A
Private Equity	GGV Discovery II, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2019	\$ 20,000,000 \$	15,600,000	\$ - :				\$ 399,939	N/A
Private Equity	GGV Discovery III, L.P.	2494 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2021	\$ 30,000,000 \$	4,950,000		, , , , , , , ,		0.98x	\$ 210,997	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				1.04x	\$ 435,478	N/A
Private Equity	GKH Investments, L.P.	200 West Madison Street, Suite 3800, Chicago, IL 60606	1988 2014	\$ 150,000,000 \$ \$ 60,000,000 \$	166,588,304 51,000,000	\$ 350,453,542 S \$ 32,621,335			2.10x	\$ - \$ 845,527	\$ 183,865,238
Illiquid Credit Illiquid Credit	Glendon Opportunities Fund, L.P Glendon Opportunities Fund II, L.P	1620 26th Street, Suite 2000N, Santa Monica, CA 90404 1620 26th Street, Suite 2000N, Santa Monica, CA 90404	2014	\$ 100,000,000 \$	60,000,000	\$ 32,021,333 S	, ,		1.49x 1.44x	\$ 843,327 \$ 986,548	N/A N/A
Private Equity	Goode Partners Consumer Fund II, L.P.	767 Third Avenue, 22nd Floor, New York, NY 10017	2017	\$ 8,040,750 \$	12,687,418				2.63x	\$ 81,778	N/A
Private Equity	Goode Partners Consumer Fund III, L.P.	767 Third Avenue, 22nd Floor, New York, NY 10017	2015	\$ 10,000,000 \$	8,792,595				1.21x	\$ 161,804	N/A
Private Equity	Great Point Partners III, L.P.	165 Mason Street, 3rd Floor, Greenwich, CT, 06830	2018	\$ 15,000,000 \$	7,170,263	\$ - :	• •,•••,••		1.13x	\$ 404,903	N/A
Private Equity	Green Equity Investors VII, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2017	\$ 150,000,000 \$	134,500,643	\$ 35,651,110			2.04x	\$ 1,799,291	N/A
Private Equity	Green Equity Investors VIII, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2020	\$ 150,000,000 \$	61,548,591		,,		1.03x	\$ 1,692,243	N/A
Private Equity	Greycroft Growth II, L.P. Greycroft Growth, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017 292 Madison Avenue, 20th Floor, New York, NY 10017	2017 2014	\$ 7,500,000 \$ \$ 7,500,000 \$	7,979,412 8,627,940	\$ 1,728,958 S 2,742,224	\$ 22,027,592 \$ 17,696,935		2.76x 2.05x	\$ 157,481 \$ 146,279	N/A N/A
Private Equity Private Equity	Greycroft Partners II, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2014	\$ 7,500,000 \$	10,688,920	\$ 14,743,998	\$ 26,395,635		2.47x	\$ 71,617	N/A
Private Equity	Greycroft Partners III, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2012	\$ 8,560,000 \$	10,743,811		\$ 23,819,033		2.22x	\$ 192,965	N/A
Private Equity	Greycroft Partners IV, L.P.	292 Madison Avenue, 20th Floor, New York, NY 10017	2015	\$ 7,500,000 \$	9,820,092		\$ 25,358,269	36.4%	2.58x	\$ 200,325	N/A
Private Equity	Gridiron Capital Fund II, L.P.	220 Elm Street, New Canaan, CT 06840	2012	\$ 10,000,000 \$	10,916,226	\$ 13,745,177	\$ 19,311,155		1.77x	\$ 22,886	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		1.23x	\$ -	
Private Equity	GTB Capital Partners, L.P.	100 Front Street, Suite 400, West Conshohocken, PA 19248 100 Front Street, Suite 400, West Conshohocken, PA 19248	2006 2014	\$ 250,000,000 \$ \$ 400,000,000 \$	264,962,800 362,625,637	\$ 502,979,007 S 233,906,885	\$ 502,979,007 \$ 511,776,043		1.90x 1.41x	\$ - \$ 2,070,819	\$ 238,016,207 N/A
Private Equity Private Equity	GTB Capital Partners II, L.P. GTCR Fund IX/A, L.P.	7776 Ivanhoe Avenue, Suite 200, La Jolla, CA 92037	2006	\$ 400,000,000 \$ \$ 60,000,000 \$	57,132,136	\$ 233,906,883 S \$ 103.011.717	\$ 103,011,717		1.41x 1.80x	\$ 2,070,819	\$ 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		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				1.55x	\$ 589	
Private Equity	Harvest Partners VII, L.P.	280 Park Avenue, 25th Floor, New York, NY 10017	2016	\$ 80,000,000 \$	82,864,819	\$ 6,920,092	\$ 144,006,596		1.74x	\$ 243,285	N/A
Private Equity	Hellman & Friedman Capital Partners V, L.P.	415 Mission Street, San Francisco, CA 94105 415 Mission Street, San Francisco, CA 94105	2004 2007	\$ 39,953,351 \$ \$ 60,000,000 \$	38,227,150 61,562,523		\$ 102,043,445 \$ 127,230,804			\$ - \$ 7,317	\$ 63,816,296 N/A
Private Equity Private Equity	Hellman & Friedman Capital Partners VI, L.P. Hellman & Friedman Capital Partners VIII, L.P.	415 Mission Street, San Francisco, CA 94105	2016	\$ 125,000,000 \$	125,582,822				2.07x 1.98x	\$ 848,417	N/A
Private Equity	Hellman & Friedman Capital Partners IX, L.P.	415 Mission Street, San Francisco, CA 94105	2019	\$ 150,000,000 \$	105,057,584	\$ 310,990	\$ 132,970,894		1.27x	\$ 2,914,228	N/A
Private Equity	Hellman & Friedman Capital Partners X, L.P.	415 Mission Street, San Francisco, CA 94105	2021	\$ 150,000,000 \$	-		\$ (132,042		NM	\$ 490,558	N/A
Private Equity	Incline Equity Partners III, L.P.	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222	2013	\$ 10,000,000 \$	11,889,504				2.45x	\$ 90,517	N/A
Private Equity	Incline Equity Partners IV, L.P.	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222	2017	\$ 37,500,000 \$	29,925,810				1.57x	\$ 703,515	N/A
Private Equity	Incline Equity Partners IV, L.P. (JPM)	625 Liberty Avenue, Suite 340, Pittsburgh, PA 15222 5 Limburglaan, Maastricht, 6229 SH, Netherlands	2017	\$ 10,000,000 \$	7,980,217		\$ 12,562,350		1.57x	\$ 187,604	N/A
Private Equity Private Equity	Indigo N.V. Infinity Capital Venture Fund 1999, L.P.	N/A N/A	1996 1999	\$ 8,385,925 \$ \$ 15,000,000 \$	7,000,000 15,000,000	\$ 9,251,063 S \$ 1,643,938	\$ 9,251,063 \$ 1,643,938		1.32x 0.11x	\$ - \$ -	\$ 2,251,063 \$ (13,356,062)
Private Equity	Information Technology Venture II, L.P	N/A	1999	\$ 15,000,000 \$	15,000,000	\$ 11,580,601	\$ 1,043,938 \$ 11,580,601		0.77x	*	\$ (3,419,399)
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				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 Blvd, Suite 520, Walnut Creek, CA 94596	2013	\$ 100,000,000 \$	105,824,554	\$ 80,815,251	\$ 236,479,899		2.23x	\$ 1,528,077	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	\$ 44,571,467	\$ 125,484,480		2.08x	\$ 1,149,683	N/A
Private Equity	Institutional Venture Partners XV, L.P.	3000 Sand Hill Road, Building 2, Suite 250, Menlo Park, CA 94025 102 City Hall Plaza, Suite 200, Durham, NC 27701	2015 2006	\$ 90,000,000 \$ \$ 6,700,000 \$	90,660,077 6,700,000	\$ 114,233,471 S 3,455,010			3.22x	\$ 2,224,322	N/A
Private Equity Private Equity	Intersouth Partners VII, L.P. Invesco Partnership Fund II, L.P.	1166 Avenue of the Americas, New York, NY 10036	1999	\$ 6,700,000 \$	5 6,700,000				0.52x 0.77x	\$ - \$ -	\$ (3,244,990) \$ (4,979,978)
Private Equity	Jade Equity Investors, L.P.	11111 Santa Monica Boulevard, Suite 2000, Los Angeles, CA 90025	2019	\$ 50,000,000 \$	10,342,927					\$ 793,474	
Private Equity	JMI Equity Fund V, L.P.	100 International Drive, Suite 19100, Baltimore, MD 21202	2005	\$ 16,200,000 \$	16,203,728					\$ -	
Private Equity	JMI Equity Fund VI, L.P.	100 International Drive, Suite 19100, Baltimore, MD 21202	2007	\$ 19,500,000 \$	19,568,427	\$ 33,934,651		11.5%	1.77x	\$ 3,952	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				2.30x	\$ 241,528	
Private Equity	Joy Capital I, L.P.	Room 1501, Wangjing Greenland Center B, Chaoyang District, China	2015	\$ 5,000,000 \$	5,768,441					\$ 84,809	N/A
Private Equity	Joy Capital II, L.P.	Room 1501, Wangjing Greenland Center B, Chaoyang District, China Room 1501, Wangjing Greenland Center B, Chaoyang District, China	2018	\$ 5,000,000 \$ \$ 40,000,000 \$						\$ 109,568	N/A
Private Equity Private Equity	Joy Capital III, L.P. Joy Capital Opportunity, L.P.	Room 1501, Wangjing Greenland Center B, Chaoyang District, China Room 1501, Wangjing Greenland Center B, Chaoyang District, China	2019 2018	\$ 40,000,000 \$ \$ 25,000,000 \$	22,528,799					\$ 1,020,677 \$ 253,647	N/A N/A
Private Equity Private Equity	Joy Capital Opportunity, L.P. Joy Capital Opportunity, L.P. (JPM)	Room 1501, Wangjing Greenland Center B, Chaoyang District, China Room 1501, Wangjing Greenland Center B, Chaoyang District, China	2018	\$ 25,000,000 \$ \$ 15,000,000 \$					1.61x 1.61x		N/A N/A
Private Equity Private Equity	J.P. Morgan Emerging Managers Program	320 Park Avenue, New York, NY 10022	2010	\$ 150,000,000 \$					2.11x		N/A
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Functional Category	Name ^t	Address ¹ 320 Park Avenue, New York, NY 10022	Vintage Year ¹	Commitment	Contribution ³	Distributions ⁴	Market Value⁵	Since Inception Net Return ⁶	Investment Multiplé	Dollar amount of the total fees paid on a fiscal year-end basis	on a fiscal year-end basis ⁹
Private Equity Private Equity	J.P. Morgan Emerging Managers Program II J.P. Morgan Emerging Managers Program III	320 Park Avenue, New York, NY 10022 320 Park Avenue, New York, NY 10022	2015 2017	\$ 99,944,000 \$ \$ 100,145,842 \$	106,795,880 84,665,768	, ,	, . ,		2.46x 1.96x	\$ 384,634	N/A N/A
Private Equity	J.P. Morgan Emerging Managers Program IV	320 Park Avenue, New York, NY 10022	2018	\$ 299,058,539 \$	87,235,343				1.17x	\$ 525,300	N/A
Private Equity	Juggernaut Capital Partners II, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2012	\$ 75,000,000 \$	96,601,209	\$ 115,321,561	\$ 179,010,929	14.2%	1.85x	\$ 1,186,166	N/A
Private Equity	Juggernaut Capital Partners III, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2015	\$ 100,000,000 \$	116,471,372					\$ 1,672,453	N/A
Private Equity	Juggernaut Capital Partners IV, L.P.	4445 Willard Avenue, Suite 1040, Chevy Chase, MD 20815	2018	\$ 125,000,000 \$	61,295,261		· / / / / / / / / / / / / / / / / / / /		1.56x	\$ 2,460,226	N/A
Private Equity	JZI Fund III, L.P.	9 West 57th Street, 33rd Floor, NY 10019	2015 2012	\$ 6,800,113 \$ \$ 10,000,000 \$	6,216,768 9,873,620	\$ 2,067,796 S \$ 7,190,444	\$ 8,505,088 \$ 13,275,181		1.37x 1.34x	\$ 148,160 \$ 64,318	N/A N/A
Private Equity Private Equity	KarpReilly Capital Partners II, L.P. Kelso Investment Associates VII, L.P	102 Greenwich Avenue, 2nd Floor, Greenwich, CT 06830 320 Park Ave, 24th Floor, New York, NY 10022	2004	\$ 10,000,000 \$	49,479,790		\$ 13,273,181 \$ 78,216,333		1.54x 1.58x	\$ 04,318	\$ 28,736,543
Private Equity	Kelso Investment Associates VII, L.P	320 Park Ave, 24th Floor, New York, NY 10022	2007	\$ 75,000,000 \$	74,241,945				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 \$	4,077,194				1.41x	\$ 159,887	N/A
Private Equity	Kidd Kamm Equity Partners, L.P.	N/A	1992	\$ 15,000,000 \$	14,874,159	\$ 587,583	\$ 587,583		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 \$	8,662,113				1.70x	\$ 54,722	
Private Equity	KKR 1996 Fund, L.P.	9 West 57th Street, Suite 4200, New York, NY 10019 9 West 57th Street, Suite 4200, New York, NY 10019	1997	\$ 125,000,000 \$	131,822,098	\$ 235,069,550			1.78x	\$ -	
Private Equity	KKR 2006 Fund, L.P. KKR Millennium Fund, L.P.	9 West 57th Street, Suite 4200, New York, NY 10019 9 West 57th Street, Suite 4200, New York, NY 10019	2006 2002	\$ 60,000,000 \$ \$ 50,000,000 \$	64,488,155 67,839,702	\$ 100,624,957 \$ \$ 122,794,809	\$ 100,624,957 \$ 122,794,809	7.7% 16.4%	1.56x 1.81x	\$ - \$ -	\$ 36,136,802 \$ 54,955,107
Private Equity 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		3.31x	\$ -	
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		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		1.00x	\$ -	
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		1.08x	\$ -	
Private Equity	Kohlberg Investors IV, L.P.	111 Radio Circle, Mount Kisco, NY 10549 681 Fifth Avenue, 14th Floor, New York, NY 10022	2001 1993	\$ 25,000,000 \$ \$ 10,000,000 \$	21,656,624 10,286,670					\$ - \$ -	\$ 7,579,495 \$ 16,502,441
Private Equity Private Equity	Landmark Equity Partners III, L.P. Landmark Equity Partners IV, L.P.	681 Fifth Avenue, 14th Floor, New York, NY 10022	1993	\$ 10,000,000 \$ \$ 10,533,677 \$	11,011,182		\$ 26,789,111 \$ 16,218,022		2.60x 1.47x		\$ 16,302,441
Private Equity	LAV Biosciences Fund IV, L.P	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2017	\$ 40,000,000 \$	43,016,805	, .,.			2.70x	\$ 918,465	
Private Equity	LAV Biosciences Fund V, L.P	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2019	\$ 48,000,000 \$	44,801,704				1.59x	\$ 927,297	N/A
Private Equity	LAV Biosciences Fund VI, L.P	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2021	\$ 40,000,000 \$	16,633,094	\$ - :	\$ 16,271,433	-4.7%	0.98x	\$ 345,495	N/A
Private Equity	LAV Biosciences Fund VI Opportunities, L.P	Room 2909-14, 168 Hubin Road, Huangpu District, Shanghai, China	2021	\$ 20,000,000 \$	9,370,675				1.01x	\$ 33,521	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	\$ 57,458,553			1.15x	\$ 3,114	
Private Equity	Lexington Capital Partners II, L.P.	660 Madison Avenue, 23rd Floor, New York, NY 10065	1998	\$ 50,000,000 \$	49,406,937				1.33x	\$ -	\$ 16,303,337
Private Equity	Lexington Capital Partners III, L.P. Lexington Capital Partners V, L.P.	660 Madison Avenue, 23rd Floor, New York, NY 10065 660 Madison Avenue, 23rd Floor, New York, NY 10065	1999 2001	\$ 25,000,000 \$ \$ 50,000,000 \$	24,654,618 49,756,618	\$ 30,973,827 \$ 83,315,442	\$ 31,179,091 \$ 83,508,826		1.26x 1.68x	\$ 1,529 \$ 602	
Private Equity Private Equity	Lightspeed Venture Partners VI, L.P.	2200 Sand Hill Road, Menlo Park, CA 94025	2001	\$ 50,000,000 \$ \$ 8,000,000 \$	7,340,182		\$ 63,308,820 \$ 7,782,321		1.06x	\$ 602 \$ -	N/A \$ 442,139
Private Equity	Lightyear Fund III, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2011	\$ 105,000,000 \$	120,798,199	\$ 247,642,683	\$ 256,192,524		2.12x	\$ 193,963	N/A
Private Equity	Lightyear Fund IV, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2016	\$ 150,000,000 \$	166,396,700	\$ 64,745,043			1.62x	\$ 1,808,012	N/A
Private Equity	Lightyear Fund V, L.P.	9 West 57th Street, 31st Floor, New York, NY 10019	2021	\$ 100,000,000 \$	19,086,143	\$ - :			0.95x	\$ 2,133,904	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			2.41x	\$ -	\$ 41,078,750
Private Equity	Livingbridge 6, L.P.	100 Wood Street, London EC2V 7AN, United Kingdom	2016	\$ 52,530,377 \$	51,598,949	\$ 7,411,266			1.26x	\$ 887,234	
Private Equity	M/C Venture Partners VI, L.P.	75 State Street, Suite 2500, Boston, MA 02109 Three First National Plaza, Suite 4600, Chicago, IL 60602	2006 1999	\$ 19,000,000 \$ \$ 30,000,000 \$	18,813,924 30,021,318	\$ 39,761,999			2.11x	\$ -	
Private Equity	Madison Dearborn Capital Partners III, L.P. Madison Dearborn Capital Partners IV, L.P.	Three First National Plaza, Suite 4600, Chicago, IL 60602 Three First National Plaza, Suite 4600, Chicago, IL 60602	2000	\$ 30,000,000 \$ \$ 25,000,000 \$	24,258,894	\$ 45,791,560 S \$ 46,347,176	\$ 45,791,560 \$ 46,347,176		1.53x 1.91x	\$ - \$ -	\$ 15,770,243 \$ 22,088,282
Private Equity 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		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		2.19x	\$ -	\$ 81,308,552
Private Equity	Marlin Equity IV, L.P.	338 Pier Avenue, Hermosa Beach, CA 90254	2013	\$ 50,000,000 \$	49,769,589	\$ 41,655,742			1.43x	\$ 479,795	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 \$	111,030,192	\$ 93,922,536	\$ 246,777,210		2.22x	\$ 937,134	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 \$	114,752,886					\$ 895,100	N/A
Private Equity	MBK Partners Fund V, L.P.	22nd Floor, D Tower D1, 17 Jongno 3-gil, Jongno-gu, Seoul, Korea	2020 1998	\$ 150,000,000 \$ \$ 25,000,000 \$	13,616,204 21,327,148			105.8%		\$ 1,018,172	N/A
Private Equity	McCown DeLeeuw & Co. Fund IV, L.P. Media Communications Partners, L.P.	950 Tower Lane, Suite 800, Foster City, CA 94404 75 State Street, Suite 2500, Boston, MA 02109	1998	\$ 25,000,000 \$ \$ 25,000,000 \$	21,327,148	\$ 15,493,357 S \$ 40,272,681	\$ 15,493,357 \$ 40,272,681		0.73x 1.61x	\$ - \$ -	\$ (5,833,791) \$ 15,272,681
Private Equity Private Equity	Mediphase Venture Partners II, L.P.	One Gateway Center, Suite 407, Newton, MA 02458	2002	\$ 10,000,000 \$	9,703,163				1.82x	\$ -	
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		0.98x	\$ -	
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	\$ 10,574,053	\$ 18,451,094	16.0%	2.64x	\$ 105,000	N/A
Private Equity	MetroPCS	2250 Lakeside Boulevard, Richardson, TX 75082	1995	\$ 5,784,200 \$	5,920,141		\$ 54,529,368		9.21x	\$ -	\$ 48,609,227
Private Equity	Moelis Capital Partners Opp. Fund I-B LP	399 Park Avenue, 6th Floor, New York, NY 10022	2014	\$ 10,000,000 \$	10,157,283	\$ 15,278,773	\$ 18,634,100		1.83x	\$ 78,448	
Private Equity	Montagu III, L.P.	2 More London Riverside, London SEI 2AP, United Kingdom	2005	\$ 76,404,757 \$	74,273,362		\$ 97,904,791		1.32x	\$ -	\$ 23,631,429
Private Equity	Montefiore Investment V, S.L.P Morgan Stanley Dean Witter Venture Partners IV, L.P	28 rue Bayard, 75008, Paris CEDEX 01, France 1585 Broadway, New York, NY 10036	2020 1999	\$ 47,372,825 \$ \$ 5,000,000 \$	4,443,224 5,126,102	\$ - : \$ 4,166,577	• •,= · ·,- • •		0.73x 0.83x	\$ 1,217,602 \$ 89	N/A N/A
Private Equity Private Equity	Morgan Stanley Dean Witter Venture Partners IV, L.P. Morgan Stanley Venture Partners 2002 Fund, L.P.	1585 Broadway, New York, NY 10036 1585 Broadway, New York, NY 10036	2002	\$ 5,000,000 \$ \$ 5,000,000 \$	5,126,102				0.83X 1.57x	\$ 89	\$ 3,209,105
Private Equity	NeoTribe Ventures I, L.P.	3340 Hillview Avenue, Palo Alto, CA 94304	2017	\$ 5,000,000 \$	4,550,000	\$ 26,072	\$ 6,817,600		1.50x	\$ 118,146	
Private Equity	NeoTribe Ventures II, L.P.	3340 Hillview Avenue, Palo Alto, CA 94304	2020	\$ 9,537,500 \$	1,716,750	\$ - :			0.85x	\$ 247,391	N/A
Private Equity	New Mainstream Capital II, L.P.	5949 Sherry Lane, Suite 1080, Dallas, TX 75225	2014	\$ 10,000,000 \$	11,913,271				1.36x	\$ 135,308	N/A
Private Equity	NexPhase Capital Fund IV, L.P.	600 Lexington Avenue, 12th Floor, New York, NY 10022	2021	\$ 12,578,500 \$	4,971,479		, .,		1.40x	\$ 401,592	N/A
Private Equity	Next Coast Ventures I, L.P.	1204 Nueces Street, Austin, TX 78701	2016	\$ 5,000,000 \$	5,070,502				2.71x		
Private Equity	Next Coast Ventures II, L.P.	3600 North Capital of Texas Highway, Building B Suite 250, Austin, TX 78746	2019	\$ 15,000,000 \$					0.97x		
Private Equity	Nordic Capital Fund VI, L.P. Nordic Capital V, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands 26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2006 2003	\$ 59,027,621 \$ \$ 46,013,772 \$	62,740,012 51,554,630				1.54x 2.79x	\$ - \$ -	
Private Equity Private Equity	Nordic Capital V, L.P. Nordic Capital VII Beta, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands 26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2003	\$ 46,013,772 \$ \$ 67,574,115 \$					2.79x 1.34x	s -	
Private Equity	Nordic Capital VIII Beta, L.P. Nordic Capital VIII Beta, L.P.	26 Esplanade, St. Helier, Jersey, JE4 8PX Channel Islands	2012	\$ 92,027,352 \$	94,897,893					\$ -	
Private Equity	Northgate Venture Partners VI, L.P.	649 San Ramon Valley Boulevard, Danville, CA 94526	2012	\$ 50,000,000 \$						\$ -	
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 \$	-	\$ - :	s -	NM	NM		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				0.65x		
Private Equity	Oak Investment Partners V, L.P.	901 Main Avenue, Suite 600, Norwalk, CT 06851	1992	\$ 11,250,000 \$					1.52x		
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	I S -	\$ 26,701,314

Section 6254.26 (b)

Fiscal Year-Ended June 30, 2021

Fiscal Year-Ended June 30, 2021											
Functional Category	Name ^l	Address	Vintage Year ^J	Commitment	Contribution ³	Distributions ⁴	Distribution Plus Market Value ⁵	Since Inception Net Return ⁶	Investment Multiple	Dollar amount of the total fees paid on a fiscal year-end basis	Dollar amount of cash profit received on a fiscal year-end
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 5	\$ 18,005,960	54.3%	1.80x	s -	\$ 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	\$ 25,113,425			1.26x	\$ 2,675	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				0.89x	\$ 11,722	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		\$ 38,153,061		0.96x	\$ 20,231	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	\$ 40,528,403	\$ 54,375,162		1.45x	\$ 272,798	N/A
Illiquid Credit	Oaktree Opportunities Fund VIII, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	2010 2012	\$ 37,500,000 \$ \$ 100,000,000 \$	37,500,000 100,000,000	\$ 54,151,613 S \$ 62,176,125 S	\$ 54,960,481 \$ 133,627,332		1.47x 1.34x	\$ 22,473 \$ 1,227,175	N/A
Illiquid Credit Private Equity	Oaktree Opportunities Fund IX, L.P. OCM Opportunities Fund II, L.P.	333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071 333 South Grand Avenue, 28th Floor, Los Angeles, CA 90071	1997	\$ 25,000,000 \$	25,000,000	\$ 37,729,349	\$ 133,627,332 \$ 37,729,349		1.54x 1.51x	\$ 1,227,173	N/A \$ 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		1.48x	\$ -	
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		1.65x	\$ -	
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 5	\$ 53,567,421	14.1%	1.65x	\$ 5,561	
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		1.58x	\$ 2,260	\$ 18,774,285
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	\$ 70,126,511	\$ 70,166,825		1.73x	\$ 4,793	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	\$ 41,226,406	\$ 41,440,866		1.38x	\$ 9,482	N/A
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		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 \$	63,830,787	\$ 9,527,156	\$ 98,823,848		1.55x	\$ 1,324,612	N/A
Private Equity	One Rock Capital Partners III, L.P.	30 Rockefeller Plaza, 54th Floor, New York, NY 10112	2020 2003	\$ 150,000,000 \$ \$ 75,000,000 \$	31,762,876 73,984,802	\$ - ! \$ 221.598.361 !			0.96x 3.00x	\$ 1,761,602 \$ -	N/A
Private Equity	Onex Partners, L.P. Onex Partners II, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada 161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2003	\$ 75,000,000 \$	53,620,551		\$ 221,867,437 \$ 97,173,470		3.00x 1.81x	\$ - \$ 4,931	N/A N/A
Private Equity Private Equity	Onex Partners II, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2008	\$ 75,000,000 \$	83,475,101				1.62x	\$ 153,649	N/A N/A
Private Equity	Onex Partners IV, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M53 2S1, Canada	2008	\$ 150,000,000 \$	149,636,661	\$ 95,385,936	\$ 203,430,835		1.36x	\$ 899,598	N/A N/A
Private Equity	Onex Partners V, L.P.	161 Bay Street, P.O. Box 700, Toronto, ON M5J 2S1, Canada	2018	\$ 200,000,000 \$	99,824,412	\$ 636,126			1.18x	\$ 3,804,843	N/A
Private Equity	Osceola Fund I, L.P.	1715 North Westshoe Boulevard, Suite 200, Tampa, FL 33607	2020	\$ 15,000,000 \$	10,451,989				0.93x	\$ 361,414	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	\$ 175,723,524 \$	78,327,348	\$ - 5	\$ 101,653,255	28.4%	1.30x	\$ 3,431,058	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 \$	110,420,636				1.38x	\$ 1,150,185	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				2.28x	\$ 44,817	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				2.43x	\$ 8,643	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 \$	8,794,678	\$ 1,371,052	\$ 19,432,650		2.21x	\$ 223,277	N/A
Private Equity	Peak Rock Capital Fund, L.P.	13413 Galleria Circle, Suite Q-300, Austin, TX 78738	2013	\$ 11,000,000 \$ \$ 15,000,000 \$	10,116,579		\$ 16,057,247		1.59x	\$ 76,531 \$ 1,029,076	N/A
Private Equity	Peloton Equity II, L.P.	66 Field Point Road, 2nd Floor, Greenwich, CT 06830 80 Pall Mall, London SW1Y 5ES, United Kingdom	2021 2003	\$ 15,000,000 \$ \$ 95,225,609 \$	6,649,517 106,878,027	\$ - 5 \$ 174,555,493	\$ 9,340,574 \$ 174,938,112		1.40x 1.64x	\$ 1,029,076 \$ 8,404	N/A N/A
Private Equity Private Equity	Permira Europe III, L.P. Permira Europe IV, L.P.	80 Pall Mall, London SW1Y 5ES, United Kingdom 80 Pall Mall, London SW1Y 5ES, United Kingdom	2003	\$ 93,223,609 \$	75,442,718				1.52x	\$ 8,404	
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		2.19x	\$ -	
Private Equity	Phoenix Equity Partners III, L.P.	123 Victoria Street, London Sw1E 6DE, United Kingdom	2000	\$ 5,195,919 \$	4,017,519		\$ 5,407,526		1.35x	\$ -	
Private Equity	Phoenix Equity Partners IV, L.P.	123 Victoria Street, London Sw1E 6DE, United Kingdom	2001	\$ 17,494,723 \$	23,037,525				2.16x	\$ -	
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		1.29x	\$ -	
Private Equity	Providence Equity Partners III, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	1999	\$ 21,765,349 \$	25,250,994				1.54x	\$ -	
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		2.04x	\$ 1,928	
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		1.79x	\$ 76	
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 5	\$ 85,416,140		1.23x	\$ -	
Private Equity	Providence Equity Partners VI, L.P.	50 Kennedy Plaza, 18th Floor, Providence, RI 02903	2007 2000	\$ 80,000,000 \$ \$ 10,000,000 \$	77,988,274 10,245,962	\$ 107,823,757 S \$ 12,397,723 S	\$ 107,823,757 \$ 12,397,723		1.38x 1.21x	\$ - \$ -	
Private Equity Private Equity	Providence Growth Investors, L.P Prudential Venture Partners II	50 Kennedy Plaza, 18th Floor, Providence, RI 02903 355 Lexington Avenue, Suite 1400, New York, NY 10017	1987	\$ 10,000,000 \$	50,000,000				2.33x	\$ - \$ -	
Private Equity Private Equity	Quad C Partners V, L.P.	200 Garrett Street, Suite M, Charlottesville, VA 22902	1987	\$ 25,000,000 \$	24,966,260	\$ 36,516,994	\$ 36,516,994		1.46x	\$ -	
Private Equity	Quad-C Partners VII, L.P.	200 Garrett Street, Suite M, Charlottesville, VA 22902	2006	\$ 43,723,396 \$	44,927,887				1.63x	\$ -	
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				1.42x	\$ -	
Private Equity	Questor Partners Fund II, L.P.	101 Southfield Road, 2nd Floor, Birmingham, MI 48009	1999	\$ 30,000,000 \$	32,873,554				1.19x	\$ -	
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 \$	133,244,290	\$ 8,351,644			1.21x	\$ 1,538,064	
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			1.41x	\$ -	
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			0.01x	\$ -	\$ (8,931,291)
Private Equity	Revelstoke Capital Partners Single Asset Fund I, L.P	260 North Josephine Street, Suite 500, Denver, CO 80206	2019	\$ 60,000,000 \$	52,390,626	\$ - 5	, ,,,,,,,,,,		1.83x	\$ 410,144	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			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 \$	113,790,125				1.45x	\$ 1,163,742 \$ 1,016,754	N/A
Private Equity	Riverside Micro-Cap Fund V, L.P. Rizvi Opportunistic Equity Fund II	45 Rockefeller Center, New York, NY 10111 260 East Brown Street, Suite 380, Birmingham, MI 48009	2019 2010	\$ 65,000,000 \$ \$ 4,293,000 \$	32,137,166 5,003,029	\$ - 5 \$ 4,753,927	\$ 41,010,597 \$ 13,355,129		1.28x 2.67x	\$ 1,016,754 \$ 49,128	N/A N/A
Private Equity Private Equity	RLH Investors II, L.P.	10900 Wilshire Boulevard, Suite 850, Los Angeles, CA 90024	2010	\$ 4,293,000 \$ \$ 10,000,000 \$	11.482.112	\$ 4,733,927 S	\$ 13,333,129		2.07x 2.17x	\$ 49,128	\$ 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		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				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				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				1.10x	\$ -	
Private Equity	Sevin Rosen Fund VII, L.P.	P.O Box 192128, Dallas, TX 75219	1999	\$ 10,000,000 \$	9,875,000				0.21x	\$ -	
Private Equity	Sevin Rosen Fund VIII, L.P.	P.O Box 192128, Dallas, TX 75219	2000	\$ 13,720,000 \$	13,514,200				1.16x	\$ -	
Private Equity	Sevin Rosen VI, L.P.	P.O Box 192128, Dallas, TX 75219	1998	\$ 5,000,000 \$	5,000,000				1.84x	\$ -	
Private Equity	Sierra Ventures V, L.P.	1400 Fashion Island Boulevard, Suite 1010, San Mateo, CA 94404	1995	\$ 5,000,000 \$	5,000,000				4.25x	\$ -	
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				0.78x	\$ -	. (-, -, -,
Private Equity	Silver Lake Partners III, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2007	\$ 60,000,000 \$	61,676,680				2.28x	\$ 9,898	
Private Equity	Silver Lake Partners IV, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2013	\$ 105,000,000 \$	132,812,145				2.45x	\$ 777,941	N/A
Private Equity	Silver Lake Partners V, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025	2017	\$ 180,000,000 \$	169,657,380				1.72x	\$ 1,980,882	N/A
Private Equity	Silver Lake Partners VI, L.P.	2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025 1560 Sherman Avenue, Suite 1200, Evanston, IL 60201	2020 2012	\$ 200,000,000 \$ \$ 12,000,000 \$	47,044,514 13,217,171					\$ 3,622,174 \$ 75,930	
Private Equity	Silver Oak Services Partners II, L.P.	1300 Sherifian Avenue, Sune 1200, Evansion, IL 00201	2012	p 12,000,000 \$	13,217,171	φ 24,000,084	o 54,122,960	2/.170	2.58x	φ /3,930	IN/A

Fiscal Year-Ended June 30, 2021											Dollar amount of
Functional Category	Name ^l	Address	Vintage Year ^l	Commitment	Contribution ³	Distributions ⁴	Distribution Plus Market Value⁵	Since Inception Net Return ⁶	Investment Multiple		cash profit received on a fiscal year-end
Private Equity	Silverhawk Capital Partners II, L.P.	140 Greenwich Avenue, Suite 2, Greenwich, CT 06830	2010	\$ 7,000,000	\$ 8,153,376	\$ 13,078,186	\$ 14,730,752	20.6%	1.81x	\$ 9,085	N/A
Private Equity	Sinovation Fund IV, L.P.	Dinghao Tower Block A, Haidian District, Beijing, China	2018	\$ 75,000,000	\$ 53,625,000	\$ -	\$ 75,153,785	22.2%	1.40x	\$ 1,932,702	N/A
Private Equity	Siris Partners III, L.P.	601 Lexington Avenue, 59th Floor, New York, NY 10022	2014	\$ 60,000,000		\$ 48,647,320		14.1%		\$ 806,783	N/A
Private Equity	Siris Partners IV, L.P.	601 Lexington Avenue, 59th Floor, New York, NY 10022	2019	\$ 100,000,000		\$ 8,271,134		20.2%	1.37x	\$ 1,870,906	N/A
Private Equity	Solera Partners, L.P. Southfield Capital III, L.P.	625 Madison Avenue, 3rd Floor, New York, NY 10022 140 Greenwich Avenue. Suite 4. Greenwich, CT 06830	2002 2020	\$ 10,000,000 \$ 15,000,000		\$ 14,890,218 \$ -	\$ 14,890,218 \$ 1,219,331	9.6%	2.91x 0.78x	\$ - \$ \$ 342.071	\$ 9,770,289
Private Equity Private Equity	Southvest Fund V, L.P.	40 Burton Hills Boulevard, Suite 420, Nashville, TN 37215	2020	\$ 13,000,000		\$ 18,187,244		15.6%	2.22x	\$ 18,390	N/A N/A
Private Equity	Spectrum Equity Investors V, L.P.	140 New Montgomery, San Francisco, CA 94105	2005	\$ 35,000,000		\$ 79,843,031		18.0%	2.45x	\$ 31,359	N/A
Private Equity	Sprout VIII, L.P.	1 Madison Avenue, 7th Floor, New York, NY 10010	1998	\$ 20,000,000		\$ 18,911,128		-0.9%		\$ - \$	\$ (1,088,872
Private Equity	Sterling Investment Partners III, L.P.	285 Riverside Avenue, Westport, CT 06880	2013	\$ 100,000,000		\$ 113,393,465		24.6%		\$ 3,097,270	N/A
Private Equity	Sterling Investment Partners IV, L.P	285 Riverside Avenue, Westport, CT 06880	2020	\$ 125,000,000		\$ -	. ())	NM		\$ 5,332,621	N/A
Private Equity	STG VI, L.P.	1300 El Camino Real, Suite 300, Menlo Park, CA 94025	2021 2015	\$ 85,000,000	•	\$ -	\$ (511,575)	NM 22.5%	NM	\$ 498,295	N/A
Private Equity Private Equity	Storm Ventures Fund V, L.P. Storm Ventures Fund VI, L.P.	3000 Sand Hill Road, Building 4-210, Menlo Park, CA 94025 3000 Sand Hill Road, Building 4-210, Menlo Park, CA 94025	2019	\$ 50,000,000 \$ 50,000,000		\$ 7,500,000 \$	\$ 99,410,845 \$ 36,772,334	30.3%	2.40x 1.29x	\$ 715,352 \$ 712,399	N/A N/A
Private Equity Private Equity	Summit Accelerator Fund, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	1999	\$ 5,600,000		\$ 9,711,301	\$ 9,711,301	9.9%	1.27X 1.77x	\$ 712,339	\$ 4,212,879
Private Equity	Summit Park I-A	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2012	\$ 7,406,250		\$ 18,325,987	\$ 24,121,987	26.7%	3.17x	\$ 9,665	N/A
Private Equity	Summit Park II, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2014	\$ 10,000,000	\$ 10,551,500	\$ 10,979,686	\$ 24,140,508	29.4%	2.29x	\$ 14,024	N/A
Private Equity	Summit Park III, L.P.	300 South Tryon Street, Suite 1210, Charlotte, NC 28202	2018	\$ 9,375,000		\$ 70,026		-4.4%		\$ 153,339	N/A
Private Equity	Summit Partners Europe Growth Equity Fund III	222 Berkeley Street, 18th Floor, Boston, MA 02116	2020	\$ 41,619,273		\$ -		-13.5%	0.93x	\$ 624,109	N/A
Private Equity	Summit Partners Growth Equity Fund VIII-A, L.P	222 Berkeley Street, 18th Floor, Boston, MA 02116	2011 2006	\$ 75,000,000 \$ 69,900,000		\$ 176,189,493 \$ 122,249,208	\$ 228,097,275 \$ 141,633,003	27.5% 10.8%	2.20x	\$ 808,878 \$ 2,370	N/A
Private Equity Private Equity	Summit Partners Private Equity Fund VII-A, L.P. Summit Partners Venture Capital Fund II-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116 222 Berkeley Street, 18th Floor, Boston, MA 02116	2006	\$ 69,900,000 \$ 8,400,000		\$ 122,249,208 \$ 20,712,591	\$ 141,633,003 \$ 20,931,473	10.8%	1.91x 2.04x	\$ 2,370 \$ 1,476	N/A N/A
Private Equity	Summit Ventures III, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1992	\$ 25,000,000		\$ 78,763,052		61.7%	3.94x	\$ - \$	\$ 58,763,052
Private Equity	Summit Ventures IV, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1995	\$ 24,750,000		\$ 181,655,345		104.0%	7.57x	\$ - \$	\$ 157,647,845
Private Equity	Summit Ventures V, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	1998	\$ 37,000,000		\$ 49,485,953		8.1%	1.39x	\$ - \$, ,
Private Equity	Summit Ventures VI-A, L.P.	222 Berkeley Street, 18th Floor, Boston, MA 02116	2001	\$ 50,000,000		\$ 111,989,537		15.4%	2.09x	\$ 1,735	N/A
Private Equity	Symantec Corp.	350 Ellis Street, Mountain View, CA 94043	1992	\$ 5,569,791		\$ 2,222,145		-28.5%		\$ - \$	
Private Equity	Syndicated Communications II, L.P Syndicated Communications Venture Partners IV, L.P	4800 Hampden Lane, Suite 200, Bethesda, MD 20814 4800 Hampden Lane, Suite 200, Bethesda, MD 20814	1990 2000	\$ 7,500,000 \$ 7,500,000		\$ 16,664,333 \$ 5,205,401	\$ 16,664,333 \$ 5,205,401	13.0%	2.22x 0.70x	\$ - \$ \$ - \$	\$ 9,164,333 \$ (2,240,304
Private Equity Private Equity	T3 Partners II, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2001	\$ 18,707,131		\$ 56,361,527	\$ 56,361,527	93.8%	3.07x	s - s	\$ 38,000,566
Private Equity	TA Select Opportunities Fund II, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2021	\$ 30,000,000		\$ -	\$ -	NM		\$ -	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	\$ - \$	\$ 2,420,500
Private Equity	TA XIII, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2019	\$ 75,000,000		\$ 17,157,241	\$ 84,902,397	56.7%	1.37x	\$ 1,427,664	N/A
Private Equity	TA XIV, L.P.	200 Clarendon Street, 56th Floor, Boston, MA 02116	2021	\$ 110,000,000		\$ -	\$ -	NM 10.6%	NM		N/A
Private Equity	TCV V, L.P. TCV VI, L.P.	528 Ramona Street, Palo Alto, CA 94301 528 Ramona Street, Palo Alto, CA 94301	2004 2006	\$ 39,000,000 \$ 50,000,000		\$ 70,742,057 \$ 80,584,851		10.6% 12.3%	110774	\$ (11,552) \$ (6,520)	N/A N/A
Private Equity Private Equity	TCV VII, L.P.	528 Ramona Street, Palo Alto, CA 94301	2007	\$ 75,000,000		\$ 211,366,730	\$ 238,080,687	23.4%	3.05x	\$ (254,089)	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	, . ,	\$ -	\$ -	NM	NM	\$ -	N/A
Private Equity	Ten Coves Capital I, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2018	\$ 2,902,557	\$ 5,120,309	\$ 12,065,270		92.5%	2.94x	\$ 35,423	N/A
Private Equity	Ten Coves Capital II, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2018	\$ 8,225,000		\$ 1,746,798	\$ 9,355,894	22.3%	1.36x	\$ 153,262	N/A
Private Equity	Ten Coves Capital III, L.P.	280 Park Avenue, 3rd Floor, New York, NY 10017	2021	\$ 7,521,000		\$ -	\$ 324,320	-33.6%	0.76x	\$ 116,712	N/A
Private Equity	TH Lee Putnam Parallel Ventures, L.P.	200 Madison Avenue, Suite 1900, New York, NY 10016 140 Broadway, 16th Floor, New York, NY 10005	2000 1993	\$ 5,000,000 \$ 15,000,000		\$ 5,833,008 \$ 23,988,308	\$ 5,833,008 \$ 23,988,308	3.0% 12.1%	1.15x 1.86x	S - S	\$ 777,102 \$ 11,125,434
Private Equity Private Equity	The 1818 Fund II, L.P. The Beacon Group III - Focus Value Fund, L.P.	N/A	1993	\$ 13,000,000		\$ 23,988,308 \$ 10,102,452		-18.2%	0.25x	s - s	\$ (29,532,29)
Natural Resources & Commodities	The Energy & Minerals Group Fund III, L.P.	2229 San Felipe Street, Houston, TX 77017	2014	\$ 150,000,000		\$ 16,137,632	\$ 88,037,542	-9.4%	0.59x	\$ 1,289,315	N/A
Private Equity	The Fifth Alcuin Fund Limited Partnership	65 Sloane Street, London SW1X 9SH, United Kingdom	2021	\$ 14,913,100		\$ -	\$ 4,502,833	NM	NM	\$ 122,147	N/A
Private Equity	The Resolute Fund II, L.P.	399 Park Avenue, 30th Floor, New York, NY 10022	2007	\$ 60,000,000		\$ 85,432,018		7.5%		\$ - \$	\$ 23,761,13
Private Equity	The Resolute Fund, L.P.	399 Park Avenue, 30th Floor, New York, NY 10022	2002	\$ 50,000,000		\$ 120,845,133		17.0%		S - S	\$ 73,038,720
Private Equity	Thoma Bravo Discover Fund III, L.P.	600 Montgomery Street, 20th Floor, San Francisco, CA 94111	2020 2020	\$ 50,000,000 \$ 100,000,000		\$ -	\$ 17,094,614	0.8%		\$ 881,651	N/A
Private Equity Private Equity	Thoma Bravo Fund XIV, L.P. Thomas H. Lee Equity Fund IV, L.P.	600 Montgomery Street, 20th Floor, San Francisco, CA 94111 100 Federal Street, 35th Floor, Boston, MA 02110	1998	\$ 100,000,000 \$ 70,000,000	,,	\$ - \$ 54,841,198	, .,.	-1.7% -2.6%		\$ 988,495 \$ - \$	N/A \$ (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		\$ 79,014,823		13.7%		\$ - \$	
Private Equity	Thomas H. Lee Equity Fund VI, L.P.	100 Federal Street, 35th Floor, Boston, MA 02110	2006	\$ 60,000,000		\$ 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	\$ - \$	\$ 56,263,95
Private Equity	TPG Partners III, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2000	\$ 25,750,055		\$ 68,499,799	\$ 68,499,799	24.5%	2.49x	\$ - \$	\$ 40,971,81
Private Equity	TPG Partners IV, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2003	\$ 69,768,736		\$ 157,203,357	\$ 157,324,162	15.2%	1.94x	\$ 22,687	N/A
Private Equity	TPG Partners V, L.P. TPG Partners VI, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102 301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2006 2008	\$ 75,000,000 \$ 100,000,000	\$ 65,377,267 \$ 99,595,863	\$ 87,755,202 \$ 144,234,418	\$ 87,755,202 \$ 144,234,418	4.1% 9.1%	1.34x 1.45x	\$ - \$	\$ 22,377,935 \$ 44,638,554
Private Equity Private Equity	Triton Fund V. L.P.	9 South Street, 3rd Floor, London W1K 2XA, United Kingdom	2008	\$ 175,305,588		\$ 144,234,418 \$ 951,456	\$ 97.479.412	17.9%	1.45x 1.16x	\$ - \$ \$ 5,702,097	N/A
Private Equity	Union Square Ventures 2004, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2005	\$ 10,000,000		\$ 122,376,122	\$ 123,153,471	68.0%	13.84x	\$ 4,099	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	\$ 27,133,031	\$ 46,679,505	22.4%	4.91x	\$ 91,680	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	\$ 211,803,835	\$ 245,882,430	54.2%	23.91x	\$ 163,801	N/A
Private Equity	Union Square Ventures Opportunity Fund, L.P	915 Broadway, 19th Floor, New York, NY 10010	2010	\$ 7,000,000		\$ 17,690,609		58.5%	3.88x	\$ 23,755	N/A
Private Equity	USV 2014, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2014	\$ 8,250,000		\$ 10,931,647		41.9%		\$ 123,267	N/A
Private Equity	USV 2016, L.P.	915 Broadway, 19th Floor, New York, NY 10010 915 Broadway, 19th Floor, New York, NY 10010	2016 2019	\$ 9,000,000 \$ 9,000,000		\$ 3,090,253 \$ -		68.7% 135.3%		\$ 242,358 \$ 253,675	N/A N/A
Private Equity Private Equity	USV 2019, L.P. USV Opportunity 2014, L.P.	915 Broadway, 19th Floor, New York, NY 10010 915 Broadway, 19th Floor, New York, NY 10010	2019	\$ 9,000,000		\$ 28,060,998		135.3%		\$ 253,675 \$ 114,403	N/A N/A
Private Equity Private Equity	USV Opportunity 2014, L.P. USV Opportunity 2019, L.P.	915 Broadway, 19th Floor, New York, NY 10010	2019	\$ 11,250,000		\$ 20,000,998		32.9%		\$ 113,932	N/A
Private Equity	Vestar Capital Partners IV, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	1999	\$ 25,000,000		\$ 43,362,057		13.5%		\$ - \$	
Private Equity	Vestar Capital Partners V, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	2005	\$ 75,000,000		\$ 93,397,012		2.9%		\$ - \$	
Private Equity	Vestar Equity Partners III, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167	1997	\$ 17,500,000		\$ 19,588,323	\$ 19,588,323	2.6%	1.14x	S - S	\$ 2,433,992
Private Equity	Vestar Equity Partners, L.P.	245 Park Avenue, 41st Floor, New York, NY 10167		\$ 8,000,000				56.5%	3.51x		,,
Private Equity	Vinci Capital Partners III, L.P.	535 Madison Avenue, New York, NY 10022	2019	\$ 75,000,000	\$ 23,787,308	\$ 924,585	\$ 30,001,229	17.8%	1.26x	\$ 898,260	N/A

Section 6254.26 (b)

Fiscal Year-Ended June 30, 2021

Fiscal Year-Ended June 30, 2021											Dollar amount of
Functional Category	Name ¹	Address ¹	377 4 37 1	C 14 2	G (11 (3	D: () () 4	Distribution Plus	Since Inception Net		Dollar amount of the total fees paid on a	cash profit received
Functional Category	Name	Address	Vintage Year ¹	Commitmenť	Contribution	Distributions ⁴	Market Value ⁵	Return ⁶	Investment Multiple	fiscal year-end basis	on a fiscal year-end
D: (F)	W. F. 's D. C. IIII I D.	1111 Percelous Suite 1000 Ochlord CA 04607	2008	\$ 50,000,000	\$ 51,662,484	\$ 125,104,261 S	\$ 130,367,703	27.9%	2.52x		basis
Private Equity	Vista Equity Partners Fund III, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607 1111 Broadway, Suite 1980, Oakland, CA 94607	2008		\$ 51,662,484 \$ 99,089,897	\$ 125,104,261 S \$ 127,877,380 S	\$ 130,367,703 \$ 200,926,148		2.52X 2.03x	\$ 76,774 \$ 716,988	N/A N/A
Private Equity	Vista Equity Partners Fund IV, L.P.				4 ,,,,,,,,,						
Private Equity	Vista Equity Partners Fund V, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607 1111 Broadway, Suite 1980, Oakland, CA 94607	2014	,,	\$ 274,994,246					\$ 1,977,298 \$ 3,122,298	N/A N/A
Private Equity	Vista Equity Partners Fund VI, L.P.		2016	200,000,000	\$ 265,609,071		\$ 4/5,151,3/2 \$ 145,550,190		1.79x		
Private Equity	Vista Equity Partners Fund VII, L.P.	1111 Broadway, Suite 1980, Oakland, CA 94607	2019 1986	\$ 200,000,000 \$ 50,000,000	\$ 127,638,160 \$ 50,000,000	\$ 401,858 S \$ 218,432,276 S			1.14x 4.37x	\$ 3,038,193 \$ -	N/A \$ 168.432,276
Private Equity	Warburg Pincus Capital Company, L.P.	466 Lexington Avenue, New York, NY 10017 320 1st Street N. Suite 608, Jacksonville Beach, FL 32250	2018	\$ 50,000,000	\$ 50,000,000 \$ 8,846,325	, . ,	, . ,		4.3 /X 1.80x	\$ - \$ 221.415	+
Private Equity	Warren Equity Partners Fund II, L.P.			4	\$ 8,846,325 \$ 2,174,276	\$ - 5	,,			,	
Private Equity	Warren Equity Partners Fund III, L.P.	320 1st Street N, Suite 608, Jacksonville Beach, FL 32250 701 Fast Lake Street, Suite 300, Wayzata, MN 55391	2021	\$ 10,500,000 \$ 75,000,000	\$ 2,174,276 \$ 23,175,000				0.89x 4.34x	\$ 239,352 \$ -	
Private Equity	Wayzata Opportunities Fund II, L.P.	701 East Lake Street, Suite 300, Wayzata, MN 55391	2007	\$ 75,000,000	\$ 23,175,000 \$ 47,460,000	\$ 100,495,702 S \$ 47.683.053 S			4.34X 1.00x	\$ - \$ -	*,
Private Equity	Wayzata Opportunities Fund III, L.P.	701 East Lake Street, Suite 300, Wayzata, MN 55391	2012		\$ 47,460,000	\$ 62,803,809	\$ 47,083,033 \$ 62.803.809		1.00%	Ψ	,
Private Equity	Wayzata Opportunities Fund, LLC	320 Park Avenue, Suite 2500, New York, NY 10022	1993	\$ 40,000,000 \$ 10,000,000	\$ 37,428,323 \$ 10,000,000	\$ 20,712,010	,,		1.68x 2.07x	\$ - \$ -	
Private Equity	Welsh, Carson, Anderson & Stowe VI, L.P.	320 Park Avenue, Suite 2500, New York, NY 10022 320 Park Avenue, Suite 2500, New York, NY 10022	1993	\$ 10,000,000	\$ 10,000,000	\$ 20,712,010 S \$ 43.513.904 S				s -	
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 \$ 25,000,000	,,			2.18x 1.29x	-	
Private Equity	Welsh, Carson, Anderson & Stowe VIII, L.P		2003	\$ 25,000,000 \$ 1,811,720	\$ 25,000,000 \$ 1,811,720					-	
Private Equity	Weston Presidio Capital IV - Secondary	200 Clarendon Street, 50th Floor, Boston, MA 02116		\$ 1,811,720 \$ 9,665,712	\$ 1,811,720 \$ 9,665,712			5.2%	1.28x	Ψ	
Private Equity	Weston Presidio Capital IV, L.P.	200 Clarendon Street, 50th Floor, Boston, MA 02116 200 Clarendon Street, 50th Floor, Boston, MA 02116	2000		\$ 9,665,712 \$ 34,660,903				1.18x 2.28x	Ψ	
Private Equity	Weston Presidio Capital V, L.P. Whitman Heffernan & Rhein Fund II, L.P	N/A	2005 1992	\$ 35,000,000 \$ 14,200,000	\$ 34,660,903 \$ 14,232,703		\$ /9,153,937 \$ 8,329,230		2.28X 0.59x	7	4,.,,,,,,
Private Equity					\$ 14,232,703 \$ 10,000,000	\$ 8,329,230 S			0.007.00	9	. (.,,)
Private Equity	William Blair Mezzanine Capital Fund II, L.P	222 West Adams Street, Chicago, IL 60606	1997						1.70x	\$ -	
Private Equity	Worldview Technology Partners I, L.P	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	1996 1998	\$ 8,500,000 \$ 5,000,000	\$ 8,500,000 \$ 5,000,000	\$ 32,237,243 5 \$ 8,406,737 5			3.79x 1.68x	\$ - \$ -	
Private Equity	Worldview Technology Partners II, L.P	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113			\$ 5,000,000 \$ 10,000,000	\$ 8,406,737 S \$ 1.532,976 S				Ψ .	
Private Equity	Worldview Technology Partners III, L.P	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113	1999	\$ 10,000,000 \$ 12,086,682					0.15x	\$ -	. (-//. /
Private Equity	Worldview Technology Partners IV, L.P	99 South Almaden Boulevard, 6th Floor, San Jose, CA 95113 6250 North River Road, Suite 10–100, Rosemont, IL 60018	2000 2020	\$ 12,086,682 \$ 75,000,000	\$ 11,300,783 \$ 15,220,154	,,	,,		0.00.000	\$ - \$ 1,669,868	
Private Equity	Wynnchurch Capital Partners V, L.P.	6250 North River Road, Suite 10–100, Rosemont, IL 60018	2020	\$ /5,000,000	\$ 15,220,154	\$ - 5	19,467,922	69.8%	1.28x	\$ 1,669,868	N/A
T.C. A. A.	Real Asset	WITCO 1: 1 1 A:	2020	6 177 070 000	e 0.606.102	6 574.160 4	12.410.000	NM	1.20	6 4.557.204	ė.
Infrastructure	DIF Infrastructure VI, L.P.	WTC Schiphol Airport, Schiphol Boulevard 269, Schiphol 1118 BH, Netherlands	2020	\$ 177,870,000	\$ 9,686,182	\$ 574,168	\$ 12,418,969		1.28x	\$ 4,557,204	T
Infrastructure	Grain Spectrum Holdings III, L.P.	100 North Washington Boulevard, Suite 201, Sarasota, FL 34236	2020	\$ 60,000,000	\$ 46,599,247				0.99x	\$ 257,406	
Infrastructure	Pan-Europe Infrastructure III, L.P.	1 Great Winchester Street, London EC2N 2DB, United Kingdom	2020	\$ 118,580,000	\$ 15,560,494	\$ 458,112	\$ 15,353,494	-0.6%	0.99x	\$ 2,816,256	\$ -
0 110 PF	Real Estate	28 Boulevard Royal, 5th Floor, L-2449 Luxembourg	2018	\$ 56,165,000	\$ 18.824.513	c	\$ 16,867,485	-11.6%	0.90x	\$ 948,611	\$ (9,354,301)
Opportunistic RE	Aermont Capital Real Estate Fund IV SCSp	8 Oueen's Road, 15th Floor, Central Hong Kong	2018	,,	\$ 18,824,513 \$ 44,120,623				0.90x 1.21x		
Core and Value Added RE	AEW Value Investors Asia III, L.P.	245 Park Avenue, New York, NY 10167	2017	\$ 50,000,000 \$ 100,000,000	\$ 44,120,623 \$ 42,296,556					\$ 660,481 \$ 1,530,514	
Opportunistic RE	AG Asia Realty Fund IV, L.P.	245 Park Avenue, New York, NY 10167 245 Park Avenue, New York, NY 10167	2018	\$ 100,000,000	\$ 42,296,556 \$ 46,500,000	\$ 3,827,713 S	\$ 52,144,354 \$ 61,604,803		1.23X 1.32x	\$ 1,530,514 \$ 720,709	
Opportunistic RE	AG Europe Realty Fund II, L.P.			,,,,,,,,	,,	,					
Core and Value Added RF	Bain Capital Real Estate Fund I-A, L.P. CapMan Nordic Real Estate II FCP-RAIF	200 Clarendon Street, Boston, MA 02116 Ludviginkatu 6, 4th Floor, 00130 Helsinki, Finland	2018 2017	\$ 100,000,000 \$ 63,168,776	\$ 62,861,736 \$ 50,420,117		\$ 73,343,771 \$ 64,160,454		1.17x 1.27x	\$ 1,764,263 \$ 585,018	
Core and Value Added RE				\$ 65,168,776	\$ 50,420,117 \$ 14.664.442		\$ 64,160,454 \$ 14,355,926		1.2/X 0.98x	\$ 585,018 \$ 517,836	
	CapMan Nordic Real Estate III FCP-RAIF	Ludviginkatu 6, 4th Floor, 00130 Helsinki, Finland	2021						0.5.0.0		
Opportunistic RE	Capri Urban Investors, LLC	875 North Michigan Avenue, Suite 3430, Chicago, Illinois 60611	2007 2007	\$ 150,000,000 \$ 19,868,930	\$ 149,951,767 \$ 26,654,251				0.65x	\$ 167,280 \$ 29,191	
Opportunistic RE	Carlyle Europe Real Estate Partners III, L.P.	1001 Pennsylvania Avenue, NW Washington, DC 20004-2505	2007	,,	\$ 26,654,251 \$ 143,290,517				0.88x	,.	
Opportunistic RE	CityView Bay Area Fund II, L.P.	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025	2012	4,,					1.53x	-,0.0,7.0	
Opportunistic RE	CityView Southern California Fund II, L.P	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025		4,,	\$ 99,104,064	\$ 158,080,855			1.61x	\$ 269,093 \$ 2.091,798	
Opportunistic RE	CityView Western Fund I, L.P.	1901 Avenue of the Stars, Suite 1950, Los Angeles, CA 90025	2016	\$ 150,000,000 \$ 100,000,000	\$ 108,868,446 \$ 100,000,000	\$ - 5			1.37x 1.07x	-,0,7,,70	
Core and Value Added RE	Core Property Index Fund	1111 Superior Avenue, Suite 1100, Cleveland, Ohio 44114	2019 2007		\$ 100,000,000	\$ 2,410,218 5			1.0/X 1.29x	\$ 105,797 \$ 9,986	
Opportunistic RE	Europa Fund III, L.P.	15 Sloane Square, London SW1W 8ER, United Kingdom		4,,,	,,					4 ,,,,,,	
Opportunistic RE	Europa Fund IV, L.P.	15 Sloane Square, London SW1W 8ER, United Kingdom	2012	50,105,000	\$ 58,877,499		\$ 65,014,859		1.10x	Ψ 017,200	
Core and Value Added RE	Heitman Asia-Pacific Property Investors, L.P	401 Wilshire Boulevard, Suite 1200, Santa Monica, CA 90401	2017	\$ 50,000,000	\$ 43,552,263				1.07x	\$ 487,397	
Core and Value Added RE	Hunt UK Realty Partners, L.P.	4 International Drive, Rye brook, NY 10523	2007	\$ 18,234,832	\$ 30,253,161				0.09x	\$ -	
Core and Value Added RE	Invesco Real Estate Asia Fund, L.P.	37A, Avenue J.F. Kennedy, L-1855 Luxembourg	2014	\$ 100,000,000	\$ 133,934,524	\$ 39,023,980 5	\$ 202,139,520		1.51x	\$ 1,131,646	
Core and Value Added RE	Prologis European Logistics Fund, L.P.	34-38, Avenue de la Liberte, L-1930 Luxembourg	2007	\$ 111,980,000	\$ 264,825,686		\$ 386,813,085		1.46x	\$ 2,045,927	
Core and Value Added RE	RREEF Core Plus Industrial Fund, L.P.	345 Park Avenue, 24th Floor, New York, NY 10154	2017	\$ 125,000,000	\$ 125,000,000	\$ 18,940,602	\$ 226,164,517		1.81x	\$ 573,203	
Opportunistic RE	Starwood Capital Hospitality Fund II, L.P.	1601 Washington Avenue, Suite 800, Miami Beach, FL 33139	2007	\$ 100,000,000	\$ 97,134,161		\$ 152,522,765		1.57x	\$ 342,392	
Opportunistic RE	TPG Real Estate Partners III, L.P.	301 Commerce Street, Suite 3300, Fort Worth, TX 76102	2018	\$ 58,750,000	\$ 24,803,808	\$ 784,376	\$ 28,771,336	22.0%	1.16x	\$ 889,057	\$ (14,401,128)

¹ Name, address, and vintage year of the alternative investment fund.

² Since-inception dollar amount of commitments to the alternative investment fund.

³ Since-inception dollar amount of cash contributions to the alternative investment fund.

⁴ Since-inception dollar amount of cash distributions received from the alternative investment funds.

⁵ Since-inception dollar amount of cash distributions received plus the remaining value of the alternative investment fund.

⁶ Since-inception net returns for Private Equity and Real Assets 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. Real Estate since-inception IRR were provided by StepStone Group (asset category advisor). 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 by the laternative investment fund. Performance results marked "NM" signifies not meaningful due to recency of the fund.

⁷ 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.

⁸ 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, 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.

Annual fiscal year-end dollar amount of cash distribution net of cash contributions from the alternative investment fund for the Real Estate asset category. The since-inception total cash profit after final liquidation are reported for Fixed Income, Global Equity, Private Equity, and Real 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.





FOR INFORMATION ONLY

November 22, 2021

TO: Trustees – Board of Investments

FROM: Jude Pérez #

Principal Investment Officer

FOR: December 8, 2021 Board of Investments Meeting

SUBJECT: LACERA QUARTERLY PERFORMANCE BOOK

Attached is LACERA's quarterly performance book as of September 30, 2021. The report includes both performance and risk sections utilizing data from our platform providers, Solovis and MSCI BarraOne, respectively. Trustees may recall that prior versions of the quarterly book included consultant reports for alternative assets, private equity, real estate, and hedge funds. This report incorporates those asset classes, including the recent real estate administrator conversion with accounting data sourced from LACERA's custodian.

Additional highlights for this quarter include the construction of a private real assets section, securities lending income report, and dedicated risk pages on LACERA's Growth functional category and global equity managers.

Notes on historical real estate performance

Performance at the real estate property level has been added to State Street Bank's ("State Street") custodial record as part of the real estate administrator conversion in May 2021. The addition of this data provides greater transparency to the real estate composite. As previously reported to the Board, in the past, LACERA made an active decision to report only at the highest level of real estate data, namely, the real estate composite. Consequently, LACERA's performance book had substantially less detail than provided today. Important to note is that the property level information independently calculated by State Street may differ slightly from the legacy performance book of record. However, there is no impact on net asset values or returns previously recorded in LACERA's annual financial reporting or used to calculate LACERA's real estate composite, functional composites, or total Fund.

As part of its onboarding of LACERA as a new real estate consulting client, the StepStone Group ("StepStone") conducted a reconciliation of historical records versus State Street. Again, returns between the two firms may vary due to differences in performance methodology. For this reason, a reconciliation between State Street and StepStone will occur every month to make LACERA aware of any notable variations.

Noted and Reviewed:

Jonathan Grabel

Chief Investment Officer

Attachments

EdB:JP



Investments Division

TOTAL FUND

PERFORMANCE REPORT

For the quarter ended September 30, 2021

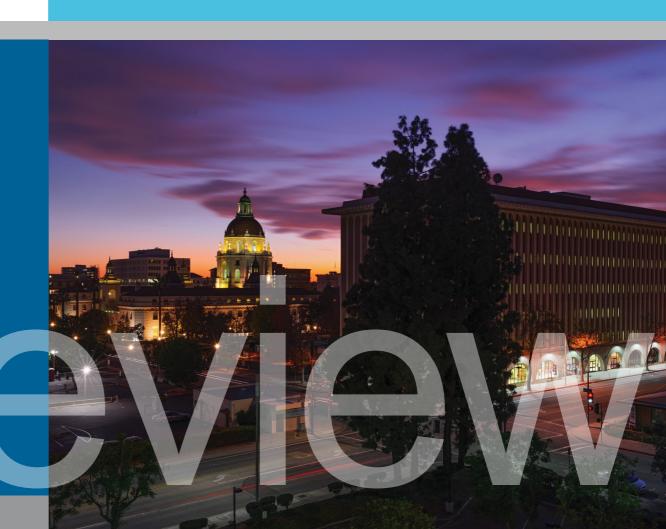




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01	TOTAL FUND
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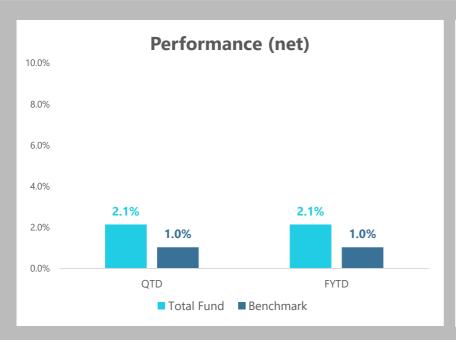


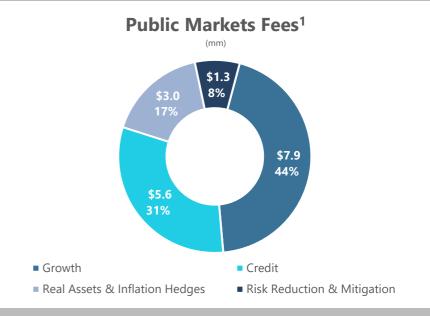
total fund

Quarterly Snapshot

for the quarter ended September 30, 2021









72,708

1 2%

from prior quarter

Sharpe Ratio²

0.00



Batting Average³

50%



Standard Deviation²

8.7



Tracking Error²

2.1



or quarter from prior quarter

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

^{2. 3} Year Annualized.

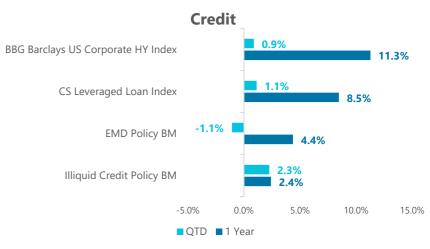
^{3.} Percentage of managers that outperformed the benchmark for the quarter.

Market Environment

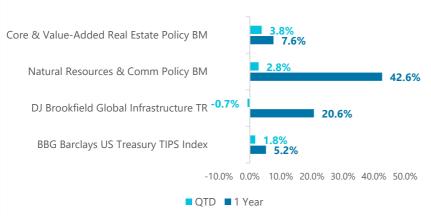
for the quarter ended September 30, 2021

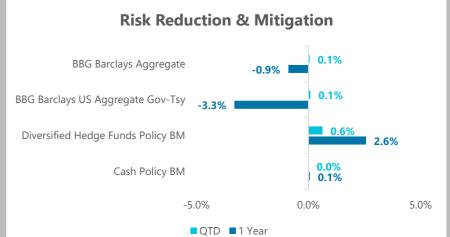






Real Assets & Inflation Hedges





Summary

for the quarter ended September 30, 2021

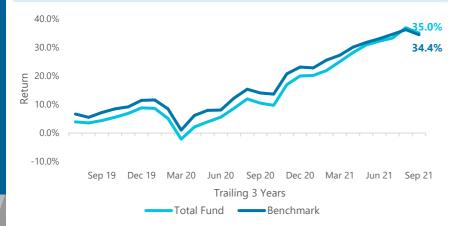


Performance (net)



	OTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
	-						
Total Fund	2.1%	12.5%	22.2%	10.5%	10.4%	9.8%	8.9%
Benchmark	1.0%	9.2%	17.9%	10.4%	9.8%	9.5%	
Excess	1.1%	3.3%	4.3%	0.2%	0.6%	0.3%	
	FY21	FY20	FY19	FY18	FY17		
Total Fund	25.2%	1.8%	6.4%	9.0%	12.7%		
Benchmark	23.1%	2.0%	8.6%	7.8%	11.2%		

Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Growth	3.0%	3.0%	36.9%	
Growth Policy BM	1.0%	1.0%	31.4%	
Excess	2.0%	2.0%	5.5%	
Credit	1.2%	1.2%	13.9%	
Credit Policy BM	1.0%	1.0%	6.9%	
Excess	0.3%	0.3%	6.9%	
Real Assets & Inflation Hedges	2.5%	2.5%	16.9%	
Real Assets & Inflation Hedges Policy BM	2.4%	2.4%	17.2%	
Excess	0.0%	0.0%	-0.3%	
Risk Reduction & Mitigation	0.1%	0.1%	1.1%	
Risk Reduction & Mitigation Policy BM	0.1%	0.1%	-0.3%	
Excess	0.0%	0.0%	1.4%	

Peer Ranking (gross)

	QTE)	1 Year		3 Year		5 Year		10 Year	
Total Fund	2.3%	12	22.7%	45	10.9%	55	10.7%	39	10.1%	50
60/40 Portfolio*	-0.6%	95	16.3%	94	10.0%	67	9.2%	84	8.6%	86
S&P 500 Index	0.6%	55	30.0%	4	16.0%	4	16.9%	4	16.6%	5
5th Percentile	3.8%		28.7%		14.7%		13.2%		12.2%	
25th Percentile	1.5%		24.4%		12.2%		11.4%		11.0%	
50th Percentile	0.9%		22.6%		11.0%		10.6%		10.0%	
75th Percentile	-0.2%		22.0%		9.9%		10.3%		9.2%	
95th Percentile	-0.7%		13.8%		8.1%		6.2%		5.7%	

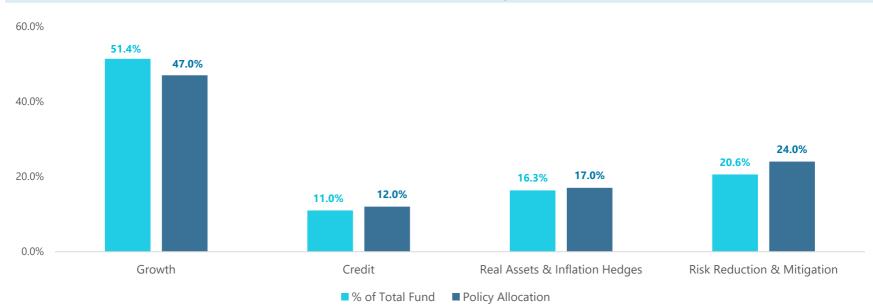
^{* 60%} MSCI ACWI IMI / 40% Bloomberg Barclays Aggregate

Asset Allocation

for the quarter ended September 30, 2021



Actual vs. Policy



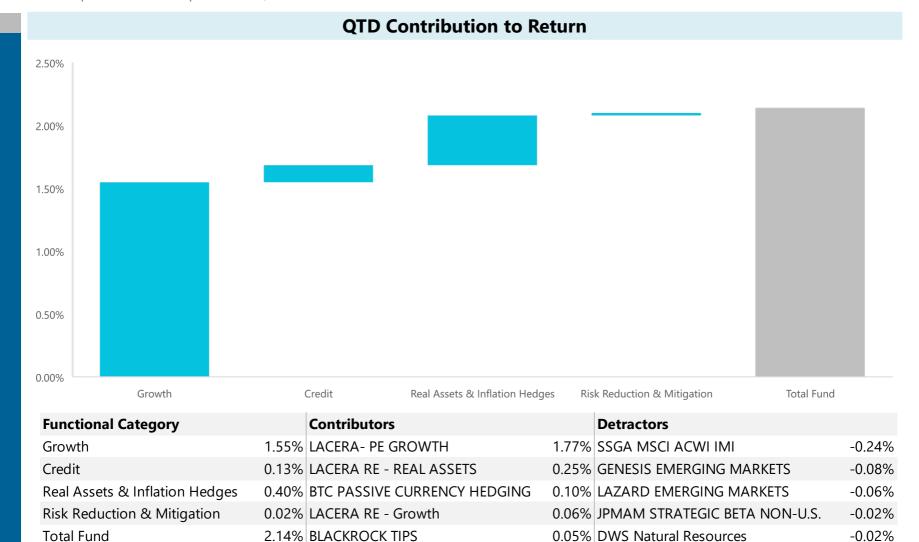
	Ending Market Value	% of Total Fund	Policy Allocation	Over/Under (%)	Over/Under
Total Fund	72,708	100.0%			
Growth	37,361	51.4%	47.0%	4.4%	3,188
Credit	7,985	11.0%	12.0%	-1.0%	-740
Real Assets & Inflation Hedges	11,870	16.3%	17.0%	-0.7%	-491
Risk Reduction & Mitigation	14,947	20.6%	24.0%	-3.4%	-2,503
Overlay Composite	545	0.7%			

Contribution to Return



for the guarter ended September 30, 2021



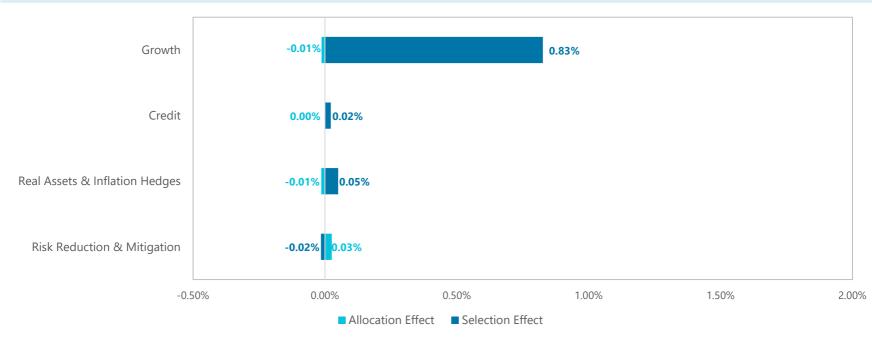


Return Attribution

for the quarter ended September 30, 2021



QTD Performance Attribution¹



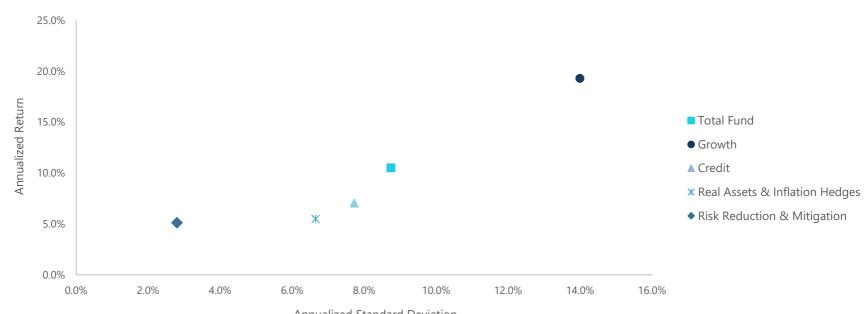
	Ending Market Value	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Total Fund	72,708	100.0%	100.0%	2.1%	1.0%	-0.01%	0.88%	1.10%
Growth	37,361	51.4%	47.0%	3.0%	1.0%	-0.01%	0.83%	1.04%
Credit	7,985	11.0%	12.0%	1.2%	1.0%	0.00%	0.02%	0.03%
Real Assets & Inflation Hedges	11,870	16.3%	17.0%	2.4%	2.4%	-0.01%	0.05%	-0.01%
Risk Reduction & Mitigation	14,947	20.6%	24.0%	0.1%	0.1%	0.03%	-0.02%	0.02%
Overlay Composite	545	0.7%						

Risk vs. Return

for the quarter ended September 30, 2021



3 Year (Annualized)¹



Annualized Standard Deviation

	Annualized	Standard	Sharpe	Information		Tracking
	Return	Deviation	Ratio	Ratio	Beta	Error
Total Fund	10.5%	8.7%	0.00	0.02	1.00	2.1%
Growth	19.3%	14.0%	0.02	0.07	0.95	4.2%
Credit	7.1%	7.7%	0.04	0.10	1.01	3.1%
Real Assets & Inflation Hedges	5.5%	6.6%	(0.06)	(0.24)	0.93	1.7%
Risk Reduction & Mitigation	5.1%	2.8%	0.08	0.29	0.94	0.8%

Performance Detail

L///CERA

for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

Annualized Net Returns

Prior Cutaffer Prio											
Total Fund			Ending	Prior Quarter							
TOTAL FUND 100.0% 72,708 71,498 2.1% 12.5% 22.2% 10.4% 9.8% 8.9% 1.70% 10.4% 9.8% 9.5% 1.70% 10.4% 9.8% 9.5% 1.70% 10.4% 9.8% 9.5% 1.70% 10.4% 9.8% 9.5% 1.70%				,							
Total Fund Policy BM S1.4% 37,361 36,932 3.0% 20.3% 36.9% 0.0% 0.0% 36.9% 0.0% 0.0% 36.9% 0.0% 0.0% 36.9% 0.0% 0.			` '	. ,							
GROWTH Growth Policy BM GLOBAL EQUITY 35.7% 25.971 26.447 -0.8% 12.8% 29.9% 19.3% 16.2% Global Equity Policy BM 14.8% 10.750 9.866 13.1% 42.8% 29.9% 16.5% 16.2% 17.7% 13.9% 17.7% 13.9% 11.1% 12.8% 12.8% 29.9% 16.5% 16.2% 11.1%		100.0%	72,708	71,498	1						
Growth Policy BM GLOBAL EQUITY 35.7% 25.971 26.447 -0.8% 12.8% 29.9% 16.2% Global Equity Policy BM 14.8% 10.750 9.866 13.1% 42.8% 29.9% 16.5% Global Equity Policy BM 14.8% 10.750 9.866 13.1% 42.8% 34.7% 16.2% 16.2% 17.7% 13.2% 43.7% 13.5% 43.7% 13.5% 13.5% 43.7% 13.5% 13.5% 43.7% 13.5	j	=4.40/	27.24								
GLOBAL EQUITY GLOBA PRIVATE EQUITY - GROWTH PRIVATE EQUITY		51.4%	37,361	36,932							
Global Equity Policy BM	,	25.70/	25.071	26.447							
PRIVATE EQUITY - GROWTH	-	33.7%	25,971	20,447	1						
Private Equity - Growth Policy BM OPPORTUNISTIC REAL ESTATE O.9% 640 618 7.7% 32.3% 43.7% 16.3% OPPORTUNISTIC REAL ESTATE O.9% 640 618 7.4% 16.0% 17.5% 11.3% 11.8% 9.5% 11.8% 11.8% 11.8% 11.8% 11.0% OPPORTUNISTIC REAL ESTATE O.9% O.	, , ,	14 00/	10.750	0.966							
OPPORTUNISTIC REAL ESTATE Opportunistic Real Estate Policy BM CREDIT 11.0% 7,985 7,706 1.2% 7.7% 13.9% 7.7% 13.9% 11.3% 11.8% 11.9% 1.0% 2.7% 6.5% 6.5% 6.6% 6.6% 6.7% 11.3% 6.7% 8.8% 6.7% 6.7% 6.7% 8.8% 6.7% 6.7% 6.7% 8.8% 6.7% 6.7% 6.7% 6.7% 6.7% 6.7% 6.7% 6.7	-	14.0%	10,750	9,000							
Opportunistic Real Estate Policy BM		0.09/	640	610							
CREDIT		0.576	040	010	1						
Credit Policy BM	, ,	11.0%	7 095	7 706							
HIGH YIELD 3.1% 2.267 2.250 0.8% 6.0% 12.9% 6.7%		11.070	1,505	1,100							
BBG BARC US Corp HY Idx BANK LOANS 3.7% 2,675 2,639 1.4% 5.7% 9.7% 7.3% BANK LOANS CS Leveraged Loan Index EM DEBT 1.2% 877 892 -1.6% -2.2% 6.8% 4.2% 2.5% EMD Policy BM ILIUQUID CREDIT 3.0% 2,166 1.924 2.9% 18.5% 26.0% 12.7% Illiquid Credit Policy BM REAL ASSETS A INFLATION HEDGES Real Assets & Inflation Hedges Policy BM CORE & VALUE-ADDED REAL ESTATE CORE & VALUE-ADDED REAL ESTATE CORE & VALUE-ADDED REAL ESTATE SINFLATION HEDGES ANATURAL RESOURCES & COMMODITIES ANATURAL RESOURCES & COMMODITIES AL2% 3,031 2.998 2.998 2.33% 4.21% 5.5% 4.8% -1.9% -2.0% INFRASTRUCTURE TR D J BROOKFIELD GLOBAL INFRASTRUCTURE TR TIPS BBG BARC US Toy TIPS Idx RISK REDUCTION & MITTIGATION BBG BARC US Tsy TIPS Idx RISK REDUCTION & MITTIGATION BBG BC Aggregate Bond Index DIVERSIFIED HEDGE FUNDS D ON THE ASSET AND THE ASSET A	,	3 1%	2 267	2 250							
BANK LOANS CS Leveraged Loan Index EM DEBT 1.2% 877 892 -1.6% -2.2% 6.8% 4.2%		3.170	2,201	2,230							
CS Leveraged Loan Index EM DEBT 1.2% 877 892 -1.6% -2.2% 6.8% 4.2%	·	3.7%	2 675	2 639							
EM DEBT 1.2% 877 892 -1.6% -2.2% 6.8% 4.2% 2.5% EMD Policy BM 1.1LIQUID CREDIT 3.0% 2,166 1,924 2.9% 18.5% 26.0% 1.2% 3.8% 11LIQUID CREDIT 2.3% 13.0% 2,166 1,924 2.9% 18.5% 26.0% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.3% 2.4% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.3% 2.4% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2% 1.2		3.770	2,013	2,033							
EMD Policy BM ILLIQUID CREDIT Illiquid Credit Policy BM REAL ASSETS & INFLATION HEDGES Real Assets & Inflation Hedges Policy BM CORE & VALUE-ADDED REAL ESTATE Core & Value-Added Real Estate Policy BM NATURAL RESOURCES & COMMODITIES NATURAL RESOURCES & COMMODITIES DI BROOKFIELD GLOBAL INFRASTRUCTURE TR IPS BBG BARC US Tsy TIPS Idx RISK REDUCTION & MITIGATION RISK REDUCTION & MITIGATION 2.56 11,924 2.998 2.898 2.898 2.898 2.998 2.998 2.898 2.998 2.898 2.9069	3	1 2%	877	892	1						
ILLIQUID CRÉDIT 3.0% 2,166 1,924 2.9% 18.5% 26.0% 12.7%		1.270	J.,	032							
Illiquid Credit Policy BM	,	3.0%	2.166	1.924							
REAL ASSETS & INFLATION HEDGES 16.3% 11,870 11,602 2.5% 10.7% 16.9% 5.5% Real Assets & Inflation Hedges Policy BM CORE & VALUE-ADDED REAL ESTATE 6.2% 4,480 4,392 4.0% 6.0% 6.9% 3.1% 4.7% 7.0% 6.8% Core & Value-Added Real Estate Policy BM NATURAL RESOURCES & COMMODITIES 4.2% 3,031 2,998 2.9% 23.3% 42.1% 5.5% 4.8% -1.9% -2.0% Natural Resources & Comm Policy BM 2.8% 23.2% 42.6% 6.8% 4.5% -2.7% -2.9% INFRASTRUCTURE DJ DJ BROOKFIELD GLOBAL INFRASTRUCTURE TR TIPS 2.8% 2,061 2,029 1.6% 3.3% 4.9% 7.8% BBG BARC US Tsy TIPS Idx 2.8% 2,061 2,029 1.6% 3.3% 4.9% 7.9% RISK REDUCTION & MITIGATION 20.6% 14,947 14,743 0.1% -0.9% -0.3% 4.3% INVESTMENT GRADE BONDS 15.0% 10,897 11,301 0.1% -1.5% -0.4% 5.6% 3.5% 3.8% 5.9% BBG BC Aggregate Bond Index Diversified Hedge Funds Policy BM 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8% CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	-		_,	.,,== :							
Real Assets & Inflation Hedges Policy BM CORE & VALUE-ADDED REAL ESTATE 6.2% 4,480 4,392 4.0% 6.0% 6.9% 3.1% 4.7% 7.0% 6.8% 6.8% 6.0% 6.9% 3.1% 4.7% 7.0% 6.8% 6.8% 6.0% 6.9% 3.1% 4.7% 7.0% 6.8% 6.8% 6.9%	·	16.3%	11.870	11.602	2.5%	10.7%	16.9%				5.5%
CORE & VALUE-ADDED REAL ESTATE CORE & VALUE-ADDED REAL ESTATE CORE & Value-Added Real Estate Policy BM NATURAL RESOURCES & COMMODITIES A.2% NATURAL RESOURCES & COMMODITIES A.29% NATURAL RESOURCE & COMMODITIES A.29% NATURAL RESOURCE & CAMBOR A.29% NASW A2.9%			, ,	,							
Core & Value-Added Real Estate Policy BM NATURAL RESOURCES & COMMODITIES 4.2% 3,031 2,998 2,9% 23.3% 42.1% 5.5% 4.8% -1.9% -2.0% Natural Resources & Comm Policy BM 2.8% 23.2% 42.6% 6.8% 4.5% -2.7% -2.9% 10,000 1	3 7	6.2%	4,480	4,392	4.0%	6.0%	6.9%	3.1%	4.7%	7.0%	6.8%
Natural Resources & Comm Policy BM 3.2% 2,298 2,183 -0.2% 12.0% 20.7% 9.9%	Core & Value-Added Real Estate Policy BM				3.8%	7.2%	7.6%	5.1%	6.1%	9.1%	6.7%
INFRASTRUCTURE 3.2% 2,298 2,183 -0.2% 12.0% 20.7% 9.9%	NATURAL RESOURCES & COMMODITIES	4.2%	3,031	2,998	2.9%	23.3%	42.1%	5.5%	4.8%	-1.9%	-2.0%
DJ BROOKFIELD GLOBAL INFRASTRUCTURE TR TIPS 2.8% 2,061 2,029 1.6% 3.3% 4.9% 7.0% 8BG BARC US Tsy TIPS Idx 1.8% 3.5% 5.2% 7.9% 8ISK REDUCTION & MITIGATION Risk Reduction & Mitigation Policy BM INVESTMENT GRADE BONDS 15.0% 10,897 11,301 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.1% 0.	Natural Resources & Comm Policy BM				2.8%	23.2%	42.6%	6.8%	4.5%	-2.7%	-2.9%
TIPS BBG BARC US Tsy TIPS Idx RISK REDUCTION & MITIGATION Risk Reduction & Mitigation Policy BM INVESTMENT GRADE BONDS BBG BC Aggregate Bond Index DIVERSIFIED HEDGE FUNDS A 3.8% A 4.9% 7.8% 1.8% 3.5% 5.2% 7.8% 5.1% 7.8% 1.8% 0.1% -0.2% 1.1% -0.9% -0.3% 4.3% 3.5% 3.8% 5.9% 0.1% -1.5% -0.4% 5.6% 3.5% 3.8% 5.9% 3.0% 5.4% 7.4% 7.4% 7.4% 7.4%	INFRASTRUCTURE	3.2%	2,298	2,183	-0.2%	12.0%	20.7%				9.9%
BBG BARC US Tsy TIPS Idx RISK REDUCTION & MITIGATION 14,947 14,743 0.1% -0.2% 1.1% 4.3% 10.1% -0.9% -0.3% 4.3% 10.1% -1.5% -0.4% 5.6% 3.5% 3.8% 5.9% 3.8% 5.9% 10.1% -1.6% -0.9% 5.4% 2.9% 3.0% 5.4% DIVERSIFIED HEDGE FUNDS 4.3% 3.098 2,526 0.0% 7.5% 10.8% 7.4% 0.6% 1.9% 2.6% 3.5% CASH	DJ BROOKFIELD GLOBAL INFRASTRUCTURE TR				-0.7%	12.2%	20.6%				7.0%
RISK REDUCTION & MITIGATION 20.6% 14,947 14,743 0.1% -0.2% 1.1% 5.1% Risk Reduction & Mitigation Policy BM INVESTMENT GRADE BONDS 15.0% 10,897 11,301 0.1% -0.9% -0.4% 5.6% 3.5% 3.8% 5.9% BBG BC Aggregate Bond Index DIVERSIFIED HEDGE FUNDS 4.3% 3,098 2,526 0.0% 7.5% 10.8% 7.4% Diversified Hedge Funds Policy BM CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	TIPS	2.8%	2,061	2,029	1.6%	3.3%	4.9%				7.8%
Risk Reduction & Mitigation Policy BM INVESTMENT GRADE BONDS 15.0% 10,897 11,301 0.1% -0.9% -0.3% 4.3% BBG BC Aggregate Bond Index 0.1% -1.5% -0.4% 5.6% 3.5% 3.8% 5.9% DIVERSIFIED HEDGE FUNDS 4.3% 3,098 2,526 0.0% 7.5% 10.8% 7.4% Diversified Hedge Funds Policy BM 0.6% 1.9% 2.6% 3.5% CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	BBG BARC US Tsy TIPS Idx				1.8%	3.5%	5.2%				7.9%
INVESTMENT GRADE BONDS 15.0% 10,897 11,301 0.1% -1.5% -0.4% 5.6% 3.5% 3.8% 5.9% BBG BC Aggregate Bond Index 0.1% -1.6% -0.9% 5.4% 2.9% 3.0% 5.4% DIVERSIFIED HEDGE FUNDS 4.3% 3,098 2,526 0.0% 7.5% 10.8% 7.4% Diversified Hedge Funds Policy BM 0.6% 1.9% 2.6% 3.5% CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	RISK REDUCTION & MITIGATION	20.6%	14,947	14,743	0.1%	-0.2%	1.1%				5.1%
BBG BC Aggregate Bond Index DIVERSIFIED HEDGE FUNDS 4.3% 3,098 2,526 0.0% 7.5% 10.8% 7.4% 0.6% 1.9% 2.6% 3.5% CASH	Risk Reduction & Mitigation Policy BM				0.1%	-0.9%	-0.3%				4.3%
DIVERSIFIED HEDGE FUNDS 4.3% 3,098 2,526 0.0% 7.5% 10.8% 7.4% Diversified Hedge Funds Policy BM 0.6% 1.9% 2.6% 3.5% CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	INVESTMENT GRADE BONDS	15.0%	10,897	11,301	0.1%			5.6%	3.5%	3.8%	
Diversified Hedge Funds Policy BM 0.6% 1.9% 2.6% 3.5% CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	BBG BC Aggregate Bond Index				0.1%	-1.6%	-0.9%	5.4%	2.9%	3.0%	5.4%
CASH 1.3% 952 916 0.2% 0.6% 0.7% 1.6% 1.5% 1.0% 1.8%	DIVERSIFIED HEDGE FUNDS	4.3%	3,098	2,526	0.0%	7.5%	10.8%				7.4%
	Diversified Hedge Funds Policy BM				0.6%	1.9%	2.6%				3.5%
Cash Policy BM 0.0% 0.0% 0.1% 1.2% 1.2% 0.6% 1.4%		1.3%	952	916							
	Cash Policy BM				0.0%	0.0%	0.1%	1.2%	1.2%	0.6%	1.4%



growth

Summary

for the quarter ended September 30, 2021



Performance (net) 40.0% 30.0% 20.0% 10.0% QTD YTD 1 Year 3 Year 5 Year 10 Year ITD

	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Growth	3.0%	20.3%	36.9%				19.3%
Benchmark	1.0%	15.6%	31.4%				18.2%
Excess	2.0%	4.6%	5.5%				1.1%

■ Growth ■ Benchmark

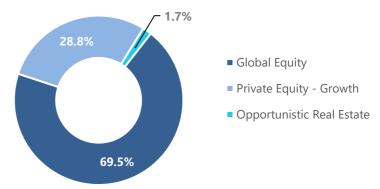
Functional Category

	QTD	FYTD	1 Year	3 Year
Global Equity	-0.8%	-0.8%	29.9%	
Global Equity Policy BM	-1.1%	-1.1%	28.9%	
Excess	0.3%	0.3%	1.0%	
Private Equity - Growth	13.1%	13.1%	58.4%	
Private Equity - Growth Policy BM	7.7%	7.7%	43.7%	
Excess	5.4%	5.4%	14.7%	
Opportunistic Real Estate	7.4%	7.4%	17.5%	11.3%
Opportunistic Real Estate Policy BM	4.4%	4.4%	10.3%	7.7%
Excess	3.0%	3.0%	7.2%	3.5%

Cumulative Return



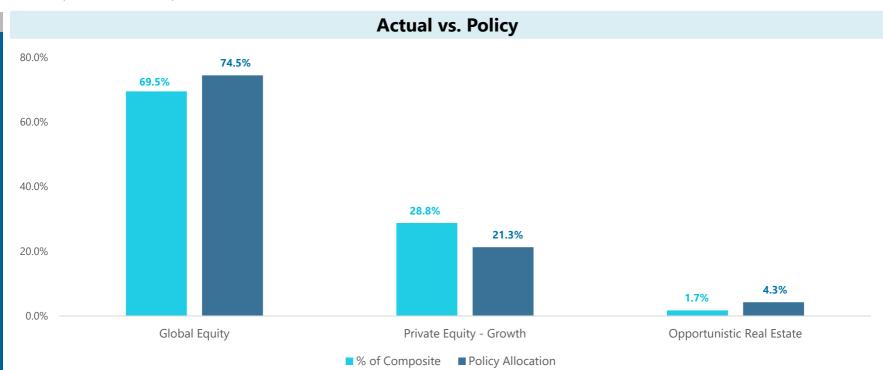
Exposure



Asset Allocation



for the quarter ended September 30, 2021



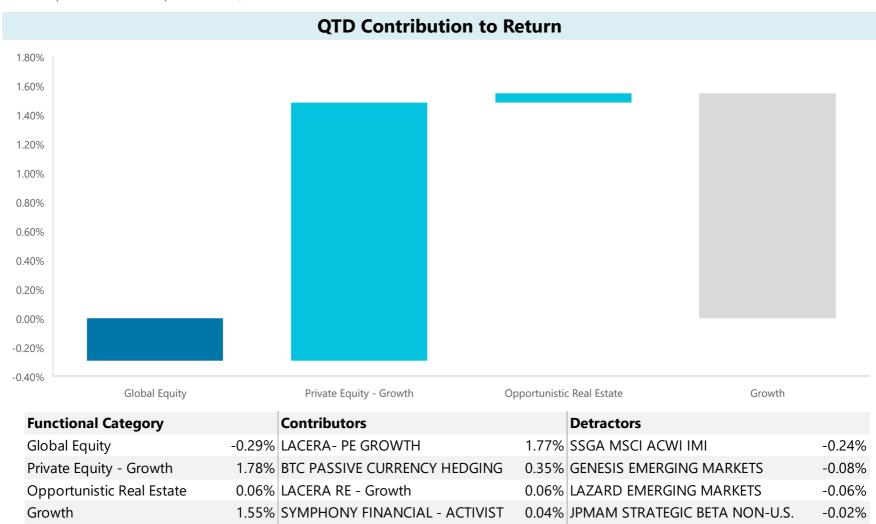
	Ending Market Value	% of Composite	Policy Allocation	Over / Under	Over / Under
Growth	37,361	100.0%			
Global Equity	25,971	69.5%	74.5%	-5.0%	-1,851
Private Equity - Growth	10,750	28.8%	21.3%	7.5%	2,799
Opportunistic Real Estate	640	1.7%	4.3%	-2.5%	-948

Contribution to Return



0.02% ACADIAN DEVELOPED MARKETS

for the quarter ended September 30, 2021



JPMAM STRATEGIC BETA U.S.

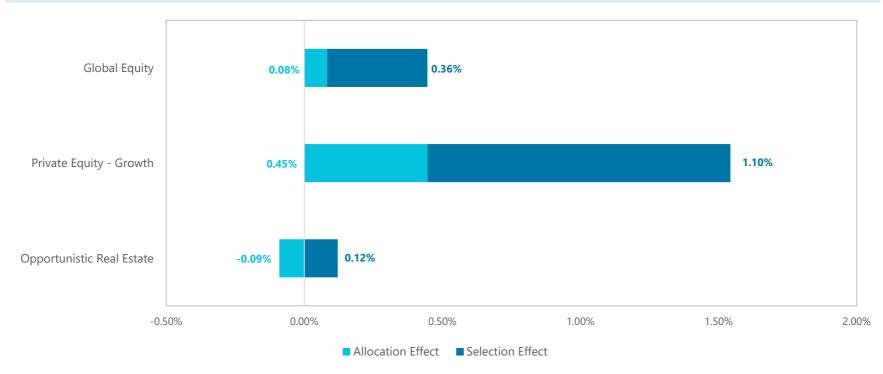
-0.02%

Return Attribution

for the quarter ended September 30, 2021



QTD Performance Attribution¹



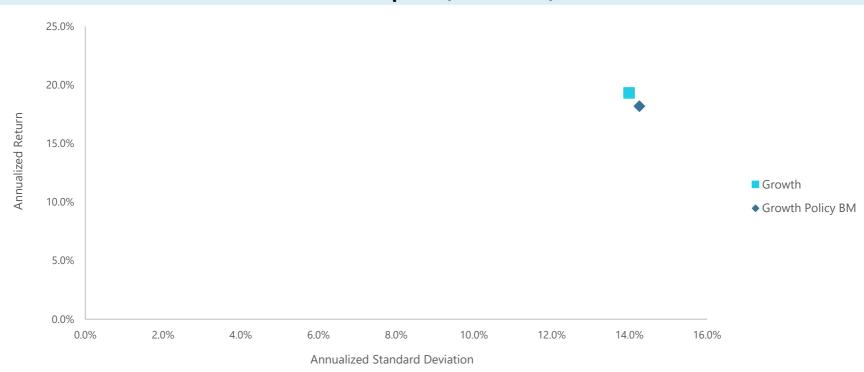
	Ending Market Value	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Growth	37,361	100.0%	100.0%	3.0%	1.0%	0.44%	1.58%	2.04%
Global Equity	25,971	69.5%	74.5%	-0.8%	-1.1%	0.08%	0.36%	0.31%
Private Equity - Growth	10,750	28.8%	21.3%	13.1%	7.7%	0.45%	1.10%	1.77%
Opportunistic Real Estate	640	1.7%	4.3%	7.4%	4.4%	-0.09%	0.12%	-0.04%

Risk vs. Return

for the quarter ended September 30, 2021



Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Growth	19.3%	14.0%				
Growth Policy BM	18.2%	14.3%	0.02	0.07	0.95	4.2%

Performance Detail

L//.CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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
ROWTH	100.0%	37,361	36,932	3.0%	20.3%	36.9%				19.3%
Growth Policy BM				1.0%	15.6%	31.4%				18.2%
GLOBAL EQUITY	69.5%	25,971	26,447	-0.8%	12.8%	29.9%				16.5%
Global Equity Policy BM				-1.1%	11.4%	28.9%				16.2%
PASSIVE										
BTC PASSIVE CURRENCY HEDGING	0.2%	60	65	1.0%	2.5%	0.3%	0.4%	0.7%	1.1%	0.7%
SSGA MSCI ACWI IMI	42.2%	15,769	16,141	-1.1%	12.0%	29.4%				16.3%
FACTOR BASED										
JPMAM STRATEGIC BETA NON-US	1.7%	628	644	-2.5%	6.6%	24.6%				22.5%
JPMAM STRATEGIC BETA US	13.0%	4,863	4,850	0.3%	15.3%	30.8%				33.5%
ACTIVE										
ACADIAN DEVELOPED MARKETS	1.7%	636	647	-1.8%	12.3%	30.6%	9.7%	12.3%	11.0%	5.6%
BTC EURO TILTS	1.9%	713	717	-0.6%	14.3%	30.3%	8.4%	9.2%	9.5%	4.0%
CAPITAL GROUP DEVELOPED MARKETS	1.3%	470	478	-1.8%	6.3%	21.5%	14.3%	14.4%	11.2%	
CEVIAN CAPITAL II - ACTIVIST	1.0%	389	389	0.0%	17.2%	34.7%	7.7%	9.2%		9.2%
CORNERCAP	0.2%	82	82	-0.5%	26.4%	60.1%	10.9%			10.99
FRONTIER US SMID GROWTH	0.8%	295	303	-2.6%	11.6%	44.2%	10.9%	12.6%	14.9%	11.29
GENESIS EMERGING MARKETS	1.8%	668	726	-8.0%	-2.5%	17.4%	10.9%	10.0%	7.2%	5.6%
GLOBAL ALPHA IE SC -EMP	0.4%	164	164	0.4%	13.8%	33.5%				14.49
Jana JSI Fund V - activist	0.3%	124	110	3.3%	16.4%	36.7%	16.0%	20.5%		20.59
LAZARD EMERGING MARKETS	1.3%	471	512	-8.1%	-0.8%	24.1%	13.0%	11.1%		5.3%
QMA US SMALL CAP CORE	0.5%	198	200	-1.0%	21.5%	53.3%	5.4%			6.0%
SYMPHONY FINANCIAL- ACTIVIST	0.7%	252	222	13.1%	12.1%	19.2%	13.5%			18.09
SYSTEMATIC US SMALL CAP VLAUE	0.5%	192	198	-2.8%	21.4%	54.9%	8.7%			8.4%
PRIVATE EQUITY GROWTH	28.8%	10,750	9,866	13.1%	42.8%	58.4%				25.1
Private Equity - Growth Policy BM				7.7%	32.3%	43.7%				16.39
OPPORTUNISTIC REAL ESTATE	1.7%	640	618	7.4%	16.0%	17.5%	11.3%	11.8%	9.5%	4.2%
Opportunistic Real Estate Policy BM				4.4%	9.2%	10.3%	7.7%	8.8%	11.8%	11.09

Growth Risk Summary

Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Risk Summary

	Value
Total Risk	18.74
Benchmark Risk	18.53
Active Risk	1.41
Portfolio Beta	1.01

Risk Decomposition

	Port	folio	Ac	tive
	Risk		Risk	
Risk Source	Contribution	%Risk	Contribution	%Risk
Total Risk	18.74	100.00	1.41	100.00
Local Market Risk	18.20	97.12	1.32	0.93
Common Factor Risk	18.15	96.85	1.08	0.77
Specific Risk	0.05	0.27	0.24	0.17
Currency Risk	0.54	2.88	0.09	0.07

Contribution to Risk



	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Growth	36,768	100.00	18.74	18.74	100.00
Global Equity	25,906	70.46	18.22	12.48	66.63
Private Equity	10,222	27.80	24.16	5.98	31.92
Opportunistic Real Estate	640	1.74	23.34	0.27	1.45

Active Risk from Common Factors



Growth Risk Summary

for the quarter ended September 30, 2021

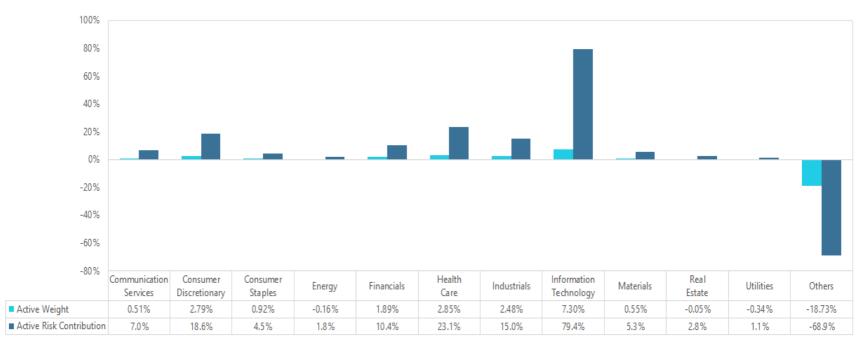


		Weight%					
Region	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total Growth	100.00%	100.00%	0.00%	18.74	1.41	100.00	0.01
North America	64.97%	67.34%	-2.37%	20.07	1.15	81.31	0.07
Asia Pacific	15.01%	15.56%	-0.55%	15.83	0.18	12.71	-0.01
Europe, Middle East, Africa	17.75%	16.27%	1.48%	21.33	0.07	5.03	0.00
Global	1.07%	0.00%	1.07%	21.84	-0.03	-1.79	-0.02
South America	0.99%	0.64%	0.35%	32.12	0.04	2.51	0.01
Rest Of World	0.22%	0.19%	0.03%	14.21	0.00	0.23	0.00



for the quarter ended September 30, 2021

Portfolio Allocation by GICS Sector



■ Active Weight ■ Active Risk Contribution

Growth – Global Equity Acadian Developed Markets



for the quarter ended September 30, 2021

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)	52,642.7	77,079.0
No. Of Issues	645.0	
Dividend Yield	2.4	2.7
Return on Equity	22.0	16.3
Price to Sales	4.3	5.2
Price to Book	10.3	4.9
PE Ratio	13.9	19.9

Top Holdings (% of assets)

ASML HOLDING NV	2.9%
FUJITSU LTD	2.0%
ICON PLC	2.0%
NOVO NORDISK A/S B	1.7%
WOLTERS KLUWER	1.7%
Top 5 Holdings	10.3%

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

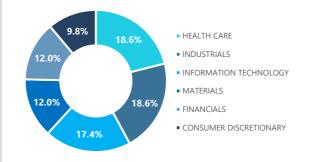
Performance (net)¹

	Ending Market Value (mm)			QTD		1 Year		3 Year		5 Year
ACADIAN DEVELOPED MARKETS	636.0			-1.8%		30.6%		9.7%		12.3%
MSCI EAFE + Canada Net Index				-0.7%		26.5%		7.9%		8.9%
Growth Policy BM				1.0%		31.4%				
Universe data: International Equity Funds Core		QTD		1 Year		3 Year		5 Year		
ACADIAN DEVELOPED MARKETS		-1.7%	55	31.1%	56	10.1%	63	12.7%	52	
Median		-1.2%		32.2%		11.9%		12.8%		

Growth of \$10,000



Top Exposures (% of assets)²





- JAPANSWITZERLAND
- NETHERLANDS
- UNITED KINGDOM
- GERMANY

1,22

Growth Risk Analysis – Global Equity Acadian Developed Markets



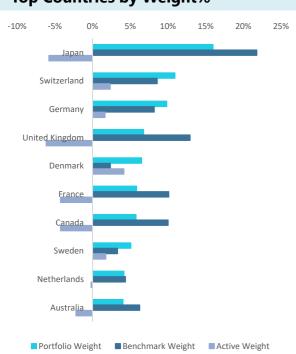
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	19.80
Benchmark Risk	18.23
Active Risk	4.69
Portfolio Beta	1.06

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
AURELIUS EQUITY OPPORTUNITIES SE & CO.	2.97%	0.00%	2.97%	51.71	10.16	0.200
ATLASSIAN CORP PLC	1.56%	0.00%	1.56%	41.01	3.70	0.151
ASM INTERNATIONAL NV	1.35%	0.10%	1.25%	40.47	2.94	0.151
GETINGE AB	1.36%	0.00%	1.36%	33.76	2.61	0.130
ICON PLC	1.98%	0.00%	1.98%	30.91	2.52	0.100
BLUESCOPE STEEL LTD	1.14%	0.04%	1.10%	40.16	2.42	0.143
BIONTECH SE	0.60%	0.00%	0.60%	63.92	2.17	0.211
ZIM INTEGRATED SHIPPING SERVICES LTD	0.62%	0.00%	0.62%	63.44	2.15	0.203
XINYU IRON & STEEL CO LTD	0.82%	0.00%	0.82%	46.97	2.14	0.163
AP MOLLER MAERSK A S B COMMON STOC	1.47%	0.00%	1.47%	35.47	2.01	0.104



Growth – Global Equity **BTC Europe Alpha Tilts**

Los Angeles County Employees Retirement Association

for the guarter ended September 30, 2021

Strategy

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

Inception Date: January 2007

Risk Statistics (since inception)

Standard Deviation	19.2%
Benchmark Standard Deviation	19.2%
Sharpe Ratio	0.0
Information Ratio	0.1
Beta	1.0
Tracking Error	1.9%

Performance (net)¹ Ending Market Value (mm) OTD 1 Year 3 Year 5 Year **BTC EURO TILTS** 712.9 -0.6% 30.3% 8.4% 9.2% MSCI EUROPE -1.6% 27.3% 7.8% 8.8% Growth Policy BM 1.0% 31.4%

Universe data: International Equity Developed Markets	QTD		1 Year		3 Year		5 Year	
BTC EURO TILTS	-0.5%	39	30.8%	23	8.9%	45	9.7%	45
Median	-1.2%		25.8%		8.7%		9.4%	

Calendar Year Returns





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



Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	19.62
Benchmark Risk	20.00
Active Risk	1.79
Portfolio Beta	0.98

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

	Weight					
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
US Dollar	2.33%	0.00%	2.33%	0.00	6.68	0.000
NOKIA OYJ	1.44%	0.28%	1.17%	38.24	4.56	0.019
LUNDIN ENERGY AB	1.59%	0.07%	1.52%	51.22	4.21	-0.002
ROCHE HOLDING AG	3.84%	2.39%	1.44%	21.01	4.13	0.000
GIVAUDAN SA	1.88%	0.39%	1.48%	19.73	4.01	-0.003
DEUTSCHE POST AG	2.02%	0.58%	1.44%	25.03	3.22	-0.011
SIKA AG	1.81%	0.42%	1.39%	22.53	3.12	-0.011
NOVARTIS AG	3.15%	1.70%	1.45%	19.04	2.62	-0.019
L'OREAL SA	2.37%	0.97%	1.40%	19.57	2.57	-0.018
KONINKLIJKE AHOLD DELHAIZE NV	1.25%	0.32%	0.93%	19.92	2.43	-0.004



Growth – Global Equity Capital Group Developed Markets



11.9%

12.8%

for the quarter ended September 30, 2021

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)	117,528.3	77,010.0
No. Of Issues	195.0	-
Dividend Yield	1.9	2.7
Return on Equity	16.9	16.3
Price to Sales	9.0	5.2
Price to Book	3.2	4.9
PE Ratio	31.8	19.9

Top Holdings (% of assets)

EVOLUTION AB	4.0%
OCADO GROUP PLC	3.2%
LVMH MOET HENNESSY LOUIS VUI	2.6%
NOVO NORDISK A/S B	2.1%
TOKYO ELECTRON LTD	1.9%
Top 5 Holdings	13.7%

. Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Performance (net)¹

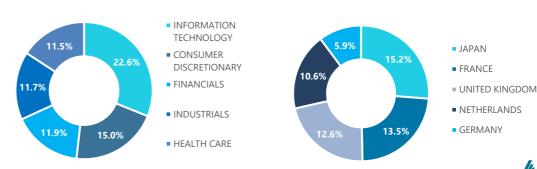
	Endin	g Market V	/alue (mm)	(QTD	1 Yea	ar	3 Year	5	Year
CAPITAL GROUP DEVELOPED MARKETS		469.6			-	1.8%	21.59	%	14.3%	1	4.4%
EAFE CUSTOM INDEX					-	0.7%	26.59	%	7.9%	8	3.9%
Growth Policy BM					1	1.0%	31.49	%			
Universe data: International Equity Funds Co	ore	QTD		1 Ye	ear		3 Year		5 Year		
CAPITAL GROUP DEVELOPED MARKETS		-1.7%	55	22.0)%	83	14.7%	32	14.8%	36	

Growth of \$10,000

Median



Top Exposures (% of assets)²



1,26

Growth Risk Analysis – Global Equity Capital Group Developed Markets



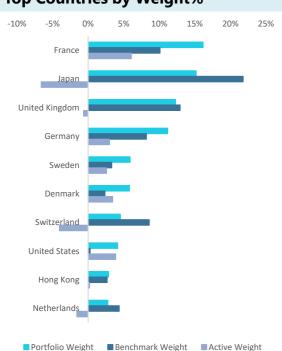
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

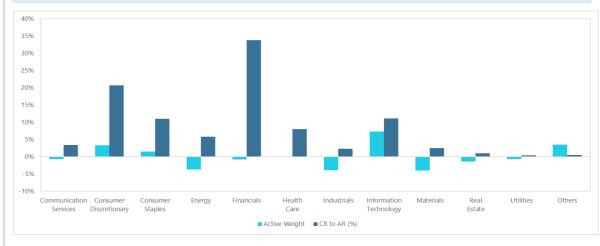
	Value
Total Risk	18.73
Benchmark Risk	18.23
Active Risk	4.82
Portfolio Beta	0.99

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
AURELIUS EQUITY OPPORTUNITIES SE & CO	5.41%	0.00%	5.41%	51.71	20.12	0.174
EVOLUTION AB (PUBL)	3.98%	0.14%	3.84%	47.09	15.14	0.185
OCADO GROUP PLC	3.21%	0.06%	3.15%	42.29	9.78	0.145
GENMAB A/S	1.64%	0.15%	1.49%	30.99	3.08	0.095
AURELIUS EQUITY OPPORTUNITIES SE & CO	0.64%	0.00%	0.64%	51.71	2.37	0.174
TOKYO ELECTRON LTD	1.90%	0.35%	1.54%	34.33	2.24	0.065
BEIGENE LTD	0.74%	0.00%	0.74%	49.18	2.11	0.132
NUVEI CORP SUBORDINATE VTG COMMON	0.53%	0.00%	0.53%	58.02	1.62	0.142
ZOOPLUS AG	0.55%	0.00%	0.55%	53.53	1.39	0.117
AURELIUS EQUITY OPPORTUNITIES SE & CO	0.37%	0.00%	0.37%	51.71	1.38	0.174



Growth – Global Equity Cevian Capital II

Median

Los Angeles County Employees Retirement Association

8.7%

9.4%

for the quarter ended September 30, 2021

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: April 2006

Risk Statistics (since inception)

Standard Deviation	16.7%
Benchmark Standard Deviation	16.3%
Sharpe Ratio	0.0
Information Ratio	0.0
Beta	0.9
Tracking Error	8.7%

Performance (net) ¹										
	Ending Market	t Value (m	nm)	QTD		1 Year	3	Year	5 Ye	ar
CEVIAN CAPITAL II - ACTIVIST	388	.9		0.0%		34.7%	7	'.7 %	9.29	6
MSCI EUROPE				-1.6%		27.3%	7	7.8%	8.89	6
Growth Policy BM				1.0%		31.4%				
	'			ı						
Universe data: International Equity Deve	loped Markets	QTD		1 Year		3 Year		5 Year		
CEVIAN CAPITAL II - ACTIVIST		0.2%	21	36.2%	14	8.9%	43	10.6%	39	

-1.2%

25.8%





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

Growth Risk Analysis – Global Equity Cevian Capital II



Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

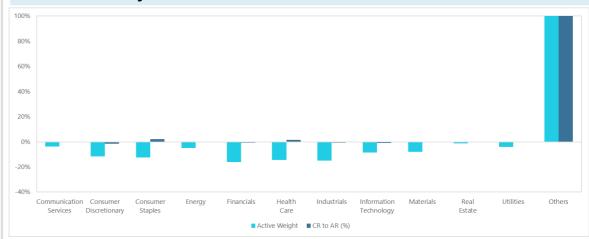
	Value
Total Risk	21.91
Benchmark Risk	20.00
Active Risk	8.59
Portfolio Beta	1.01

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk
Weight

	vveignt					
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
CEVIAN CAPITAL II - ACTIVIST	100.00%	0.00%	100.00%	21.91	100.00	0.089
NESTLE SA	0.00%	3.23%	-3.23%	16.43	0.78	-0.017
ASTRAZENECA PLC	0.00%	1.74%	-1.74%	24.99	0.52	-0.022
ROCHE HOLDING AG	0.00%	2.39%	-2.39%	21.01	0.47	-0.013
UNILEVER PLC	0.00%	1.31%	-1.31%	22.27	0.42	-0.024
NOVARTIS AG	0.00%	1.70%	-1.70%	19.04	0.30	-0.012
DIAGEO PLC	0.00%	1.06%	-1.06%	22.87	0.23	-0.015
GLAXOSMITHKLINE PLC	0.00%	0.88%	-0.88%	21.67	0.22	-0.018
NOVO NORDISK A/S	0.00%	1.51%	-1.51%	23.92	0.18	-0.007
HSBC HOLDINGS PLC	0.00%	1.00%	-1.00%	35.47	0.16	-0.011



Growth – Global Equity CornerCap US Small Cap



for the quarter ended September 30, 2021

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)	2,480.0	3,312.2
No. Of Issues	301.0	
Dividend Yield	1.7	1.0
Return on Equity	12.9	9.5
Price to Sales	2.3	20.6
Price to Book	3.2	3.8
PE Ratio	18.8	91.2

Top Holdings (% of assets)

ALPHA METALLURGICAL RESOURCE	0.5%
ADVANSIX INC	0.5%
CONNECTONE BANCORP INC	0.5%
BLUEGREEN VACATIONS HOLDING	0.5%
STEWART INFORMATION SERVICES	0.5%
Top 5 Holdings	2.6%

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

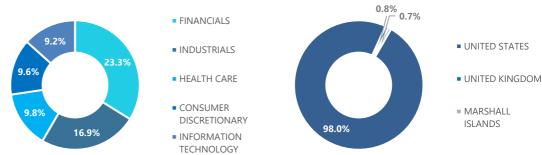
Performance (net)¹

	Ending Market Value (mm)				QTD	1	Year	3 Yea	ar	5 Year
CORNERCAP US SC - EMP	81.6				-0.5%	6	0.1%	10.99	%	
RUSSELL 2000					-4.4%	4	7.7%	10.59	%	
Growth Policy BM					1.0%	3	1.4%			
Universe data: U.S. Equities Small Cap	QTD		1 Year		3 Year		5 Year			
CORNERCAP US SC - EMP	-0.4%	19	61.0%	29	11.5%	34				
Median	-1.8%		51.7%		10.6%					

Growth of \$10,000



Top Exposures (% of assets)²



1,30

Growth Risk Analysis – Global Equity CornerCap US Small Cap



Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

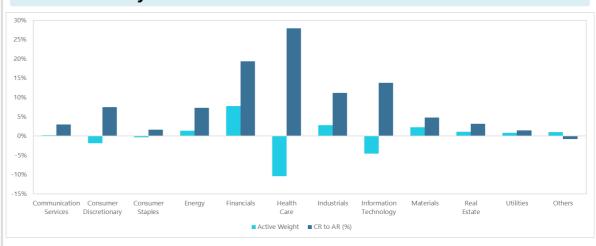
	Value
Total Risk	29.59
Benchmark Risk	27.95
Active Risk	6.23
Portfolio Beta	1.04

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
RANGER OIL CORP	0.51%	0.01%	0.50%	97.02	1.97	0.291
APA CORP	0.45%	0.00%	0.45%	79.79	1.69	0.277
PROPETRO HOLDING CORP	0.44%	0.03%	0.42%	85.37	1.57	0.278
BERRY CORP	0.43%	0.02%	0.42%	73.96	1.34	0.244
SOLARIS OILFIELD INFRASTRUCTURE INC	0.41%	0.01%	0.40%	68.72	1.23	0.238
MESA AIR GROUP INC	0.38%	0.01%	0.37%	75.72	1.23	0.248
INTELLIA THERAPEUTICS	0.00%	0.32%	-0.32%	67.82	1.22	-0.195
AMPLIFY ENERGY CORPORATION	0.29%	0.00%	0.29%	97.42	1.05	0.272
CIMAREX ENERGY CO	0.52%	0.00%	0.52%	58.24	1.04	0.170
PACWEST BANCORP	0.52%	0.00%	0.52%	45.18	1.00	0.166



Growth – Global Equity Frontier US SMID Growth



10.6%

13.0%

for the quarter ended September 30, 2021

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: April 2006

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	8,281.5	7,288.9
No. Of Issues	143.0	
Dividend Yield	0.5	1.2
Return on Equity	9.0	12.5
Price to Sales	4.4	15.0
Price to Book	5.2	6.4
PE Ratio	47.3	42.7

Top Holdings (% of assets)

CAESARS ENTERTAINMENT INC	2.1%
MACOM TECHNOLOGY SOLUTIONS H	2.0%
CONTROLADORA VUELA CIA ADR	1.8%
DANA INC	1.7%
INSULET CORP	1.6%
Top 5 Holdings	9.2%

. Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Performance (net)¹

	Ending M	Ending Market Value (mm)				1 Yea	ır	3 Year		5 Year
FRONTIER US SMID GROWTH		294.8		-2.	6%	44.29	6	10.9%		12.6%
RUSSELL 2500				-2.	7%	45.09	6	12.5%		14.3%
Growth Policy BM				1.0	0%	31.49	6			
Universe data: U.S. Equity Funds- Sma	all Cap	OTD		1 Year		3 Year		5 Year		
FRONTIER US SMID GROWTH		-2.4%	69	45.3%	63	11.8%	30	13.5%	37	

51.7%

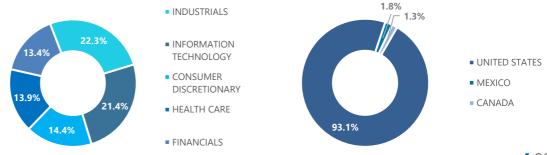
-1.8%

Growth of \$10,000

Median



Top Exposures (% of assets)²



1.32

Growth Risk Analysis – Global Equity Frontier US SMID Growth



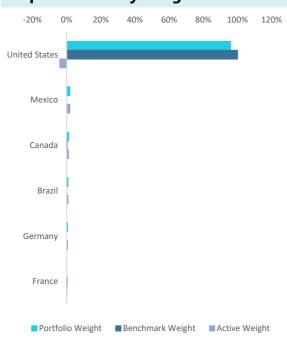
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

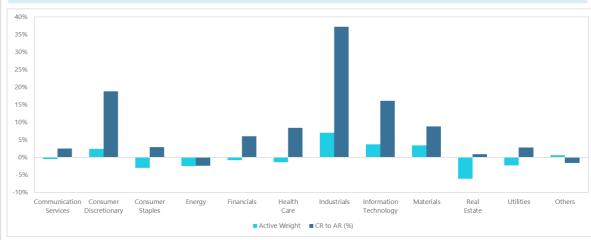
	Value
Total Risk	28.84
Benchmark Risk	26.31
Active Risk	4.54
Portfolio Beta	1.09

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight					
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR	
CAESARS ENTERTAINMENT INC	2.10%	0.00%	2.10%	64.17	9.18	0.330	
DANA INC	1.74%	0.05%	1.69%	53.06	5.94	0.291	
CONTROLADORA VUELA	1.79%	0.00%	1.79%	57.46	5.55	0.272	
TUTOR PERINI CORP	1.34%	0.01%	1.33%	63.05	5.08	0.305	
BUILDERS FIRSTSOURCE INC	2.19%	0.16%	2.02%	46.44	4.54	0.233	
MACOM TECHNOLOGY SOLUTIONS	2.01%	0.05%	1.96%	41.35	3.23	0.206	
AZUL SA	0.71%	0.00%	0.71%	74.33	3.22	0.337	
BANCORP INC	1.20%	0.02%	1.18%	54.68	3.09	0.250	
PLANET FITNESS INC	1.14%	0.10%	1.04%	52.82	2.94	0.259	
MRC GLOBAL INC	0.81%	0.01%	0.80%	65.01	2.74	0.287	



Growth – Global Equity Genesis Emerging Markets



for the quarter ended September 30, 2021

Strategy

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

Inception Date: September 2007

Risk Statistics (since inception)

Standard Deviation	21.2%
Benchmark Standard Deviation	22.0%
Sharpe Ratio	0.0
Information Ratio	0.1
Beta	0.9
Tracking Error	4.1%

Performance (net)¹ Ending Market Value (mm) OTD 1 Year 3 Year 5 Year **GENESIS EMERGING MARKETS** 667.6 -8.0% 17.4% 10.9% 10.0% 20.8% 9.3% MSCI EM IMI CUSTOM INDEX -7.4% 9.1% Growth Policy BM 1.0% 31.4% Universe data: International Equity Funds Emerging Markets QTD 1 Year 3 Year 5 Year GENESIS EMERGING MARKETS -7.9% 70 71 18.2% 11.8% 42 10.8% 35 Median -6.1% 23.7% 10.7% 10.0%





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

1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity Genesis Emerging Markets



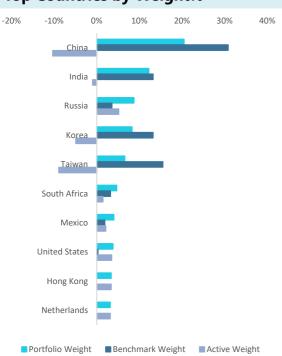
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	17.88
Benchmark Risk	19.63
Active Risk	4.60
Portfolio Beta	0.89

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
SBERBANK ROSSII PAO	4.41%	0.56%	3.85%	30.94	7.31	-0.007
MEITUAN	0.00%	1.42%	-1.42%	49.42	4.06	-0.226
US Dollar	1.86%	0.00%	1.86%	0.00	3.80	0.000
YANDEX N.V.	2.13%	0.00%	2.13%	35.20	3.56	-0.017
COMPAGNIE FINANCIERE RICHEMONT SA	2.19%	0.00%	2.19%	33.07	3.50	-0.021
HEINEKEN NV	1.65%	0.00%	1.65%	24.78	3.50	0.004
OTP BANK PLC	2.10%	0.15%	1.95%	35.99	3.49	-0.012
HEINEKEN HOLDING NV	1.53%	0.00%	1.53%	24.99	3.32	0.005
WULIANGYE YIBIN CO LTD	1.81%	0.00%	1.81%	38.55	2.75	-0.025
GRUMA SAB DE CV	1.24%	0.03%	1.21%	32.66	2.66	0.007



Growth – Global Equity Global Alpha

L///CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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)	2,814.9	3,358.2
No. Of Issues	63.0	
Dividend Yield	2.1	2.8
Return on Equity	8.8	11.9
Price to Sales	18.6	11.0
Price to Book	3.2	4.8
PE Ratio	49.5	25.4

Top Holdings (% of assets)

SAVILLS PLC	3.6%
L OCCITANE INTERNATIONAL SA	3.4%
ROTHSCHILD + CO	3.1%
RAFFLES MEDICAL GROUP LTD	3.1%
AUTOGRILL SPA	2.9%
Top 5 Holdings	16.2%

. Universe data is gross-of-fees.

Performance (net)¹

	Ending Market Value (mm)			n) Q	TD	1 Yea	r	3 Year	5 Year
GLOBAL ALPHA IE SC - EMP	164.3			0.4	0.4% 33.5%				
MSCI EAFE SMALL CAP NET				0.9	9%	29.09	6		
Growth Policy BM				1.0	0%	31.49	6		
Universe data: International Equity Fu	nds Core	QTD		1 Year		3 Year		5 Year	
GLOBAL ALPHA IE SC - EMP		0.6%	6	34.4%	46				

32.2%

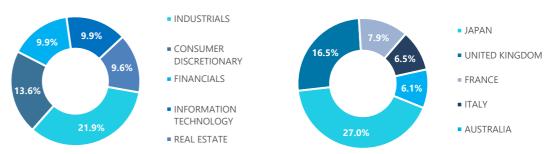
-1.2%

Growth of \$10,000

Median



Top Exposures (% of assets)²



Charts display top exposures only and may not add up to 100%.

Growth Risk Analysis – Global Equity Global Alpha



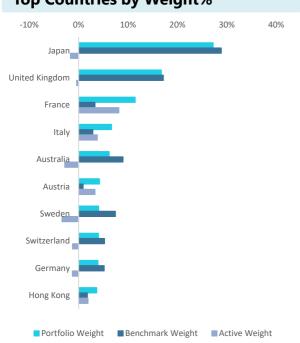
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	20.03
Benchmark Risk	20.77
Active Risk	4.51
Portfolio Beta	0.94

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
L'OCCITANE INTERNATIONAL SA	3.43%	0.00%	3.43%	40.80	9.73	0.072
BIFFA PLC	3.80%	0.05%	3.75%	42.06	9.56	0.059
INTERNET INITIATIVE JAPAN INC	2.84%	0.06%	2.78%	35.72	6.09	0.043
AUTOGRILL SPA	2.99%	0.05%	2.94%	53.42	5.72	0.032
RAFFLES MEDICAL GROUP LTD	3.15%	0.03%	3.12%	30.56	4.27	0.006
ROTHSCHILD & CO	3.15%	0.00%	3.15%	33.67	3.93	0.000
ASICS CORP	2.22%	0.11%	2.11%	49.75	3.90	0.027
SAVILLS	3.67%	0.08%	3.59%	35.58	3.66	-0.010
HONG KONG DOLLAR	2.81%	0.00%	2.81%	0.58	3.47	-0.000
ORMAT TECHNOLOGIES INC	2.08%	0.00%	2.08%	42.26	3.16	0.013



Growth – Global Equity JANA JSI Fund V

Los Angeles County Employees Retirement Association

19

25.3%

16.9%

13

20.4%

16.0%

for the guarter ended September 30, 2021

Strategy

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

Inception Date: October 2016

Risk Statistics (since inception)

Standard Deviation	24.5%
Benchmark Standard Deviation	15.1%
Sharpe Ratio	0.1
Information Ratio	0.1
Beta	1.0
Tracking Error	19.6%

Performance (net)¹ Ending Market Value (mm) OTD 1 Year 3 Year 5 Year JANA JSI FUND V - ACTIVIST 123.6 3.3% 36.7% 16.0% 20.5% S&P 500 INDEX 0.6% 30.0% 16.0% 16.9% Growth Policy BM 1 0% 31.4% Universe data: U.S. Equities Total Large Cap QTD 1 Year 3 Year 5 Year

7

43.0%

31.5%

3.9%

0.1%

JANA JSI FUND V - ACTIVIST

Median

12





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

1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity JANA JSI Fund V



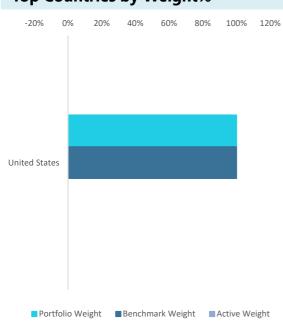
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	21.99
Benchmark Risk	19.58
Active Risk	13.49
Portfolio Beta	0.89

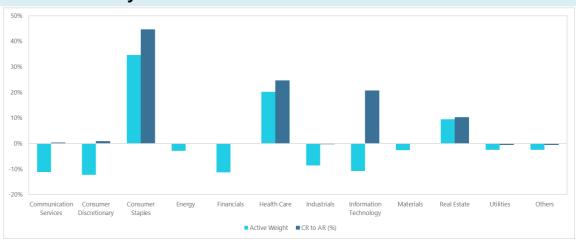
Top Countries by Weight%



Note: Data is as of June 30, 2021 (one guarter lagged).

Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
CONAGRA BRANDS	24.04%	0.05%	24.00%	25.47	23.92	0.104
TREEHOUSE FOODS INC	16.36%	0.00%	16.36%	35.54	22.11	0.152
VONAGE HOLDINGS CORP	14.12%	0.00%	14.12%	48.04	16.64	0.129
LABORATORY CORPORATION OF AMERICA	16.61%	0.07%	16.53%	33.61	13.67	0.081
ENCOMPASS HEALTH CORPORATION	16.62%	0.00%	16.62%	32.83	13.11	0.076
CYRUSONE INC	12.04%	0.00%	12.04%	40.94	10.74	0.090
APPLE INC	0.00%	5.91%	-5.91%	31.95	1.46	-0.064
US Dollar	4.23%	0.00%	4.23%	0.00	0.95	0.000
TESLA INC	0.00%	1.44%	-1.44%	59.78	0.79	-0.104
MICROSOFT CORP	0.00%	5.62%	-5.62%	23.96	0.57	-0.044



Growth – Global Equity JPMorgan Strategic Beta Non-US



for the quarter ended September 30, 2021

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)	80,664.5	77,902.0
No. Of Issues	1,600.0	
Dividend Yield	2.8	2.7
Return on Equity	18.1	15.9
Price to Sales	5.0	6.3
Price to Book	4.5	5.0
PE Ratio	15.1	17.9

Top Holdings (% of assets)

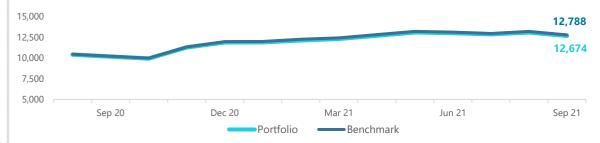
Top 5 Holdings	6.0%
ASML HOLDING NV	1.0%
TENCENT HOLDINGS LTD	1.0%
NESTLE SA REG	1.1%
ISHARES MSCI SAUDI ARABIA ETF	1.1%
TAIWAN SEMICONDUCTOR MANUFAC	1.7%

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

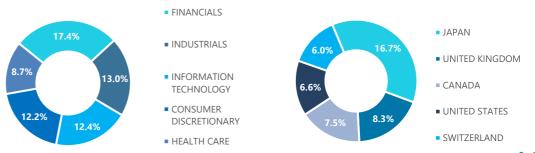
Performance (net)¹

	Ending Market Value (mm)			QTD	1	Year	3 Year	5 Year	
JPMAM STRATEGIC BETA NON-U.S.	627.9			-2.5%	24.6%				
MSCI ACWI ex USA IMI Net					-2.6%	2	5.2%		
Growth Policy BM					1.0%	3	1.4%		
Universe data: International Equity	QTD		1 Year		3 Year		5 Year		
JPMAM STRATEGIC BETA NON-U.S.	-2.5%	71	24.5%	75					
Median	-1.6%		26.8%						

Growth of \$10,000



Top Exposures (% of assets)²



1.40

Growth Risk Analysis – Global Equity JPMorgan Strategic Beta Non-US



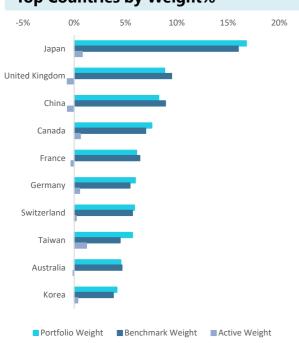
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

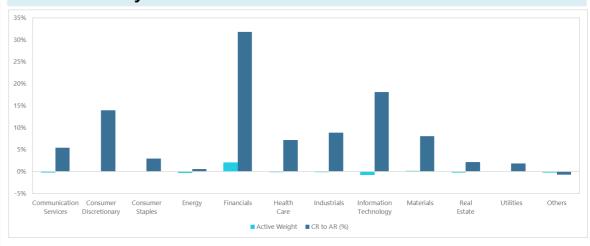
	Value
Total Risk	18.32
Benchmark Risk	18.39
Active Risk	0.92
Portfolio Beta	0.99

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

	Weight						
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR	
AURELIUS EQUITY OPPORTUNITIES SE	1.05%	0.00%	1.05%	51.71	18.95	0.147	
ASML HOLDING NV	0.00%	1.01%	-1.00%	30.33	8.03	-0.092	
ALIBABA GROUP HOLDING	0.01%	0.89%	-0.88%	38.05	7.12	-0.093	
VALE SA COMMON STOC	0.20%	0.00%	0.20%	46.36	1.52	0.050	
MITSUBISHI UFJ FINANCIAL GRO	0.27%	0.00%	0.27%	25.32	1.02	0.016	
ROYAL DUTCH SHELL PLC A SHS	0.30%	0.00%	0.30%	41.19	1.01	0.012	
UNILEVER PLC	0.42%	0.00%	0.42%	22.27	0.80	-0.002	
MEITUAN	0.36%	0.41%	-0.05%	49.42	0.79	-0.159	
DAIMLER AG REGISTERED SHARES	0.28%	0.00%	0.28%	38.66	0.78	0.006	
PINDUODUO INC	0.07%	0.13%	-0.06%	52.60	0.75	-0.144	



Growth - Global Equity JPMorgan Strategic Beta US



for the quarter ended September 30, 2021

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)	468,812.6	555,483.0
No. Of Issues	935.0	
Dividend Yield	1.1	1.1
Return on Equity	30.4	31.9
Price to Sales	6.7	7.1
Price to Book	9.7	8.4
PE Ratio	24.8	27.5

Top Holdings (% of assets)

MICROSOFT CORP	4.6%
AMAZON.COM INC	3.3%
FACEBOOK INC CLASS A	1.9%
ALPHABET INC CL A	1.9%
ALPHABET INC CL C	1.8%
Top 5 Holdings	13.5%

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

Performance (net)¹

	Ending Market Value (mm)			QT	D	1 Year	3 Year	5 Year	
JPMAM STRATEGIC BETA U.S.		4,862.6			0.3	%	30.8%		
MSCI USA IMI Gross					0.0	%	32.3%		
Growth Policy BM					1.0	%	31.4%		
Universe data: U.S. Equities Total Larg	е Сар	QTD		1	Year		3 Year	5 Year	
JPMAM STRATEGIC BETA U.S.		0.3%	45	30	0.8%	54		 	

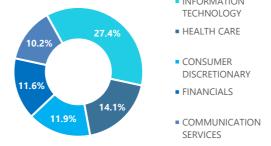
31.5%

Growth of \$10,000

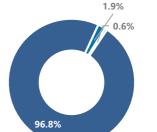
Median



Top Exposures (% of assets)²



INFORMATION



- UNITED STATES
- IRELAND
- UNITED KINGDOM

1,42

Growth Risk Analysis – Global Equity JPMorgan Strategic Beta US



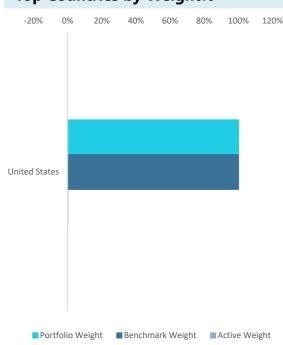
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	19.04
Benchmark Risk	19.21
Active Risk	0.71
Portfolio Beta	0.99

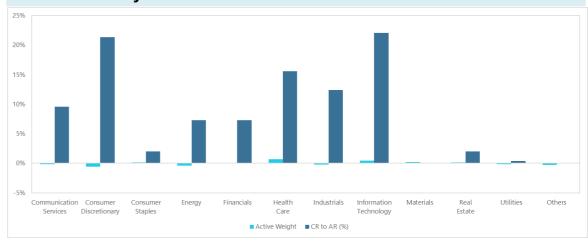
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Weight							
	Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
	JPMORGAN CHASE & CO	0.00%	1.12%	-1.12%	27.92	3.82	-0.074
	MONGODB INC	0.00%	0.06%	-0.06%	49.90	1.32	-0.207
	CARNIVAL CORP	0.00%	0.05%	-0.05%	62.44	1.30	-0.248
	CAESARS ENTERTAINMENT INC	0.00%	0.05%	-0.05%	64.17	1.30	-0.224
	AMC ENTERTAINMENT HOLDINGS INC	0.00%	0.04%	-0.04%	80.97	1.30	-0.269
	ROYAL CARIBBEAN GROUP	0.00%	0.05%	-0.05%	61.72	1.22	-0.237
	OCCIDENTAL PETROLEUM CORP	0.01%	0.06%	-0.06%	64.90	1.14	-0.197
	PINTEREST INC	0.02%	0.06%	-0.05%	52.34	1.06	-0.210
	SNAP INC	0.11%	0.16%	-0.05%	51.72	1.01	-0.186
	TWILIO INC	0.07%	0.12%	-0.05%	45.92	0.99	-0.204

Portfolio Risk by GICS Sector



Growth – Global Equity Lazard Emerging Markets



for the quarter ended September 30, 2021

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)	54,530.3	122,781.9
No. Of Issues	53.0	
Dividend Yield	2.9	2.6
Return on Equity	23.6	17.1
Price to Sales	15.5	6.6
Price to Book	2.4	5.3
PE Ratio	5.3	13.1

Top Holdings (% of assets)

SAMSUNG ELECTRONICS PREF	7.8%
JPMORGAN EMERGING MARKETS INVE	6.9%
FIDELITY CHINA SPECIAL SITUATI	6.5%
TEMPLETON EMERGING MARKETS INV	5.3%
CITIC SECURITIES CO LTD H	5.0%
Top 5 Holdings	31.4%

1. Universe data is gross-of-fees.

Performance (net)¹

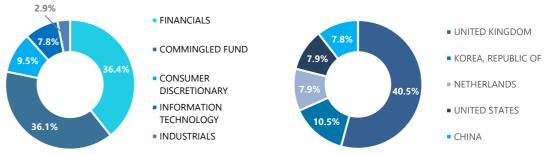
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
LAZARD EMERGING MARKETS	470.6	-8.1%	24.1%	13.0%	11.1%
MSCI EMERGING MARKETS		-8.1%	18.2%	8.6%	9.2%
Growth Policy BM		1.0%	31.4%		

Universe data: International Equity Funds Emerging Markets	QTD		1 Year		3 Year		5 Year	
LAZARD EMERGING MARKETS	-8.0%	72	25.0%	44	13.8%	32	11.9%	32
Median	-6.1%		23.7%		10.7%		10.0%	

Growth of \$10,000



Top Exposures (% of assets)²



Charts display top exposures only and may not add up to 100%.

Growth Risk Analysis – Global Equity Lazard Emerging Markets



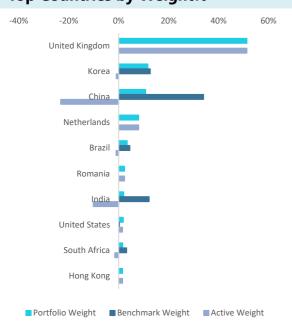
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	20.24
Benchmark Risk	19.39
Active Risk	10.67
Portfolio Beta	0.89

Top Countries by Weight%

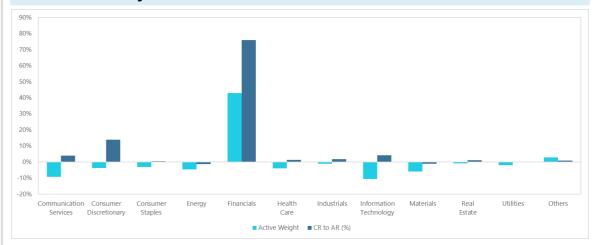


Note: Weights represent country of domicile of closed-end fund and not country of underlying fund holdings.

Top 10 Assets by Contribution to Active Risk

	Weight					
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
JPMORGAN EMERGING MK	6.86%	0.00%	6.86%	29.26	10.92	0.132
FIDELITY CHINA SPECIAL SITUATIONS PLC	6.47%	0.00%	6.47%	35.93	10.43	0.135
TEMPLETON EMERG MKTS INV TRUST	5.32%	0.00%	5.32%	29.76	8.60	0.135
PROSUS NV	7.95%	0.00%	7.95%	37.24	8.57	0.077
FIDELITY EMERGING MARKETS LTD	3.30%	0.00%	3.30%	28.82	4.92	0.122
JPMORGAN RUSSIAN SEC	3.33%	0.00%	3.33%	30.84	4.69	0.112
VINACAPITAL VIETNAM OPPORTUNITY FD	3.34%	0.00%	3.34%	30.28	4.60	0.109
ASIA DRAGON TRUST PLC	2.63%	0.00%	2.63%	31.15	4.10	0.129
SCHRODER ASIA PAC	2.38%	0.00%	2.38%	30.10	3.64	0.126
UTILICO EMERGING MARKETS TRUST PLC	2.17%	0.00%	2.17%	32.29	3.61	0.140

Portfolio Risk by GICS Sector



Growth – Global Equity QMA US Small Cap Core



for the quarter ended September 30, 2021

Strategy

Seeks to capture incremental alpha through rules-based factor models that are supported by fundamental insights. This strategy may be suited for investors looking to increase U.S. small cap exposure and increase portfolio diversification through an active quantitative investment approach.

Inception Date: July 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	3,122.2	3,312.2
No. Of Issues	339.0	
Dividend Yield	1.0	1.0
Return on Equity	17.3	9.5
Price to Sales	3.5	20.6
Price to Book	3.7	3.8
PE Ratio	20.0	91.2

Top Holdings (% of assets)

MEDPACE HOLDINGS INC	0.9%
EMCOR GROUP INC	0.9%
ZIFF DAVIS INC	0.9%
ATKORE INC	0.8%
ANTERO RESOURCES CORP	0.8%
Top 5 Holdings	4.4%

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

Performance (net)¹

	Ending Market Value (mm)			QT	D 1	l Year	3 Yea	ar	5 Year
QMA US SMALL CAP CORE	197.7			-1.0)% 5	3.3%	5.4%	6	
RUSSELL 2000				-4.4	1% 4	17.7%	10.59	%	
Growth Policy BM				1.0	% 3	31.4%			
Universe data: U.S. Equities Small Cap	QTD		1 Year		3 Year		5 Year		
QMA US SMALL CAP CORE	-0.8%	21	54.1%	45	6.0%	95			

51.7%

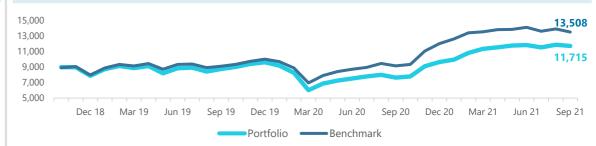
10.6%

1.8%

1,46

Growth of \$10,000

Median



Top Exposures (% of assets)²



DISCRETIONARY

Growth Risk Analysis – Global Equity QMA US Small Cap Core



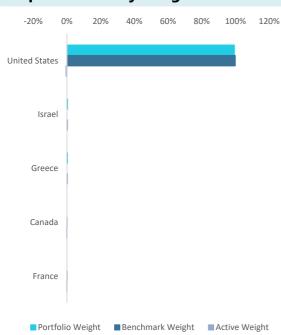
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	28.64
Benchmark Risk	27.95
Active Risk	3.49
Portfolio Beta	1.02

Top Countries by Weight%

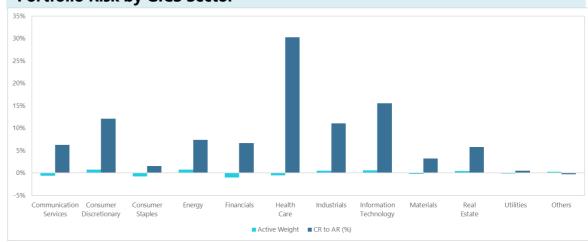


Top 10 Assets by Contribution to Active Risk

		Weight				
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
AMC ENTERTAINMENT HOLDINGS INC	0.00%	0.67%	-0.67%	80.97	2.50	-0.091
MATADOR RESOURCES CO	0.72%	0.14%	0.58%	77.63	2.21	0.172
ANTERO RESOURCES CORP	0.83%	0.18%	0.64%	74.99	2.11	0.153
CHAMPIONX CORP	0.67%	0.15%	0.52%	76.25	1.89	0.167
OCEANEERING INTERNATIONAL INC	0.45%	0.05%	0.40%	85.78	1.87	0.202
CUSTOMERS BANCORP INC	0.72%	0.04%	0.67%	47.75	1.70	0.127
ATKORE INC	0.83%	0.14%	0.70%	55.02	1.63	0.121
FIRST BANCORP	0.79%	0.09%	0.70%	43.02	1.55	0.116
GROUP 1 AUTOMOTIVE INC	0.67%	0.11%	0.55%	56.04	1.40	0.127
INTELLIA THERAPEUTICS	0.00%	0.32%	-0.32%	67.82	1.38	-0.114

Maight

Portfolio Risk by GICS Sector



Growth – Global Equity SSGA MSCI ACWI IMI

L///CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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)	310,021.6	307,611.4
No. Of Issues	6,705.0	
Dividend Yield	1.7	1.7
Return on Equity	23.6	23.4
Price to Sales	7.2	7.6
Price to Book	8.1	8.3
PE Ratio	23.0	23.4

Top Holdings (% of assets)

MICROSOFT CORP	2.7%
AMAZON.COM INC	1.9%
ALPHABET INC CL A	1.1%
FACEBOOK INC CLASS A	1.1%
ALPHABET INC CL C	1.0%
Top 5 Holdings	7.8%

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

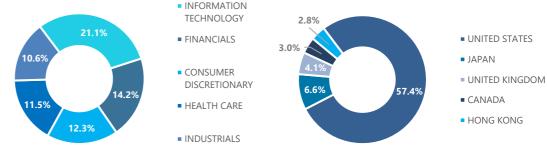
Performance (net)¹

	Ending	QTD	1	Year	3 Year	5 Year			
SSGA MSCI ACWI IMI	15,769.4				-1.1%	2	9.4%		
MSCI ACWI IMI Net					-1.1%	2	8.9%		
Growth Policy BM						3	1.4%		
Universe data: Global Equity Funds	QTD		1 Year		3 Year		5 Yea	r	
SSGA MSCI ACWI IMI	-1.1%	62	29.5%	37					
Median	-0.7%		27.5%						

Growth of \$10,000



Top Exposures (% of assets)²



Growth Risk Analysis – Global Equity SSGA MSCI ACWI IMI



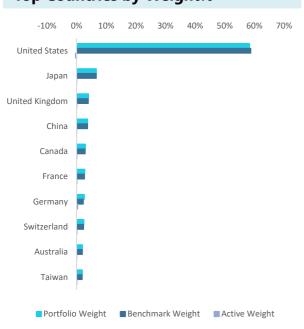
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	18.43
Benchmark Risk	18.34
Active Risk	0.30
Portfolio Beta	1.00

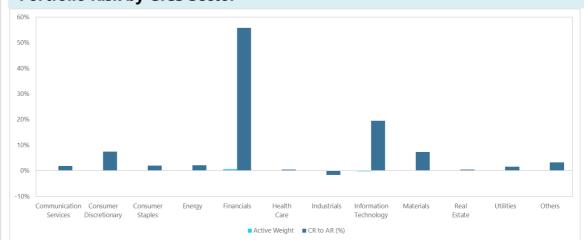
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

	Weight							
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR		
AURELIUS EQUITY OPPORTUNITIES SE & CO	0.43%	0.00%	0.43%	51.71	40.94	0.341		
USD Future Cash Offset	-0.99%	0.00%	-0.99%	0.00	16.39	-0.000		
ASML HOLDING NV	0.01%	0.42%	-0.41%	30.33	12.06	-0.039		
ROYAL DUTCH SHELL PLC A SHS COMMON	0.13%	0.00%	0.13%	41.19	4.82	0.160		
TATA MOTORS LTD	0.14%	0.00%	0.14%	53.63	3.88	0.132		
VEDANTA LTD	0.15%	0.00%	0.15%	50.71	3.18	0.116		
DAIMLER AG REGISTERED SHARES COMM	0.11%	0.00%	0.11%	38.66	3.02	0.137		
VALE SA COMMON STOC	0.07%	0.00%	0.07%	46.36	2.08	0.146		
AMAZON.COM INC	1.89%	1.98%	-0.09%	27.70	1.50	-0.001		
TATA CONSULTANCY SERVICES	0.00%	0.06%	-0.06%	26.62	1.25	-0.011		

Portfolio Risk by GICS Sector



Growth – Global Equity Symphony Financial

Median

Los Angeles County Employees Retirement Association

for the guarter ended September 30, 2021

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	22.7%
Benchmark Standard Deviation	13.3%
Sharpe Ratio	0.1
Information Ratio	0.2
Beta	0.9
Tracking Error	19.1%

Performance (net)¹ Ending Market Value (mm) OTD 1 Year 3 Year 5 Year 251.5 19.2% 13.5% SYMPHONY FINANCIAL - ACTIVIST 13.1% MSCI JAPAN SMALL CAP NET 3.4% 14.5% 4.6% Growth Policy BM 1.0% 31.4% Universe data: International Equity Developed Markets Active QTD 1 Year 3 Year 5 Year SYMPHONY FINANCIAL - ACTIVIST 13.3% 2 20.0% 68 9 16.0%

-1.2%

26.0%

8.6%





Portfolio

Growth Risk Analysis – Global Equity Symphony Financial



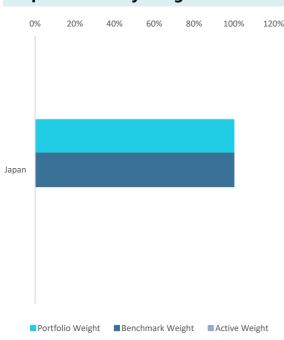
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	21.63
Benchmark Risk	17.68
Active Risk	14.73
Portfolio Beta	0.90

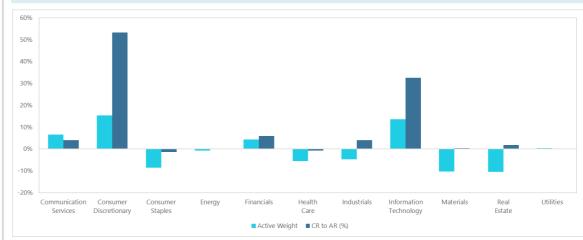
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR
NAGAWA	27.38%	0.00%	27.38%	40.27	51.84	0.258
INFOMART	20.55%	0.19%	20.35%	42.65	31.89	0.210
JAPAN SECURITIES FINANCE CO LTD	10.82%	0.08%	10.74%	31.68	5.50	0.055
UNDISCLOSED - ENTERTAINMENT ¹	9.39%	0.13%	9.27%	29.51	4.26	0.047
RIKEN KEIKI	5.45%	0.04%	5.41%	30.25	1.73	0.026
ZUIKO	5.84%	0.00%	5.84%	29.82	1.30	0.012
KOMATSU MATERE CO LTD	3.54%	0.00%	3.54%	29.35	0.90	0.017
MARUKA FURUSATO CORP NISHIO	2.64%	0.00%	2.64%	29.68	0.59	0.012
RENT ALL	6.83%	0.05%	6.78%	27.58	0.58	-0.008
DENYO	2.25%	0.03%	2.22%	29.24	0.34	0.002

Portfolio Risk by GICS Sector



1. Security name undisclosed due to confidentiality reasons.

Growth – Global Equity Systematic US Small Cap Value



for the quarter ended September 30, 2021

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)	3,944.8	3,312.2
No. Of Issues	151.0	
Dividend Yield	1.2	1.0
Return on Equity	14.6	9.5
Price to Sales	2.5	20.6
Price to Book	2.7	3.8
PE Ratio	18.8	91.2

Top Holdings (% of assets)

CROSS COUNTRY HEALTHCARE INC	1.5%
SPECTRUM BRANDS HOLDINGS INC	1.5%
SILICON MOTION TECHNOL ADR	1.4%
REGAL REXNORD CORP	1.4%
MAGNOLIA OIL + GAS CORP A	1.4%
Top 5 Holdings	7.1%

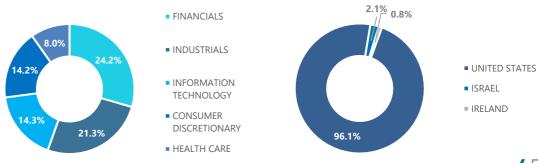
Performance (net)¹

	Ending Market Value (mm)			QTD		1 Year	3 Year	5 Year	
SYSTEMATIC US SMALL CAP VALUE	192.0			-2.8%	54.9%		8.7%		
RUSSELL 2000					-4.4%		47.7%	10.5%	
Growth Policy BM					1.0%		31.4%		
Universe data: U.S. Equities Small Cap	QTD		1 Year		3 Year		5 Year		
SYSTEMATIC US SMALL CAP VALUE	-2.7%	76	55.8%	42	9.3%	72			
Median	-1.8%		51.7%		10.6%				

Growth of \$10,000



Top Exposures (% of assets)²



17.52

^{1.} Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Growth Risk Analysis – Global Equity Systematic US Small Cap Value



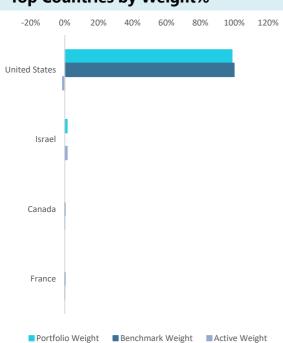
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Portfolio Risk Summary

	Value
Total Risk	26.96
Benchmark Risk	27.95
Active Risk	5.72
Portfolio Beta	0.94

Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

	Weight						
Asset	Portfolio	Benchmark	Active	Total Risk	%CR to Active TR	MC to Active TR	
FIRST CITIZENS BANCSHARES INC NRTH	2.92%	0.00%	2.92%	39.36	5.81	0.038	
SSC GOVERNMENT MM GVMXX	1.67%	0.00%	1.67%	2.27	2.18	-0.002	
UNITED COMMUNITY BANKS INC	0.96%	0.10%	0.86%	40.09	1.92	0.051	
REGAL REXNORD CORP	1.39%	0.00%	1.39%	33.11	1.88	0.001	
NORTHWESTERN CORP	1.30%	0.10%	1.20%	27.78	1.80	0.010	
WASHINGTON FEDERAL INC	1.28%	0.08%	1.20%	36.17	1.78	0.009	
AMC ENTERTAINMENT HOLDINGS INC	0.00%	0.67%	-0.67%	80.97	1.70	-0.221	
LAKELAND BANCORP INC	0.89%	0.03%	0.87%	35.60	1.70	0.036	
UMPQUA HOLDINGS CORP	0.95%	0.00%	0.95%	35.92	1.52	0.016	
FIRST MERCHANTS CORP	0.81%	0.08%	0.73%	36.81	1.50	0.041	

Portfolio Risk by GICS Sector





credit

Summary

for the quarter ended September 30, 2021

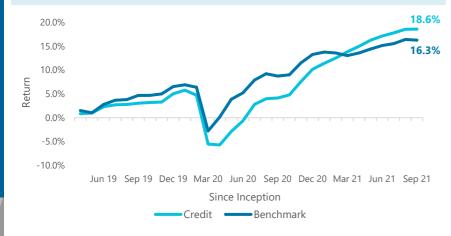


Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Credit	1.2%	7.7%	13.9%				7.1%
Benchmark	1.0%	2.7%	6.9%				6.2%
Excess	0.3%	5.0%	6.9%				0.8%

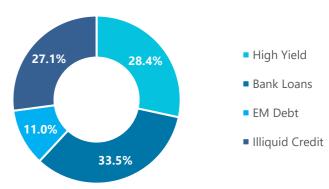
Cumulative Return



Functional Category

1 Year	3 Year
12.9%	
11.3%	
1.6%	
9.7%	
8.5%	
1.2%	
6.8%	4.2%
4.4%	5.6%
2.4%	-1.3%
26.0%	
2.4%	
23.6%	
	12.9% 11.3% 1.6% 9.7% 8.5% 1.2% 6.8% 4.4% 2.4% 26.0% 2.4%

Exposure

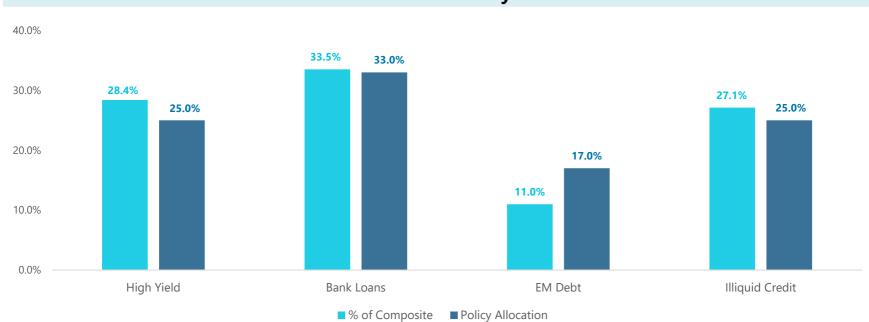


Asset Allocation

for the quarter ended September 30, 2021



Actual vs. Policy

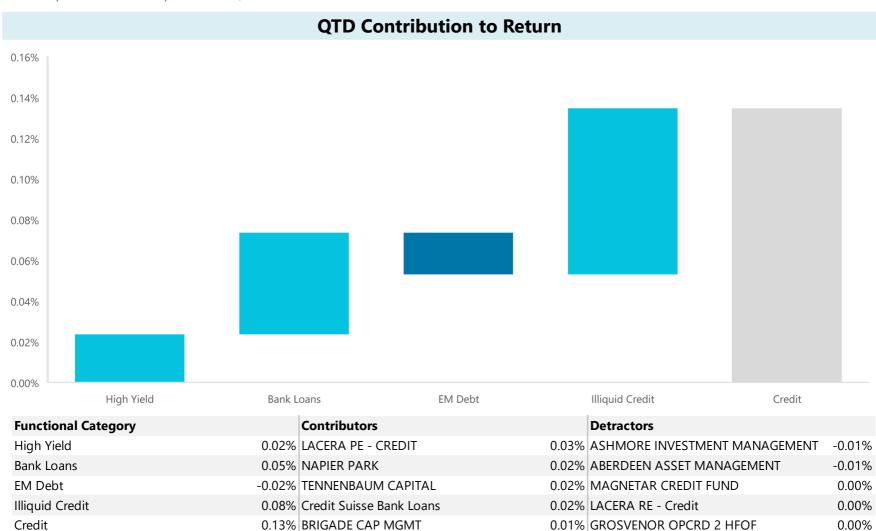


	Ending Market Value	% of Composite	Policy Allocation	Over / Under	Over / Under
Credit	7,985	100.0%			
High Yield	2,267	28.4%	25.0%	3.4%	271
Bank Loans	2,675	33.5%	33.0%	0.5%	40
EM Debt	877	11.0%	17.0%	-6.0%	-480
Illiquid Credit	2,166	27.1%	25.0%	2.1%	170

Contribution to Return



for the quarter ended September 30, 2021

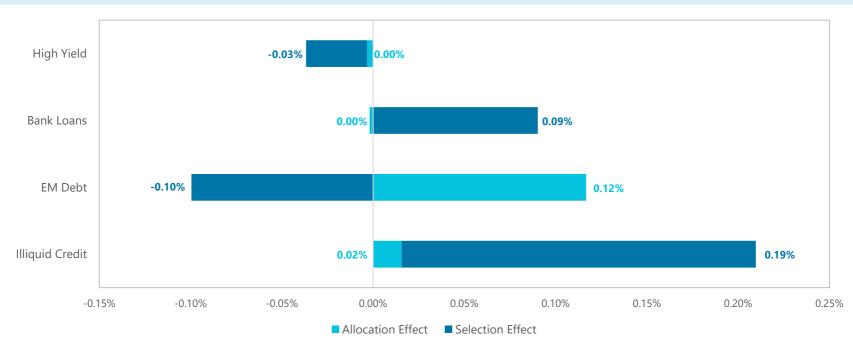


Return Attribution





QTD Performance Attribution¹



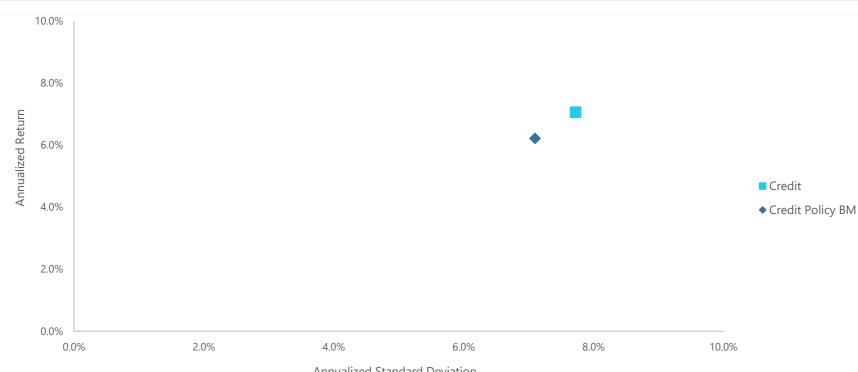
	Ending Market Value	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Credit	7,985	100.0%	100.0%	1.2%	1.0%	0.13%	0.15%	0.25%
High Yield	2,267	28.4%	25.0%	0.8%	0.9%	0.00%	-0.03%	-0.04%
Bank Loans	2,675	33.5%	33.0%	1.4%	1.1%	0.00%	0.09%	0.07%
EM Debt	877	11.0%	17.0%	-1.6%	-1.1%	0.12%	-0.10%	0.05%
Illiquid Credit	2,166	27.1%	25.0%	2.9%	2.3%	0.02%	0.19%	0.17%

Risk vs. Return

for the quarter ended September 30, 2021



Since Inception (Annualized)¹



Annualized Standard Deviation

	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Credit	7.1%	7.7%				
Credit Policy BM	6.2%	7.1%	0.04	0.10	1.01	3.1%

Performance Detail



for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

Annualized Net Returns

		Ending	Prior Quarter							
	% of	Market Value	Ending MV							
	Composite	(mm)	(mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
CREDIT	100.0%	7,985	7,706	1.2%	7.7%	13.9%				7.1%
Credit Policy BM				1.0%	2.7%	6.9%				6.2%
HIGH YIELD	28.4%	2,267	2,250	0.8%	6.0%	12.9%				6.7%
BBG BARC US Corp HY Idx				0.9%	4.5%	11.3%				7.3%
BEACHPOINT	4.0%	316	314	0.5%	4.0%	9.7%	6.7%	6.5%		6.2%
BLACKROCK HY ETF	9.3%	744	1,240	0.5%	3.7%	10.1%				5.8%
BRIGADE CAP MGMT	8.8%	704	695	1.2%	11.1%	19.8%	6.3%	6.6%	7.2%	7.4%
PINEBRIDGE INVESTMENTS	6.3%	503	0							0.0%
BANK LOANS	33.5%	2,675	2,639	1.4%	5.7%	9.7%				7.8%
CS Leveraged Loan Index	33.370	2,075	2,000	1.1%	4.7%	8.5%				4.7%
BAIN CAPITAL CREDIT	5.2%	418	411	1.6%	6.3%	11.4%	5.1%	5.3%		4.2%
CREDIT SUISSE BANK LOANS	14.4%	1,150	1,138	1.0%	4.0%	7.3%	3.170	3.570		11.5%
CRESCENT CAPITAL	6.5%	516	511	1.0%	6.4%	11.8%	6.4%	6.3%		4.3%
TENNENBAUM CAPITAL	7.4%	591	579	2.1%	7.9%	11.3%	7.4%	7.9%		7.3%
TENNENDAOW CAFTTAL	7.470	391	319	2.170	7.570	11.570	7.470	7.576		1.570
EM DEBT	11.0%	877	892	-1.6%	-2.2%	6.8%	4.2%			2.5%
EM Debt Policy BM				-1.1%	-1.9%	4.4%	5.6%			3.8%
ABERDEEN ASSET MANAGEMENT	5.6%	451	457	-1.3%	-1.9%	6.0%	5.4%			3.4%
ASHMORE INVESTMENT MANAGEMENT	5.3%	426	435	-2.0%	-2.5%	7.7%	3.1%			2.0%
ILLQUID CREDIT	27.1%	2,166	1,924	2.9%	18.5%	26.0%				12.7%
Illiquid Credit Policy BM		,	,-	2.3%	1.3%	2.4%				8.3%
BEACH POINT FUND II	0.2%	15	16							
BEACH POINT FUND III	2.4%	188	207	4.1%	17.1%	28.4%	12.0%			11.3%
GROSVENOR OPCRD 2 HFOF	0.6%	45	46	3.3%	13.8%	17.7%	2.1%	4.7%		5.3%
MAGNETAR CREDIT FUND	6.6%	525	385	0.5%	33.8%	42.6%				35.4%
NAPIER PARK	9.3%	741	654	2.4%	14.6%	24.3%				32.5%
PIMCO TAC OPPS FUNDS	3.5%	278	271	2.7%	13.1%	17.7%				8.4%
PRIVATE EQUITY - CREDIT	2.7%	216	193	12.1%	48.9%	58.5%				13.8%
REAL ESTATE - CREDIT	2.0%	157	152	0.8%	4.7%	6.8%	8.6%	8.4%	8.5%	8.5%
			-							

Credit – High Yield Beach Point

for the quarter ended September 30, 2021



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	270.0	
Effective Duration	3.4	4.0
Convexity	-0.4	-0.4
Coupon Rate	5.3	5.8
Yield to Maturity	5.2	4.6
Current Yield	5.2	5.5
Rating – Moody's	B-2	B-1
Rating – S & P	В	BB-

Top Holdings (% of assets)

AMERICAN GREETINGS CORP	2.0%
COMPASS GROUP DIVERSIFIE	1.5%
DEALER TIRE LLC/DT ISSR	1.4%
FORTRESS TRANS + INFRAST	1.2%
CCO HLDGS LLC/CAP CORP	1.0%
Top 5 Holdings	7.1%

Universe data is gross-of-fees

2.

OTHIVOIDO data	10 910	00 01 1000	٥.					
Charts display	top e	xposures	only:	and n	nav no	t add i	up to	100%

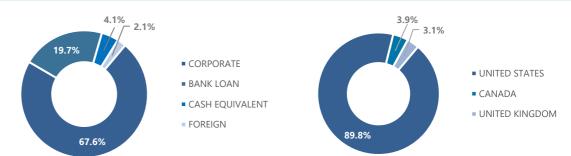
Performance (net)¹ Ending Market Value (mm) OTD 1 Year 3 Year 5 Year 315.6 0.5% 9.7% 6.7% 6.5% **BEACH POINT** BEACHPOINT CUSTOM BM 0.9% 11.3% 6.1% 5.9% Credit Policy RM 1 0% 6.9% U

Credit i olicy bivi					1.070	'	1.570	
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Year	
BEACH POINT	0.6%	27	10.2%	22	7.3%	29	7.1%	11
Median	0.1%		0.8%		5.9%		3.6%	
Median	0.1%		0.8%		5.9%		3.6%	

Growth of \$10,000



Top Exposures (% of assets)²



Credit – High Yield Brigade Capital

for the quarter ended September 30, 2021



5.9%

3.6%

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	331.0	
Effective Duration	2.5	4.0
Convexity	-0.4	-0.4
Coupon Rate	6.7	5.8
Yield to Maturity	6.9	4.6
Current Yield	6.7	5.5
Rating – Moody's	B-2	B-1
Rating – S & P	B-2	BB-

Top Holdings (% of assets)

CORNERSTONE CHEMICAL CO	1.6%
LSB INDUSTRIES	1.4%
SYNIVERSE HLDGS INC	1.3%
RAIN CII CARBON LLC/CII	1.2%
MASHANTUCKET	1.2%
Top 5 Holdings	6.7%

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

Performance (net)¹

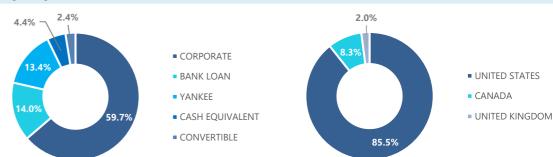
	Ending Mark	et Val	ue (mm)	C	QTD	1 Yea	ar 3	Year	5 Year
BRIGADE CAP MGMT	70	3.8		1.	.2%	19.89	% (5.3%	6.6%
Brigade Custom Index				0	.9%	11.39	% (5.7%	6.1%
Credit Policy BM				1	.0%	6.9%	5		
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Year		
BRIGADE CAP MGMT	1.3%	20	20.2%	13	7.0%	31	7.4%	10	

Growth of \$10,000

Median



Top Exposures (% of assets)²



1,62

Credit – Bank Loans Bain Capital

Los Angeles County Employees Retirement Association

5.9%

3.6%

for the quarter ended September 30, 2021

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	543.0	
Effective Duration	0.5	4.0
Convexity	-0.1	-0.4
Coupon Rate	3.2	5.8
Yield to Maturity	4.1	4.6
Current Yield	3.2	5.5
Rating – Moody's	B-2	B-1
Rating – S & P	В	BB-

Top Holdings (% of assets)

NAVICURE INC	0.8%
CHAMBER BIDCO LIMITED	0.6%
CST BUYER COMPANY	0.6%
GAINWELL ACQUISITION CORP.	0.6%
PETVET CARE CENTERS LLC	0.6%
Top 5 Holdings	3.2%

. Universe data is gross-of-fees.

Performance (net)¹ Ending Market Value (mm) QTD 1 Year 3 Year 5 Year **BAIN CAPITAL CREDIT** 417.9 1.6% 11.4% 5.1% 5.3% Bank Loans Custom Index 11% 8 5% 5.2% 4.9% 1.0% 6.9% Credit Policy BM Universe data: U.S. Fixed Income Funds OTD 1 Year 3 Year 5 Year **BAIN CAPITAL CREDIT** 1.7% 18 12.1% 19 5.8% 53 6.1% 19

0.8%

0.1%

Growth of \$10,000

Median



Top Exposures (% of assets)²



Charts display top exposures only and may not add up to 100%.

Credit – Bank Loans Credit Suisse

L//.CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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	462.0	
Effective Duration	0.2	4.0
Convexity	-0.1	-0.4
Coupon Rate	3.2	5.8
Yield to Maturity	4.0	4.6
Current Yield	3.2	5.5
Rating – Moody's	B-2	B-1
Rating – S & P	В	BB-

Top Holdings (% of assets)

FINASTRA USA, INC.	0.9%
ATOTECH B.V.	0.8%
WILLIAM MORRIS ENDEAVOR ENTMT	0.7%
NFP CORP	0.7%
PERATON CORP	0.7%
Top 5 Holdings	3.9%

1. Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Performance (net)¹

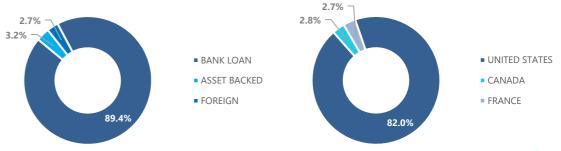
	Ending Mark	et Va	lue (mm)	(QTD	1 Yea	ar 3	3 Year	5 Year
Credit Suisse Bank Loans	1,1	49.6		1	.0%	7.3%	6		
CS Leveraged Loan Index				1	.1%	8.5%	ó		
Credit Policy BM				1	.0%	6.9%	ó		
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Year		
Credit Suisse Bank Loans	1.1%	22	7.5%	26					

Growth of \$10,000

Median



Top Exposures (% of assets)²



1,64

Credit – Bank Loans Crescent Capital

Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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	
Effective Duration	0.5	4.0
Convexity	0.0	-0.4
Coupon Rate	4.7	5.8
Yield to Maturity	5.6	4.6
Current Yield	4.7	5.5
Rating – Moody's	B-2	B-1
Rating – S & P	B-	BB-

Top Holdings (% of assets)

NMSC HLDGS INC	1.7%
KAMC HOLDINGS INC	1.7%
PERATON CORP	1.7%
COREL CORPORATION	1.6%
DUTCH LLC	1.6%
Top 5 Holdings	8.3%

. Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Performance (net)¹

	Ending Market Value (mm)				D D	1 Year	3 Ye	ar	5 Year
CRESCENT CAPITAL	516.5				%	11.8%	6.49	%	6.3%
Bank Loans Custom Index				1.1	%	8.5%	4.99	%	5.2%
Credit Policy BM					%	6.9%			
Universe data: U.S. Fixed Income Fund	s QTD		1 Year		3 Year		5 Year		
CRESCENT CAPITAL	1.2%	21	12.3%	19	6.9%	32	6.9%	13	
Median	0.1%		0.8%		5.9%		3.6%		

Growth of \$10,000



Top Exposures (% of assets)²



1,65

Credit – Bank Loans Tennenbaum Capital

L//.CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Strategy

A broadly-diversified strategy that invests in secured bonds and loans, in addition to special situation credit opportunities. This fund-of-one vehicle originates middle-market senior debt either directly or via lightly syndicated "club deals," as well as investing in secondary market opportunities.

Inception Date: November 2014

Risk Statistics (since inception)

Standard Deviation	4.4%
Benchmark Standard Deviation	8.2%
Sharpe Ratio	0.2
Information Ratio	0.2
Beta	0.5
Tracking Error	4.8%

Performance (net) ¹													
	Endi	Ending Market Value (mm)					1 Year	3 Year	5 Year				
TENNENBAUM CAPITAL	591.2			2.1%		11.3%	7.4%	7.9%					
CSFB Leveraged Loan Index 1 Month Lagged							8.5%	4.1%	4.7%				
Credit Policy BM					1.0%		6.9%						
		,											
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Year						
TENNENBAUM CAPITAL	2.3%	14	12.1%	19	8.1%	23	8.7%	8					
Median	0.1%		0.8%		5.9%		3.6%						







Credit – Emerging Market Debt Aberdeen Asset Management



2019

2020

for the guarter ended September 30, 2021

Strategy

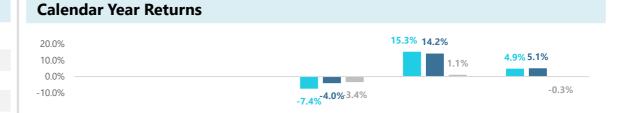
An emerging market debt strategy that invests in sovereigns, quasi-sovereigns, and corporate bonds denominated in US Dollar or local currencies.

Inception Date: July 2017

Risk Statistics (since inception)

Standard Deviation	10.7%
Benchmark Standard Deviation	8.7%
Sharpe Ratio	0.0
Information Ratio	0.0
Beta	1.2
Tracking Error	2.5%

Performance (net) ¹													
	Ending Market Value (mm)				QTD	1	Year	3 Year	5 Year				
ABERDEEN ASSET MANAGEMENT	450.9				-1.3%	6.0%		5.4%					
EMD Custom					-1.1%	4.4%		5.6%					
Credit Policy BM					1.0%	6	.9%						
			1										
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Year	•					
ABERDEEN ASSET MANAGEMENT	-1.3%	94	6.4%	28	5.8%	53							
Median	0.1%		0.8%		5.9%								



2018

■ Benchmark Return ■ Excess

2017

Portfolio

2016



Credit – Emerging Market Debt Ashmore



Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Strategy

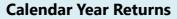
A value-driven emerging market debt strategy that applies a macro, top-down approach to build a well-diversified portfolio that adds value through asset rotation, security selection, and currency positioning utilizing a committee driven, systematic risk mitigating process.

Inception Date: June 2017

Risk Statistics (since inception)

Standard Deviation	13.1%
Benchmark Standard Deviation	8.7%
Sharpe Ratio	0.0
Information Ratio	-0.1
Beta	1.5
Tracking Error	4.8%

Performance (net) ¹									
	Ending Market Value (mm)			QTD	1	Year	3 Year	5 Year	
ASHMORE INVESTMENT MANAGEMENT			426.4		-2.0%	7	7.7%	3.1%	
EMD Custom					-1.1%	4	4.4%	5.6%	
Credit Policy BM					1.0%	6	5.9%		
Universe data: U.S. Fixed Income Funds	QTD		1 Year		3 Year		5 Yea	ar	
ASHMORE INVESTMENT MANAGEMENT	-1.8%	96	8.3%	25	3.7%	77			
Median	0.1%		0.8%		5.9%				







real assets & inflation hedges

Summary

for the quarter ended September 30, 2021



Performance (net)

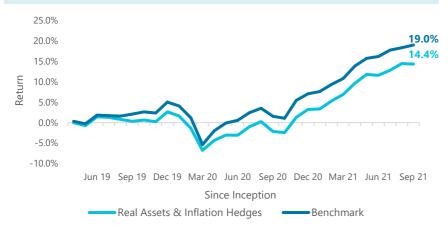


	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Assets & Inflation Hedges	2.5%	10.7%	16.9%				5.5%
Benchmark	2.4%	11.2%	17.2%				7.2%
Excess	0.0%	-0.4%	-0.3%				-1.7%

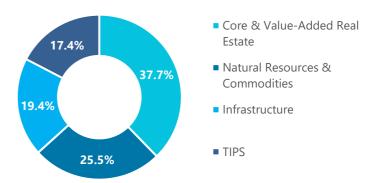
Functional Category

QTD	FYTD	1 Year	3 Year
4.0%	4.0%	6.9%	3.1%
3.8%	3.8%	7.6%	5.1%
0.2%	0.2%	-0.7%	-2.0%
2.9%	2.9%	42.1%	5.5%
2.8%	2.8%	42.6%	6.8%
0.0%	0.0%	-0.5%	-1.3%
-0.2%	-0.2%	20.7%	
-0.7%	-0.7%	20.6%	
0.5%	0.5%	0.1%	
1.6%	1.6%	4.9%	
1.8%	1.8%	5.2%	
-0.2%	-0.2%	-0.3%	
	4.0% 3.8% 0.2% 2.9% 2.8% 0.0% -0.2% -0.7% 0.5% 1.6% 1.8%	4.0% 4.0% 3.8% 3.8% 0.2% 0.2% 2.9% 2.9% 2.8% 2.8% 0.0% 0.0% -0.2% -0.2% -0.7% -0.7% 0.5% 0.5% 1.6% 1.6% 1.8% 1.8%	4.0% 4.0% 6.9% 3.8% 3.8% 7.6% 0.2% 0.2% -0.7% 2.9% 2.9% 42.1% 2.8% 42.6% 0.0% -0.5% -0.2% -0.2% 20.7% -0.7% -0.7% 20.6% 0.5% 0.5% 0.1% 1.6% 1.6% 4.9% 1.8% 1.8% 5.2%

Cumulative Return



Exposure

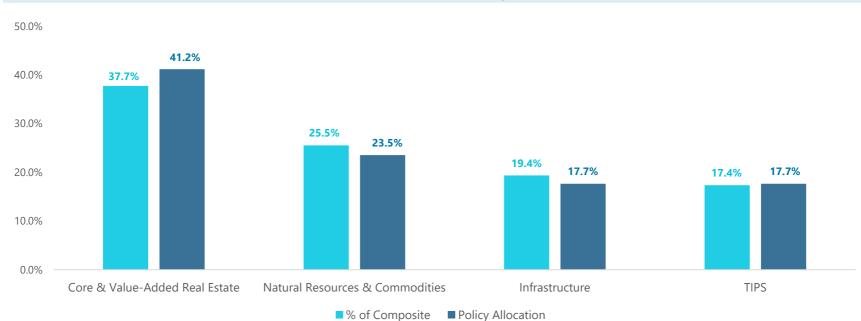


Asset Allocation

for the quarter ended September 30, 2021



Actual vs. Policy

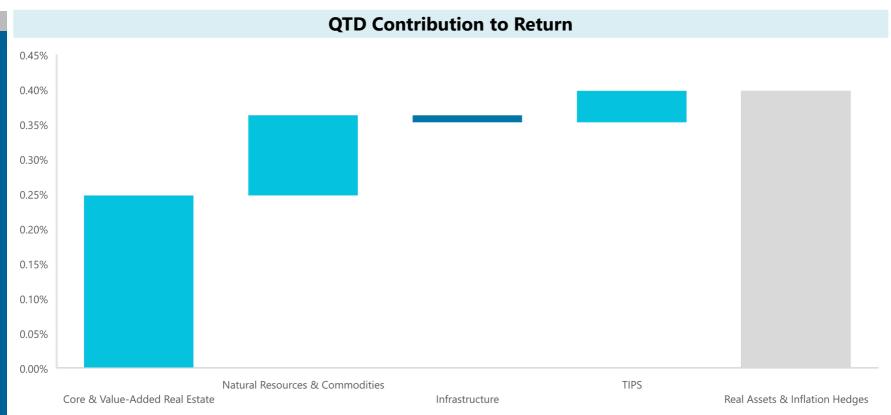


	Ending Market Value	% of Composite	Policy Allocation	Over / Under	Over / Under
Real Assets & Inflation Hedges	11,870	100.0%			
Core & Value-Added Real Estate	4,480	37.7%	41.2%	-3.4%	-407
Natural Resources & Commodities	3,031	25.5%	23.5%	2.0%	238
Infrastructure	2,298	19.4%	17.7%	1.7%	203
TIPS	2,061	17.4%	17.7%	-0.3%	-34

Contribution to Return



for the quarter ended September 30, 2021



Functional Category		Contributors		Detractors	
Core & Value-Added Real Estate	0.25%	LACERA RE - REAL ASSETS	0.25%	DWS Natural Resources	-0.02%
Natural Resources & Commodities	0.11%	BLACKROCK TIPS	0.05%	DWS INFRASTRUCTURE	-0.02%
Infrastructure	-0.01%	CREDIT SUISSE COMMODITY	0.04%	GRAIN COMMUNICATIONS OPPORTUNITY III	0.00%
TIPS	0.05%	PIMCO COMMODITY PLUS	0.04%	GRAIN SPECTRUM HOLDINGS III	0.00%
Real Assets & Inflation Hedges	0.40%	DIF INFRASTRUCTURE VI	0.00%	PAN-EUROPEAN INFRASTRUCTURE FUND III	0.00%

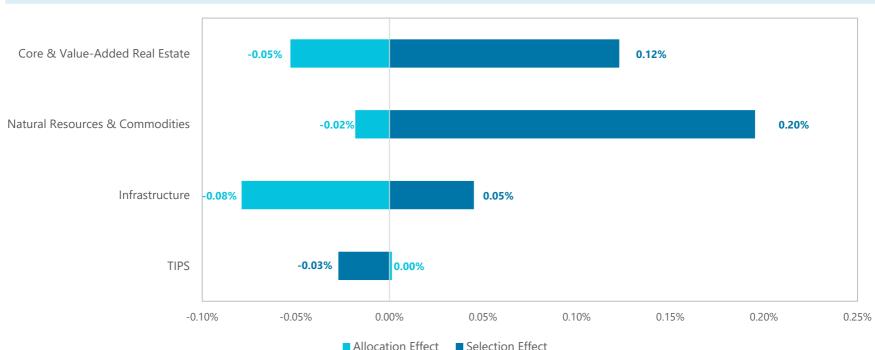
Return Attribution



for the quarter ended September 30, 2021



QTD Performance Attribution¹



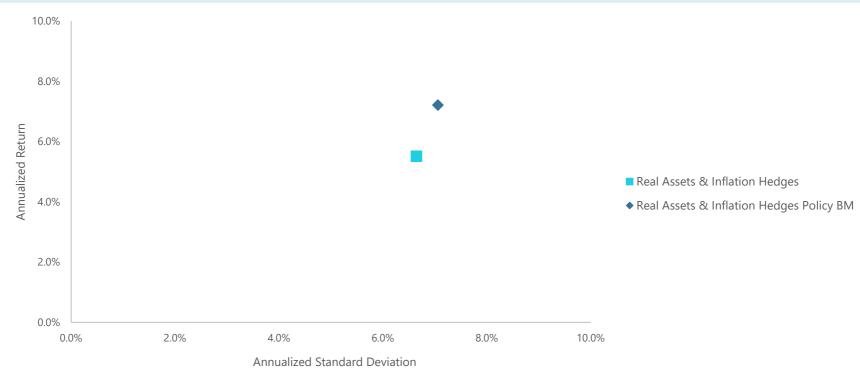
	Ending Market Value	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Real Assets & Inflation Hedges	11,870	100.0%	100.0%	2.5%	2.4%	-0.15%	0.34%	0.03%
Core & Value-Added Real Estate	4,480	37.7%	41.2%	4.0%	3.8%	-0.05%	0.12%	0.05%
Natural Resources & Commodities	3,031	25.5%	23.5%	2.9%	2.8%	-0.02%	0.20%	-0.01%
Infrastructure	2,298	19.4%	17.7%	-0.2%	-0.7%	-0.08%	0.05%	0.02%
TIPS	2,061	17.4%	17.7%	1.6%	1.8%	0.00%	-0.03%	-0.03%

Risk vs. Return

for the quarter ended September 30, 2021



Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking
	Return	Deviation	Kallo	KallO	Dela	Error
Real Assets & Inflation Hedges	5.5%	6.6%				
Real Assets & Inflation Hedges Policy BM	7.2%	7.1%	(0.06)	(0.24)	0.93	1.7%

Performance Detail



for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

Annualized Net Returns

		Ending	Prior Quarter							
	% of	Market Value	Ending MV							
	Composite	(mm)	(mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
REAL ASSETS & INFLATION HEDGES	100.0%	11,870	11,602	2.5%	10.7%	16.9%				5.5%
Real Assets & Inflation Hedges Policy BM				2.4%	11.2%	17.2%				7.2%
CORE & VALUE ADDED REAL ESTATE	37.7%	4,480	4,392	4.0%	6.0%	6.9%	3.1%	4.7%	7.0%	6.8%
Core & Value-Added Real Estate Policy BM				3.8%	7.2%	7.6%	5.1%	6.1%	9.1%	6.7%
NATURAL RESOURCES & COMMODITIES	25.5%	3,031	2,998	2.9%	23.3%	42.1%	5.5%	4.8%	-1.9%	-2.0%
Natural Resources & Comm Policy BM				2.8%	23.2%	42.6%	6.8%	4.5%	-2.7%	-2.9%
CREDIT SUISSE COMMODITY	4.5%	535	503	6.3%	29.0%	41.8%	7.5%	4.9%	-2.2%	-3.6%
DWS NATURAL RESOURCES	11.1%	1,317	1,443	-0.8%	18.3%	43.8%				13.0%
NEUBERGER BERMAN/GRESHAM	4.3%	514	484	6.1%	29.2%	42.6%	5.5%	5.7%	-1.6%	-1.7%
ORION MINE FINANCE FUND III	0.5%	55	0							0.0%
ORION MINING ROYALTY FUND I	0.1%	11	0							0.0%
PIMCO COMMODITY	4.4%	528	498	6.1%	29.7%	44.1%	7.2%	5.8%	-1.1%	-1.6%
PRIVATE EQUITY - REAL ASSETS	0.6%	72	70	3.2%	0.8%	0.0%				-18.2%
INFRASTRUCTURE	19.4%	2,298	2,183	-0.2%	12.0%	20.7%				9.9%
DJ BROOKFIELD GLOBAL INFRASTRUCTURE TR				-0.7%	12.2%	20.6%				7.0%
DIF INFRASTRUCTURE VI	0.1%	15	8	45.4%						21.6%
DWS INFRASTRUCTURE	18.6%	2,213	2,109	-0.4%	12.5%	21.3%				10.1%
GRAIN COMMUNICATIONS OPPORTUNITY III	0.1%	10	6	-3.5%						
GRAIN SPECTRUM HOLDINGS III	0.4%	46	46	-0.1%	-1.5%					-1.5%
PAN-EUROPEAN INFRASTRUCTURE FUND III	0.1%	14	14	5.2%	-3.3%					0.7%
TIPS										
BLACKROCK TIPS	17.4%	2,061	2,029	1.6%	3.3%	4.9%				7.8%
Bloomberg U.S. Treasury: U.S. TIPS				1.8%	3.5%	5.2%				7.9%

Real Assets & Inflation Hedges Natural Resources & Commodities

Credit Suisse

for the quarter ended September 30, 2021

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	14.4%
Benchmark Standard Deviation	14.7%
Sharpe Ratio	0.0
Information Ratio	0.1
Beta	1.0
Tracking Error	0.9%

Top Holdings (% of assets)

_	
US TREASURY FRN	10.5%
BRENT CRUDE FUTR JAN22	7.8%
US TREASURY FRN	7.8%
FEDERAL FARM CREDIT BANK	7.6%
US TREASURY FRN	6.9%
Top 5 Holdings	40.6%

Los Angeles County Employees Retirement Association

Performance (net)¹

• ,					
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
CREDIT SUISSE COMMODITY	534.8	6.3%	41.8%	7.5%	4.9%
Bloomberg Commodity Index Total Return		6.6%	42.3%	6.9%	4.5%
Real Assets & Inflation Hedges Policy BM		2.4%	17.2%		
Universe data Canana ditias Funda	TD 1 Vaca 2 V	, /aau	F Vanu		,

							1	
Universe data: Commodities Funds	QTD		1 Year		3 Year		5 Year	
CREDIT SUISSE COMMODITY	6.4%	23	42.1%	28	7.8%	68	5.1%	77
Median	3.8%		17.3%		10.3%		9.0%	

Growth of \$10,000



Top Exposures (% of assets)²



^{1.} Universe data is gross-of-fees.

^{2.} Charts display top exposures only and may not add up to 100%.

Real Assets & Inflation Hedges Natural Resources & Commodities DWS



for the quarter ended September 30, 2021

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	24.1%
Benchmark Standard Deviation	25.1%
Sharpe Ratio	0.0
Information Ratio	0.0
Beta	0.9
Tracking Error	4.0%

Top Holdings (% of assets)

ROYAL DUTCH SHELL PLC A SHS	6.5%
CORTEVA INC	6.2%
BUNGE LTD	4.1%
UPM KYMMENE OYJ	4.0%
CONOCOPHILLIPS	3.9%
Top 5 Holdings	24.8%

1. Universe data is gross-of-fees.

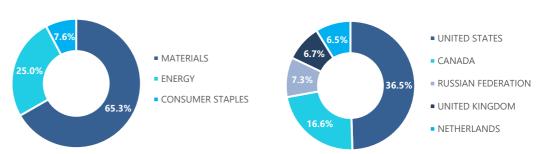
Performance (net)¹

		Ending Market Value (mm)				QT	D	1 Ye	ar	3 Year	5 Year
DWS Natural Resources			1,3	-0.8% 43		43.8	%				
S&P Glb LargeMidCap Commod & Resources				-0.9% 4		41.9	%				
Real Assets & Inflation Hedges Policy BM						2.4	%	17.2	%		
Universe data: Commodities Funds	QTD		1 Year		3 Year		5 Ye	ar			
DWS Natural Resources	-0.8%	84	44.1%	27							
Median	3.8%		17.3%								

Growth of \$10,000



Top Exposures (% of assets)²



Charts display top exposures only and may not add up to 100%.

Real Assets & Inflation Hedges Natural Resources & Commodities Neuberger Berman / Gresham

L///CERA
Los Angeles County Employees Retirement Association

9.0%

for the quarter ended September 30, 2021

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	16.7%
Sharpe Ratio	0.0
Information Ratio	0.1
Beta	1.0
Tracking Error	5.1%

Top Holdings (% of assets)

	-
GOLD 100 OZ FUTR DEC21	9.5%
NATURAL GAS FUTR NOV21	8.4%
WTI CRUDE FUTURE NOV21	7.0%
TREASURY BILL	6.8%
BRENT CRUDE FUTR JAN22	5.9%
Top 5 Holdings	37.6%
TREASURY BILL BRENT CRUDE FUTR JAN22	6.8%

Performance (net)¹

		Ending Market Value (mm)			(mm)	QTD	1 Y	ear	3 Year	5 Year
NEUBERGER BERMAN/GRESHAM		514.1				6.1%	42.	6%	5.5%	5.7%
Bloomberg Commodity Index Total Re						6.6%	. .=		6.9%	4.5%
Real Assets & Inflation Hedges Policy			l			2.4%		2%		
Universe data: Commodities Funds	QTD		1 Year		3 Year		5 Year			
NEUBERGER BERMAN/GRESHAM	6.2%	24	43.1%	27	5.9%	82	6.1%	76		

17.3%

10.3%

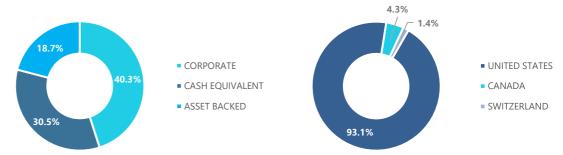
3.8%

Growth of \$10,000

Median



Top Exposures (% of assets)²



Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Real Assets & Inflation Hedges Natural Resources & Commodities PIMCO



for the quarter ended September 30, 2021

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	17.9%
Benchmark Standard Deviation	16.7%
Sharpe Ratio	0.0
Information Ratio	0.2
Beta	1.1
Tracking Error	2.6%

Top Holdings (% of assets)

BARCLAYS CAPITAL REPO	26.2%
SWU0SU373 TRS USD R E	18.4%
J P MORGANTERM REPO	14.6%
SWU0SU167 TRS USD R E	11.8%
SWU0SU399 TRS USD R E	9.8%
Top 5 Holdings	80.8%

1. Universe data is gross-of-fees.

Charts display top exposures only and may not add up to 100%.

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
PIMCO COMMODITY PLUS	528.1	6.1%	44.1%	7.2%	5.8%
Bloomberg Commodity Index Total Return		6.6%	42.3%	6.9%	4.5%
Real Assets & Inflation Hedges Policy BM		2.4%	17.2%		

Universe data: Commodities Funds	QTD		1 Year		3 Year		5 Year		
PIMCO COMMODITY PLUS	6.2%	24	44.6%	26	7.5%	72	6.2%	76	
Median	3.8%		17.3%		10.3%		9.0%		

Growth of \$10,000



Top Exposures (% of assets)²



1,79

Real Assets & Inflation Hedges Infrastructure

L//,CERA

Los Angeles County Employees Retirement Association

DWS

for the quarter ended September 30, 2021

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)	40,153.7	41,434.1
No. Of Issues	47.0	
Dividend Yield	2.2	3.2
Return on Equity	16.0	12.9
Price to Sales	7.1	6.6
Price to Book	-9.2	-0.2
PE Ratio	49.4	32.7

Top Holdings (% of assets)

AMERICAN TOWER CORP	6.7%
CHENIERE ENERGY INC	5.7%
SEMPRA ENERGY	4.6%
WILLIAMS COS INC	4.1%
AMERICAN WATER WORKS CO INC	3.9%
Top 5 Holdings	25.0%

. Universe data for infrastructure is unavailable.

Performance (net)¹ Ending Market Value (mm) QTD 1 Year 3 Year 5 Yours INERASTRUCTURE





Top Exposures (% of assets)²



UNITED STATES

HONG KONG

CANADA

SPAIN

Charts display top exposures only and may not add up to 100%.

Real Assets & Inflation Hedges TIPS

Los Angeles County Employees Retirement Association

BlackRock

for the quarter ended September 30, 2021

Strategy

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

Inception Date: May 2019

Risk Statist	tics (since	inception)
--------------	-------------	------------

Standard Deviation	4.3%
Benchmark Standard Deviation	4.2%
Sharpe Ratio	0.0
Information Ratio	-0.1
Beta	1.0
Tracking Error	0.5%

Top Holdings (% of assets)

-		
TSY INFL IX N/B		5.3%
TSY INFL IX N/B		4.2%
TSY INFL IX N/B		4.0%
TSY INFL IX N/B		3.8%
TSY INFL IX N/B		3.8%
Top 5 Hold	ings	21.1%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
BLACKROCK TIPS	2,060.9	1.6%	4.9%		
Bloomberg U.S. Treasury: U.S. TIPS		1.8%	5.2%		
Real Assets & Inflation Hedges Policy BM		2.4%	17.2%		

Growth of \$10,000



Top Exposures (% of assets)²



1,81

^{1.} Universe data for TIPS is unavailable.

Charts display top exposures only and may not add up to 100%.

risk reduction & mitigation

Summary

for the quarter ended September 30, 2021



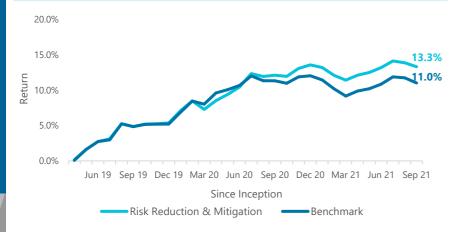
Performance (net) 6.0% 4.0% 2.0% 0.0% -2.0% OTD 3 Year 5 Year 10 Year ITD 1 Year ■ Risk Reduction & Mitigation ■ Benchmark OTD YTD 3 Year 10 Year ITD 1 Year 5 Year **Risk Reduction & Mitigation** 0.1% -0.2% 1.1% 5.1% Benchmark 0.1% -0.9% -0.3% 4.3% Excess 0.0% 0.7% 1.4% 0.9%

Fun	ction	nal (Cate	aor	\mathbf{v}^1
				J ,	J

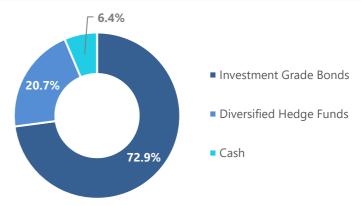
	QTD	FYTD	1 Year	3 Year
Investment Grade Bonds	0.1%	0.1%	-0.4%	5.6%
BBG BC Aggregate Bond Index	0.1%	0.1%	-0.9%	5.4%
Excess	0.0%	0.0%	0.5%	0.3%
Diversified Hedge Funds	0.0%	0.0%	10.8%	
Diversified Hedge Funds Policy BM	0.6%	0.6%	2.6%	
Excess	-0.6%	-0.6%	8.3%	
Cash	0.2%	0.2%	0.7%	1.6%
Cash Policy BM	0.0%	0.0%	0.1%	1.2%
Excess	0.2%	0.2%	0.7%	0.5%

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

Cumulative Return



Exposure

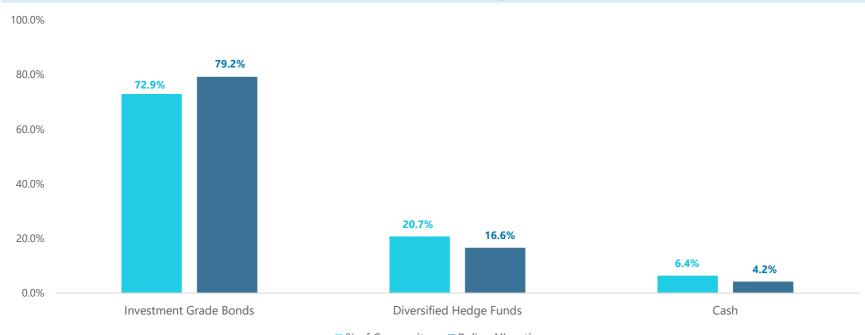


Asset Allocation









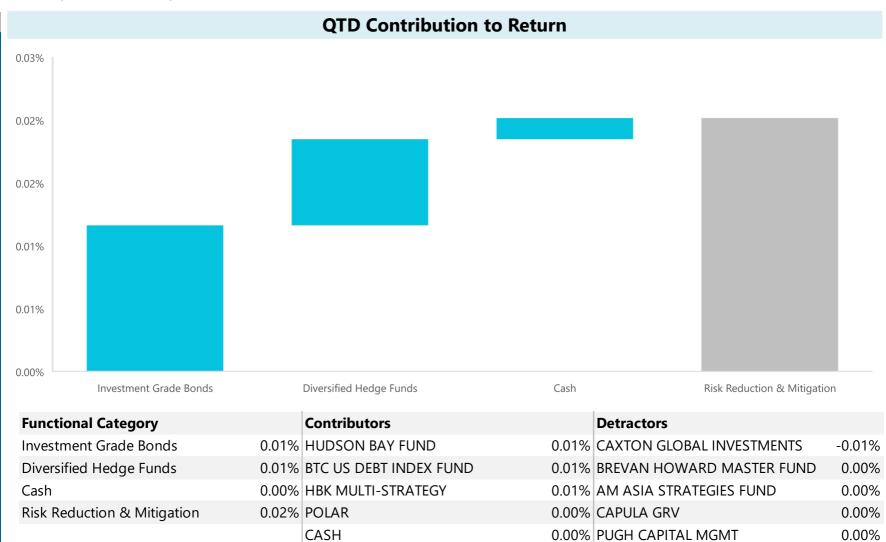
■ % of Composite	■ Policy Allocation
------------------	---------------------

	Ending Market Value	% of Composite	Policy Allocation	Over / Under	Over / Under (mm)
Risk Reduction & Mitigation	14,947	100.0%			
Investment Grade Bonds	10,897	72.9%	79.2%	-6.3%	-941
Diversified Hedge Funds	3,098	20.7%	16.6%	4.1%	617
Cash	952	6.4%	4.2%	2.2%	324

Contribution to Return



for the quarter ended September 30, 2021

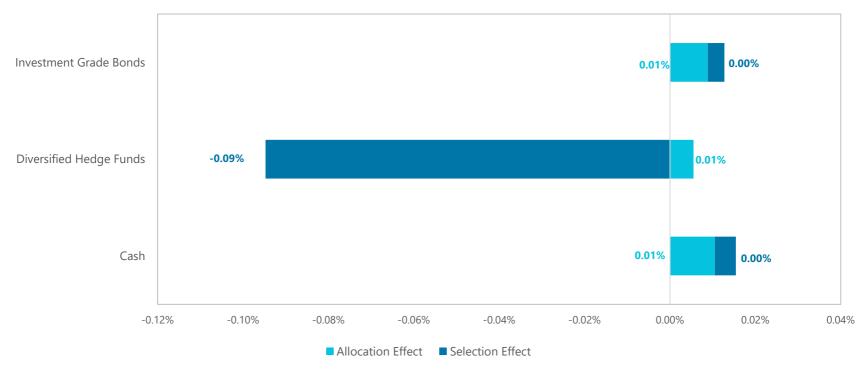


Return Attribution

for the quarter ended September 30, 2021



QTD Performance Attribution¹



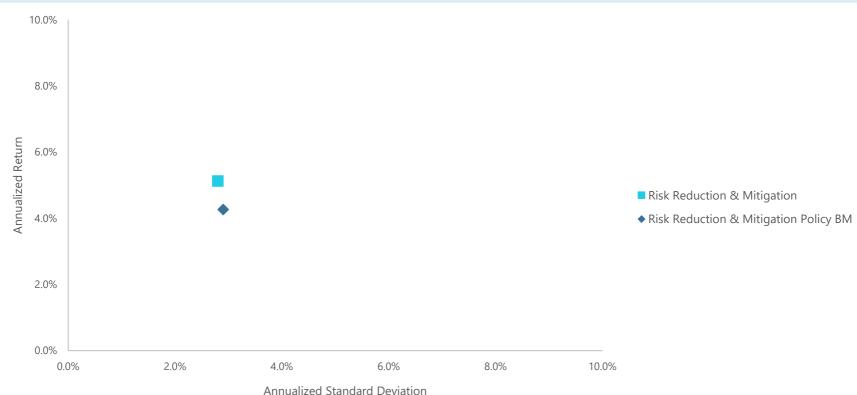
	Ending Market Value	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Risk Reduction & Mitigation	14,947	100.0%	100.0%	0.1%	0.1%	0.02%	-0.09%	-0.04%
Investment Grade Bonds	10,897	72.9%	79.2%	0.1%	0.1%	0.01%	0.00%	0.01%
Diversified Hedge Funds	3,098	20.7%	16.6%	0.0%	0.6%	0.01%	-0.09%	-0.07%
Cash	952	6.4%	4.2%	0.1%	0.0%	0.01%	0.00%	0.02%

Risk vs. Return

for the quarter ended September 30, 2021



Since Inception (Annualized)¹



	Annualized	Standard	Sharpe	Information		Tracking
	Return	Deviation	Ratio	Ratio	Beta	Error
Risk Reduction & Mitigation	5.1%	2.8%				
Risk Reduction & Mitigation Policy BM	4.3%	2.9%	0.08	0.29	0.94	0.8%

Performance Detail



for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

Annualized Net Returns¹

		Ending	Prior Quarter							
	% of	Market Value	Ending MV							
	Composite	(mm)	(mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
RISK REDUCTION & MITIGATION	100.0%	14,947	14,743	0.1%	-0.2%	1.1%				5.1%
Risk Reduction & Mitigation Policy BM				0.1%	-0.9%	-0.3%				4.3%
INVESTMENT GRADE BONDS	72.9%	10,897	11,301	0.1%	-1.5%	-0.4%	5.6%	3.5%	3.8%	5.9%
BBG BARC Agg				0.1%	-1.6%	-0.9%	5.4%	2.9%	3.0%	5.4%
BTC US DEBT INDEX FUND	49.5%	7,398	7,790	0.1%	-1.6%	-0.9%	5.4%	3.0%	3.1%	4.7%
DODGE & COX	0.0%	0	0							
MHLP	0.1%	14	16	1.5%	4.1%	5.4%	5.3%	7.1%	5.1%	5.5%
PIMCO	0.0%	0	6							
PUGH CAPITAL MGMT	7.9%	1,182	1,183	0.0%	-1.6%	-0.6%	5.7%	3.1%	3.2%	4.4%
WELLS CAPITAL	15.4%	2,303	2,302	0.0%	-1.4%	-0.4%	6.0%	3.4%	3.7%	4.9%
WESTERN ASSET MGMT	0.0%	0	4							
DIVERSIFIED HEDGE FUNDS	20.7%	3,098	2,526	0.0%	7.5%	10.8%				7.4%
Diversified Hedge Funds Policy BM				0.6%	1.9%	2.6%				3.5%
AM ASIA STRATEGIES FUND	0.8%	123	100	-1.9%						-1.9%
AMUNDSEN	0.4%	65	0							0.0%
BREVAN HOWARD MASTER FUND	2.7%	397	251	-1.8%						-1.5%
CAPULA GRV	3.5%	525	376	-0.3%	1.5%	1.9%				5.3%
CAXTON GLOBAL INVESTMENTS	1.3%	199	206	-3.4%						-0.3%
DK INSTITUTIONAL PARTNER	2.3%	342	242	-0.1%	8.5%	12.8%	7.2%			6.7%
GROSVENOR HFOF	0.5%	73	86	1.0%	16.9%	24.6%	8.1%	6.9%		5.2%
GSAM HFOF	0.0%	1	1							
HBK MULTI-STRATEGY	2.3%	344	340	1.3%	7.0%	10.4%	6.4%			5.6%
HUDSON BAY	3.2%	474	464	2.1%	16.0%	19.7%				18.3%
LINEAR B	0.2%	30	0							-0.2%
POLAR	3.1%	464	461	0.6%	9.0%	14.4%				19.8%
SPARTA	0.2%	30	0							0.0%
TRUTINO	0.2%	30	0							0.1%
CASH	6.4%	952	916	0.2%	0.6%	0.7%	1.6%	1.5%	1.0%	1.8%
Cash Policy BM				0.0%	0.0%	0.1%	1.2%	1.2%	0.6%	1.4%

Risk Reduction & Mitigation Investment Grade Bonds Pugh Capital

Los Angeles County Employees Retirement Association

4.0%

Pugh Capital

for the quarter ended September 30, 2021

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	225.0	
Effective Duration	6.4	6.4
Convexity	0.5	0.5
Coupon Rate	2.7	2.6
Yield to Maturity	1.7	1.7
Current Yield	2.5	2.4
Rating – Moody's	AA-3	AA-2
Rating – S & P	A+	AA-

Top Holdings (% of assets)

US TREASURY N/B	3.6%
US TREASURY N/B	2.6%
US TREASURY N/B	2.5%
FNMA POOL FM3241	2.0%
US TREASURY N/B	1.9%
Top 5 Holdings	12.5%

1. Universe data is gross-of-fees.

Performance (net)¹

	Endi	Ending Market Value (mm)) QTE)	1 Year	3 Year	5 Year
PUGH CAPITAL MGMT		1	,182.1		0.0%	6	-0.6%	5.7%	3.1%
BBG BARC Agg					0.1%	ó	-0.9%	5.4%	2.9%
Risk Reduction & Mitigation Policy BM					0.1%	ó	-0.3%		
Universe data: U.S. Fixed Income Pools	QTD		1 Year		3 Year		5 Year		
PUGH CAPITAL MGMT	0.0%	89	-0.5%	73	5.8%	54	3.3%	70	

Growth of \$10,000

Median



Top Exposures (% of assets)²



1.89

Charts display top exposures only and may not add up to 100%.

Risk Reduction & Mitigation Investment Grade Bonds Wells Capital

Los Angeles County Employees Retirement Association

4.0%

Wells Capital for the guarter ended September 30, 2021

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	800.0	
Effective Duration	6.1	6.4
Convexity	0.5	0.5
Coupon Rate	1.9	2.6
Yield to Maturity	1.7	1.7
Current Yield	1.9	2.4
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

FNMA TBA 15 YR 2	3.1%
FNMA TBA 30 YR 2.5	3.0%
US TREASURY N/B	2.2%
US TREASURY N/B	1.9%
FNMA TBA 30 YR 2	1.8%
Top 5 Holdings	11.9%

. Universe data is gross-of-fees.

Performance (net)¹ Ending Market Value (mm) QTD 1 Year 3 Year 5 Year 2,303.0 0.0% -0.4% 6.0% 3.4% **WELLS CAPITAL** -0.9% 2 9% 0.1% 5 4% **BBG BARC Agg** Risk Reduction & Mitigation Policy BM 0.1% -0.3% Universe data: U.S. Fixed Income Pools OTD 1 Year 3 Year 5 Year WELLS CAPITAL 0.1% -0.3% 67 6.1% 49 3.5% 64

0.1%

6.0%

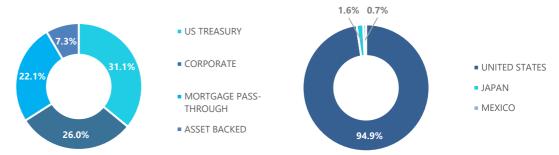
0.1%

Growth of \$10,000

Median



Top Exposures (% of assets)²





Charts display top exposures only and may not add up to 100%.

Risk Reduction & Mitigation Diversified Hedge Funds

Los Angeles County Employees Retirement Association

AM Asia Strategies Fund for the quarter ended September 30, 2021

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	0.9%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.8
Information Ratio	-0.8
Beta	
Tracking Error	3.2%

Performance (net all)	1										
		End	ing Marke	t Valu	e (mm)	QTI)	1 Ye	ar	3 Year	5 Year
AM ASIA STRATEGIES FUND			123	.0		-1.9	%				
CUSTOM HEDGE FUND BM						0.69	%				
Risk Reduction & Mitigation Poli	су ВМ					0.19	%				
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 '	Year			
AM ASIA STRATEGIES FUND	-1.9%	86									
Median	0.8%										





Growth of \$10,000



Risk Reduction & Mitigation Diversified Hedge Funds

Los Angeles County Employees Retirement Association

Brevan Howard

for the quarter ended September 30, 2021

Strategy

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

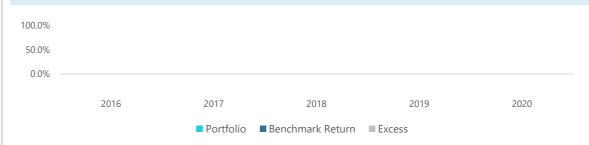
Inception Date: March 2021

Risk Statistics (since inception)

Standard Deviation	2.6%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.5
Information Ratio	-0.5
Beta	
Tracking Error	2.6%

Performance (net all) ¹										
	Endi	Ending Market Value (mm)					1 Year	3	3 Year	5 Year
BREVAN HOWARD MASTER FUND			397.3		-1.8	%				
CUSTOM HEDGE FUND BM										
Risk Reduction & Mitigation Policy BM					0.19	0.1%				
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 Year			
BREVAN HOWARD MASTER FUND	-1.8%	85								
Median	0.8%									

Calendar Year Returns



Growth of \$10,000



Risk Reduction & Mitigation Diversified Hedge Funds Capula GRV

Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Strategy

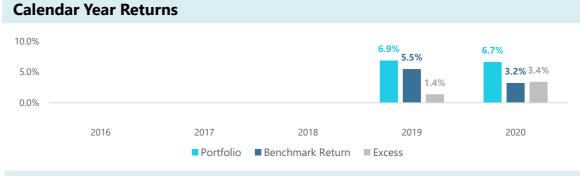
Global fixed income relative value hedge fund. The strategy seeks to benefit from pricing distortions generally caused by market flows in the government bond, interest rate swap and bond futures markets.

Inception Date: December 2018

Risk Statistics (since inception)

Standard Deviation	1.4%
Benchmark Standard Deviation	0.4%
Sharpe Ratio	0.3
Information Ratio	0.3
Beta	
Tracking Error	1.4%

Performance (net all) ¹												
			Ending N	⁄larket	: Value (mn	n)	QTD	1 Year	3 Year	5 Year		
CAPULA GRV			525.4				-0.3%	1.9%				
CUSTOM HEDGE FUND BM							0.6%	2.6%				
Risk Reduction & Mitigation P	olicy BM						0.1%	-0.3%				
			1		1							
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 Year					
CAPULA GRV	-0.3%	72	1.9%	76								
Median	0.8%		13.0%									





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

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation Diversified Hedge Funds

Los Angeles County Employees Retirement Association

1,94

Caxton

for the quarter ended September 30, 2021

Strategy

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

Inception Date: February 2021

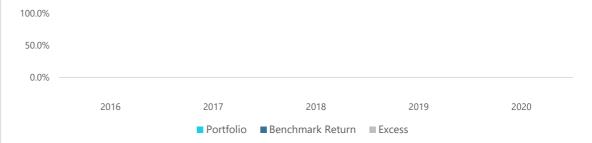
Risk Statistics (since inception)

Standard Deviation	5.4%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.2
Information Ratio	-0.2
Beta	
Tracking Error	5.4%

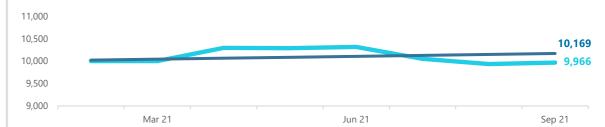
5 Year

Universe data: Hedge Funds	QTD		1 Year	3 Year	5 Year	
CAXTON GLOBAL INVESTMENTS	-3.4%	91		 	 	
Median	0.8%					

Calendar Year Returns



Growth of \$10,000



Benchmark

Portfolio

Risk Reduction & Mitigation Diversified Hedge Funds DK Institutional Partners

L///CERA
Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

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	5.1%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.1
Information Ratio	0.1
Beta	
Tracking Error	5.2%

Performance (net all) ¹											
		Ending Market Value (mm)				QT	D 1	Year	3 Year	5 Year	
DK INSTITUTIONAL PARTNERS CUSTOM HEDGE FUND BM Risk Reduction & Mitigation Policy BN	И	341.9				0.6	-0.1% 12.8% 0.6% 2.6% 0.1% -0.3%		7.2% 4.1%	 	
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 Year				
DK INSTITUTIONAL PARTNERS	-0.2%	72	12.8%	51	7.2%	45					
Median	0.8%		13.0%		6.1%						





Risk Reduction & Mitigation Diversified Hedge Funds **HBK Multi-Strategy**

Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Strategy

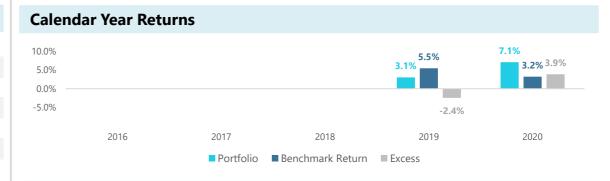
Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

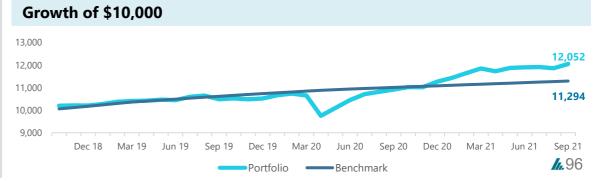
Inception Date: June 2018

Risk Statistics (since inception)

Standard Deviation	6.4%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.1
Information Ratio	0.1
Beta	
Tracking Error	6.5%

Performance (net all) ¹													
	Ending Market Value (mm)								3 Year	5 Year			
HBK MULTI-STRATEGY			344.	.5		1.3%	10.4%	6.4%					
CUSTOM HEDGE FUND BM						0.6%	2.6%	4.1%					
Risk Reduction & Mitigation Po	olicy BM						0.1%	-0.3%					
Universe data: Hedge Funds		1 Year 3 Year				5 Year							
HBK MULTI-STRATEGY	47	10.4% 59 6.4% 49			49								
Median	0.8%		13.0%		6.1%								





Risk Reduction & Mitigation Diversified Hedge Funds Hudson Bay Fund

Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Strategy

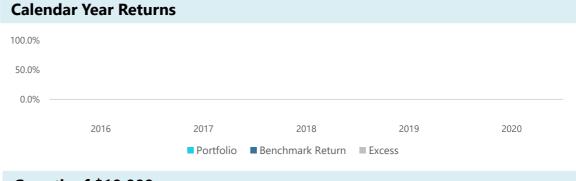
Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: July 2020

Risk Statistics (since inception)

Standard Deviation	5.7%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	0.7
Information Ratio	0.7
Beta	
Tracking Error	5.7%

Performance (net all) ¹													
			Ending Market Value (mm)				QTD	1 Year	3 Year	5 Year			
HUDSON BAY FUND		473	.7		2.1%	19.7%							
CUSTOM HEDGE FUND BM						0.6%	2.6%						
Risk Reduction & Mitigation Po						0.1%	-0.3%						
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 Year						
HUDSON BAY FUND	36	19.7%	30										
Median	0.8%		13.0%										





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

1. Universe data is gross-of-fees.

Risk Reduction & Mitigation Diversified Hedge Funds

Los Angeles County Employees Retirement Association

Polar

for the quarter ended September 30, 2021

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	5.9%
Benchmark Standard Deviation	0.2%
Sharpe Ratio	0.5
Information Ratio	0.5
Beta	
Tracking Error	6.0%

Performance (net	Performance (net all) ¹													
			Ending M	1arket	Value (mn	n)	QTD	1 Year	3 Year	5 Year				
POLAR			463.	6		0.6%	14.4%							
CUSTOM HEDGE FUND BM						0.6%	2.6%							
Risk Reduction & Mitigation P	olicy BM						0.1%	-0.3%						
		. '				,			,	,				
Universe data: Hedge Funds	QTD		1 Year		3 Year		5 Year							
POLAR	0.6%	52	14.5%	43										
Median	0.8%		13.0%											







Portfolio

Benchmark

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, 2021

L//.CERA Los Angeles County Employees Retirement Association

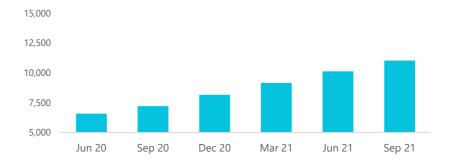
Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Equity	13.0%	42.6%	57.8%	23.7%	21.3%	16.6%	15.8%
Benchmark	7.6%	31.7%	42.8%	23.2%	19.3%	15.9%	
Excess	5.5%	10.9%	15 1%	0.4%	2 1%	0.7%	

Asset Growth (mm)

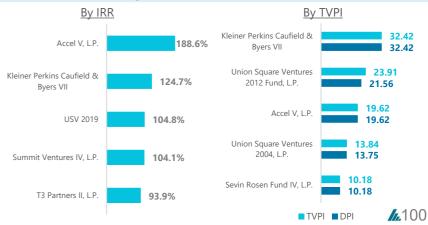
	QTD	1 Year	3 Year
Beginning Market Value	10,129	7,209	5,949
Net Cash Flow	-385	-359	-220
Gain/Loss	1,293	4,188	5,308
Ending Market Value	11,037	11,037	11,037



Cumulative Return



Top Performing Investments (since inception)

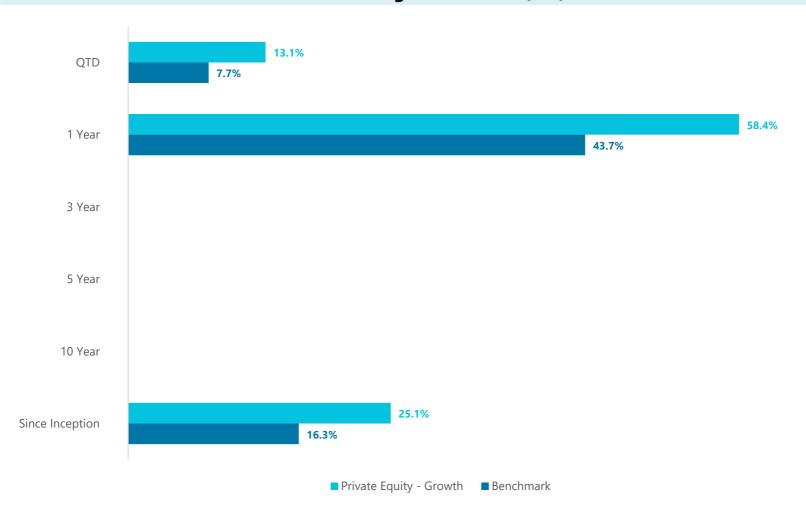


Historical Returns

Private Equity – Growth for the quarter ended September 30, 2021



Time-Weighted Returns (net)

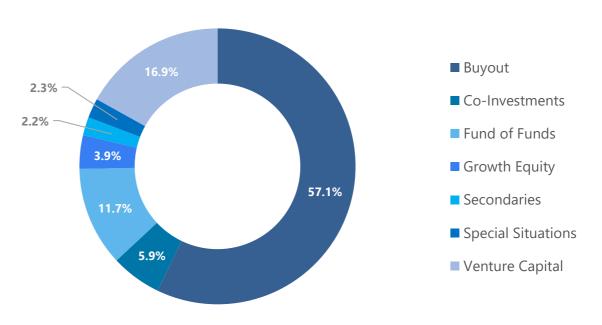


Performance by Strategy

Private Equity – Growth for the quarter ended September 30, 2021



By Strategy^{1,2}



			Cumulative	Cumulative			Total			Since	Since
	Number of	Commitments	Contributions	Distributions	Market Value	Total Value	Gain / Loss	Distributed to	Total Value to	Inception	Inception
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME
Buyout	188	12,881.0	11,044.4	12,751.6	6,214.8	18,966.4	7,922.0	1.15x	1.72x	14.2%	1.54
Co-Investments	9	1,008.3	951.4	846.6	642.9	1,489.5	538.1	0.88x	1.54x	18.1%	1.38
Fund of Funds	12	1,424.7	1,198.6	1,262.3	1,267.4	2,529.6	1,331.0	1.05x	2.11x	14.7%	1.43
Growth Equity	20	1,084.6	926.5	1,370.3	427.0	1,797.3	870.8	1.48x	1.94x	86.9%	1.67
Secondaries	13	395.3	347.0	279.7	234.6	514.4	167.4	0.81x	1.48x	17.8%	1.31
Special Situations	22	1,180.0	911.7	1,000.9	249.1	1,250.0	338.3	1.10x	1.37x	8.8%	1.11
Venture Capital	104	2,170.4	1,797.5	2,398.5	1,840.1	4,238.6	2,441.1	1.33x	2.36x	21.9%	2.05
Total Growth Portfolio	368	20,144.4	17,177.1	19,909.8	10,876.0	30,785.8	13,608.7	1.16x	1.79x	16.5%	1.67

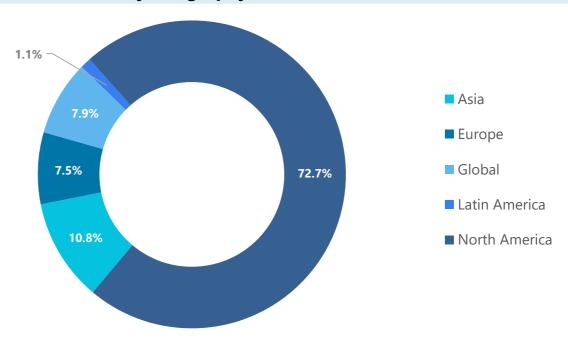
- 1. Based on best available cash flow adjusted market values.
- 2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

Performance by Geography

Private Equity – Growth for the quarter ended September 30, 2021



By Geography^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value	Total Value	Total Gain / Loss	Distributed to	Total Value to	Since Inception Net IRR	Since Inception PME
Asia	14	793.0	616.7	279.5	1,170.8	1,450.3	833.6	0.45x	2.35x	25.2%	1.59
Europe	32	2,403.9	1,828.2	2,066.1	820.3	2,886.4	1,058.2	1.13x	1.58x	15.6%	1.32
Global	21	1,479.3	1,001.9	733.7	859.2	1,592.9	591.0	0.73x	1.59x	17.1%	1.30
Latin America	2	200.0	154.1	43.0	122.9	165.9	11.9	0.28x	1.08x	3.4%	0.78
North America	299	15,268.3	13,576.2	16,787.5	7,902.7	24,690.2	11,114.0	1.24x	1.82x	16.5%	1.69
Total Growth Portfolio	368	20,144.4	17,177.1	19,909.8	10,876.0	30,785.8	13,608.7	1.16x	1.79x	16.5%	1.67

- 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, 2021



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

			Cumulative	Cumulative			Total			Since	Since	
	Number of	Commitments		Distributions	Market Value	Total Value	Gain / Loss	Distributed to	Total Value to	Inception	Inception	Quartile
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME	Ranking
1986	3	80.0	80.0	267.5	0.0	267.5	187.5	3.34x	3.34x	15.7%		1st
1987	1	25.0	25.0	40.3	0.0	40.3	15.3	1.61x	1.61x	7.3%		3rd
1988	2	200.0	216.6	466.9	0.0	466.9	250.3	2.16x	2.16x	15.5%	89.91	2nd
1989	0											N/A
1990	1	7.5	7.5	16.7	0.0	16.7	9.2	2.22x	2.22x	13.0%	9.13	3rd
1991	0											N/A
1992	10	116.0	111.0	242.5	0.0	242.5	131.6	2.19x	2.19x	29.1%	3.78	2nd
1993	8	68.0	64.8	239.5	0.0	239.5	174.7	3.70x	3.70x	39.7%	3.22	1st
1994	5	56.9	58.8	237.6	0.0	237.6	178.8	4.04x	4.04x	54.1%	2.82	1st
1995	7	100.5	102.3	362.6	0.0	362.6	260.2	3.54x	3.54x	43.2%	2.58	1st
1996	12	222.9	225.2	608.8	0.0	608.8	383.6	2.70x	2.70x	37.5%	2.15	1st
1997	11	397.5	410.4	606.4	0.0	606.4	196.0	1.48x	1.48x	7.7%	1.20	3rd
1998	22	644.4	655.2	944.0	2.1	946.0	290.8	1.44x	1.44x	7.3%	1.19	2nd
1999	21	364.5	369.7	436.4	0.3	436.7	67.0	1.18x	1.18x	3.4%	0.96	2nd
2000	25	375.7	387.3	575.0	0.2	575.2	187.9	1.48x	1.49x	8.7%	1.07	2nd
2001	15	416.1	442.4	834.0	3.6	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	312.4	339.2	700.6	1.2	701.8	362.7	2.07x	2.07x	21.3%	1.60	1st
2004	7	352.6	392.2	743.3	5.1	748.4	356.2	1.90x	1.91x	19.5%	1.58	1st
2005	15	511.9	506.2	1,038.6	2.6	1,041.1	534.9	2.05x	2.06x	13.3%	1.64	1st
2006	28	1,533.0	1,605.8	2,544.2	57.1	2,601.3	995.5	1.58x	1.62x	9.0%	1.25	2nd
2007	11	518.6	461.0	776.6	32.9	809.5	348.6	1.68x	1.76x	11.5%	1.19	2nd
2008	10	652.0	699.6	1,207.0	54.2	1,261.2	561.6	1.73x	1.80x	13.3%	1.21	2nd
2009	0											N/A
2010	2	450.0	467.1	566.8	407.3	974.0	506.9	1.21x	2.09x	17.0%	1.41	2nd
2011	7	391.0	408.0	760.0	204.8	964.8	556.8	1.86x	2.36x	19.3%	1.48	2nd
2012	7	435.0	570.0	987.8	227.3	1,215.0	645.0	1.73x	2.13x	23.1%	1.72	1st
2013	10	901.9	938.0	920.1	836.4	1,756.5	818.5	0.98x	1.87x	17.3%	1.30	2nd
2014	11	1,256.5	1,329.3	1,168.8	1,348.5	2,517.3	1,188.1	0.88x	1.89x	19.0%	1.33	2nd
2015	10	1,087.0	1,170.9	956.8	1,378.7	2,335.5	1,164.6	0.82x	1.99x	23.4%	1.40	2nd
2016	12	1,139.9	1,232.0	586.8	1,505.9	2,092.7	860.7	0.48x	1.70x	20.8%	1.18	2nd
2017	8	594.1	526.9	215.7	838.3	1,054.0	527.1	0.41x	2.00x	30.7%	1.43	2nd
2018	9	1,275.2	842.2	157.6	1,210.9	1,368.5	526.4	0.19x	1.63x	32.6%	1.27	2nd
2019	30	2,458.4	1,619.8	147.9	2,021.8	2,169.8	549.9	0.09x	1.33x	27.1%	1.08	2nd
2020	19	2,068.7	558.8	15.6	615.3	630.9	72.1	0.03x	1.13x	27.6%	1.06	2nd
2021	13	910.7	123.7		121.7			0.00x	0.98x	-2.9%	0.96	N/A
Total Growth	368	20,144.4	17,177.1	19,909.8	10,876.0	30,785.8	13,608.7	1.16x	1.79x	16.5%	1.67	
Portfolio			,	,			,					

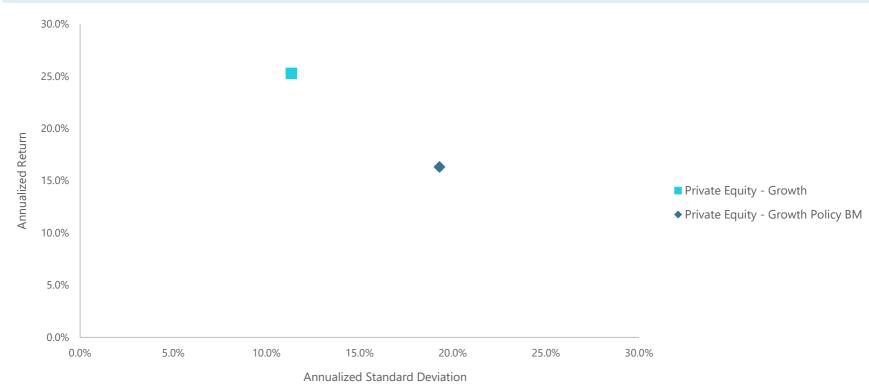
- Based on best available cash flow adjusted market values.
- Investment counts for Co-Investments and Fund of Funds do not include underlying funds.
- 3. Fund benchmark data provided by Burgiss Private IQ as of the reporting date. Quartile rankings are reported as not applicable (N/A) if commitment 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, 2021



Since Inception (Annualized)¹



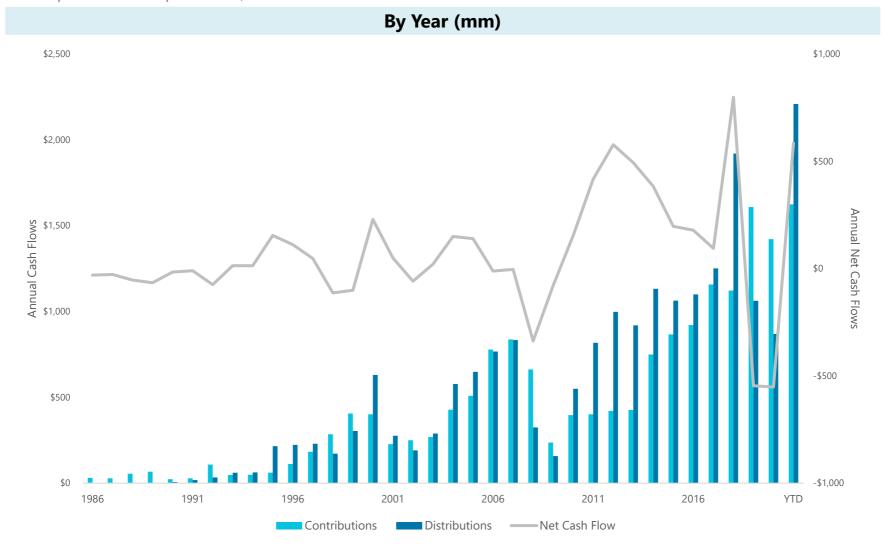
	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Equity - Growth	25.1%	11.3%	racio	ridiro	Dota	Liver
Private Equity - Growth Policy BM	16.3%	18.7%	0.15	0.09	0.17	19.3%

Annual Cash Flow Activity

Private Equity

for the quarter ended September 30, 2021





Summary

Real Estate

for the quarter ended September 30, 2021



Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Estate	4.4%	7.1%	8.1%	4.3%	5.8%	7.5%	7.5%
Benchmark	3.8%	7.3%	7.8%	5.4%	6.3%	9.0%	
Excess	0.6%	-0.2%	0.3%	-1.1%	-0.4%	-1.5%	

Asset Growth (mm)

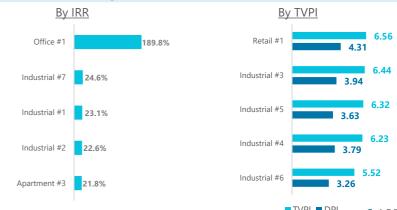
	QTD	1 Year	3 Year
Beginning Market Value	5,162	5,299	6,338
Net Cash Flow	-110	-435	-1,936
Gain/Loss	224	412	875
Ending Market Value	5,277	5,277	5,277



Cumulative Return



Top Performing Investments (since inception)¹



Property names removed due to confidentiality reasons.

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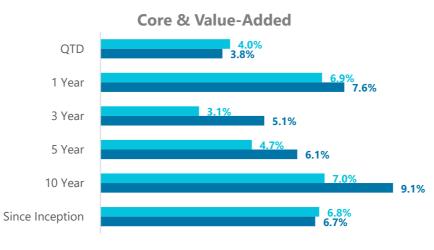
Historical Returns

Real Estate

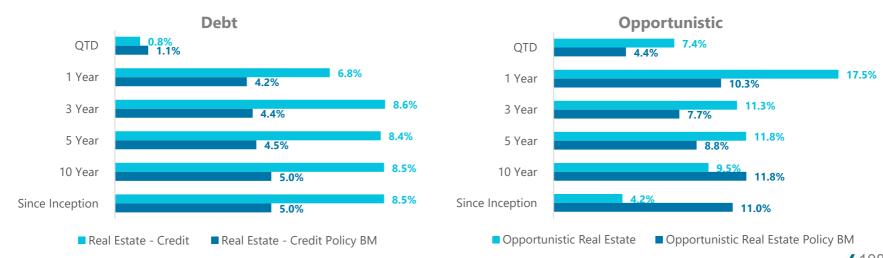
for the quarter ended September 30, 2021



Time-Weighted Returns (net)



■ Core & Value-Added Real Estate ■ Core & Value-Added Real Estate Policy BM



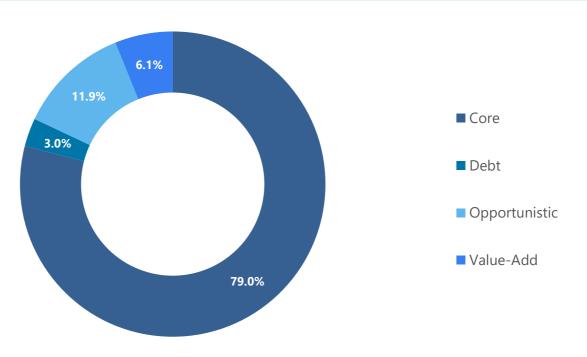
Performance by Strategy

Real Estate

for the quarter ended September 30, 2021



By Strategy^{1,2}



			Cumulative	Cumulative	Market	Total	Total			Since	Since
	Number of	Commitments	Contributions	Distributions	Value	Value	Gain / (Loss)	Distributed to	Total Value to	Inception	Inception
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME
Core	94	440.9	8,907.9	8,058.1	4,158.7	12,216.8	3,308.9	0.90x	1.37x	8.1%	1.01
Debt	12	0.0	580.9	460.5	158.0	618.5	37.5	0.79x	1.06x	8.0%	1.07
Opportunistic	23	1,015.4	1,261.4	1,023.9	624.0	1,648.0	386.5	0.81x	1.31x	7.0%	0.93
Value-Add	13	483.3	546.3	63.0	322.4	385.4	(161.0)	0.12x	0.71x	-10.2%	0.46
Total Real Estate	142	1,939.6	11,296.6	9,605.5	5,263.1	14,868.6	3,572.0	0.85x	1.32x	7.6%	0.98

- 1. Based on best available cash flow adjusted market values and includes only active investments.
- 2. Commitment amounts reflect only commingled fund investments.

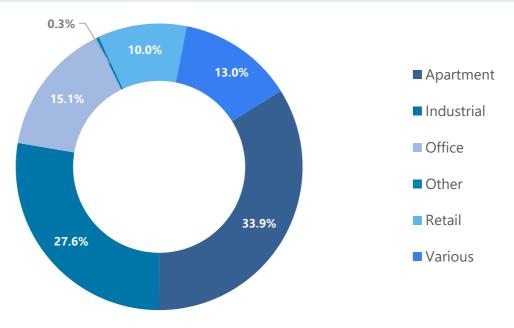
Performance by Property Type

Real Estate

for the quarter ended September 30, 2021



By Property Type^{1,2,3}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions	Market Value (mm)	Total Value (mm)	Total Gain / (Loss)	Distributed to Paid-In	Total Value to	Since Inception Net IRR	Since Inception PME
Apartment	51	384.0	4,083.8	3,450.9	1,786.0	5,236.8	1,153.0	0.85x	1.28x	7.7%	0.96
Industrial	25	240.9	1,743.2	1,351.3	1,453.9	2,805.2	1,061.9	0.78x	1.61x	12.2%	1.34
Office	27	0.0	2,801.4	2,764.3	794.4	3,558.6	757.3	0.99x	1.27x	6.7%	1.07
Other	4	100.0	170.6	178.7	16.3	195.0	24.4	1.05x	1.14x	3.1%	0.73
Retail	17	0.0	1,567.4	1,567.9	527.6	2,095.5	528.1	1.00x	1.34x	7.0%	0.80
Various	18	1,214.7	930.1	292.5	685.0	977.5	47.3	0.31x	1.05x	1.2%	0.68
Total Real Estate	142	1,939.6	11,296.6	9,605.5	5,263.1	14,868.6	3,572.0	0.85x	1.32x	7.6%	0.98

- 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.

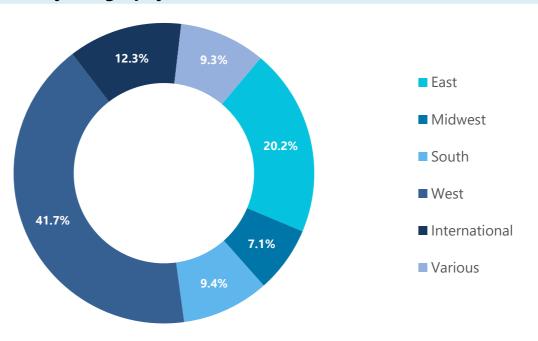
Performance by Geography

Real Estate

for the quarter ended September 30, 2021



By Geography (US NCREIF)^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value _(mm)	Total Gain / (Loss)	Distributed to	Total Value to	Since Inception Net IRR	Since Inception PME
East	36	0.0	3,582.6	3,379.7	1,064.1	4,443.8	861.2	0.94x	1.24x	6.6%	0.86
Midwest	13	0.0	674.8	458.3	374.6	832.9	158.1	0.68x	1.23x	5.3%	0.83
South	19	0.0	1,645.1	1,678.1	494.8	2,172.9	527.8	1.02x	1.32x	8.7%	0.94
West	51	384.0	3,969.3	3,447.4	2,196.0	5,643.4	1,674.1	0.87x	1.42x	8.8%	1.23
International	13	747.6	816.2	378.3	645.5	1,023.7	207.5	0.46x	1.25x	5.7%	0.86
Various	10	807.9	608.5	263.8	488.1	751.8	143.3	0.43x	1.24x	4.6%	0.80
Total Real Estate	142	1,939.6	11,296.6	9,605.5	5,263.1	14,868.6	3,572.0	0.85x	1.32x	7.6%	0.98

- 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, 2021



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

		1		1		-	_	1				
			Cumulative	Cumulative	Market	Total	Total			Since	Since	
	Number of	Commitments	Contributions	Distributions	Value	Value	Gain / (Loss)	Distributed to	Total Value to	Inception	Inception	Quartile
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME	Ranking
1990	1	0.0	249.9	291.2	119.9	411.1	161.2	1.17x	1.65x	6.3%	4.46	N/A
1991	3	0.0	32.4	119.3	78.0	197.3	165.0	3.68x	6.09x	12.3%	13.13	N/A
1992	0	0.0										N/A
1993	0	0.0										N/A
1994	1	0.0	15.2	65.4	34.1	99.5	84.4	4.31x	6.56x	12.9%	1.39	N/A
1995	1	0.0	38.8	107.6	72.3	179.9	141.0	2.77x	4.63x	11.7%	1.22	N/A
1996	1	0.0	23.9	37.7	37.4	75.1	51.3	1.58x	3.15x	8.2%	0.81	N/A
1997	1	0.0	18.2	65.9	48.9	114.8	96.6	3.63x	6.32x	15.6%	1.86	N/A
1998	2	0.0	367.3	556.1	54.5	610.6	243.4	1.51x	1.66x	8.1%	0.77	N/A
1999	1	0.0	80.9	203.8	0.0	203.8	122.9	2.52x	2.52x	9.6%	0.90	N/A
2000	1	0.0	203.2	275.7	(0.0)	275.7	72.5	1.36x	1.36x	7.9%	0.78	N/A
2001	1	0.0	142.6	74.3	75.3	149.6	7.0	0.52x	1.05x	2.0%	0.61	N/A
2002	0	0.0										N/A
2003	1	0.0	142.5	129.9	73.1	203.0	60.5	0.91x	1.42x	4.7%	0.70	N/A
2004	0	0.0										N/A
2005	1	0.0	116.3	119.6	(0.0)	119.6	3.3	1.03x	1.03x	0.5%	0.64	N/A
2006	0	0.0										N/A
2007	3	40.3	454.1	338.1	71.0	409.2	(44.9)	0.74x	0.90x	-4.6%	0.56	3rd
2008	1	150.0	150.0	93.1	4.7	97.8	(52.1)	0.62x	0.65x	-5.5%	0.35	4th
2009	1	20.0	22.2	28.2	0.6	28.8	6.6	1.27x	1.30x	8.3%	0.84	3rd
2010	1	100.0	97.1	131.7	20.8	152.5	55.4	1.36x	1.57x	9.3%	0.89	3rd
2011	4	18.5	197.8	114.9	27.1	142.1	(55.8)	0.58x	0.72x	-29.2%	0.30	4th
2012	5	134.0	733.7	541.5	138.4	680.0	(53.8)	0.74x	0.93x	-2.1%	0.66	4th
2013	8	100.0	523.7	572.0	177.2	749.3	225.6	1.09x	1.43x	8.8%	0.99	3rd
2014	19	273.8	1,074.8	862.1	650.9	1,513.0	438.2	0.80x	1.41x	8.0%	1.04	3rd
2015	13	0.0	1,394.2	1,191.2	581.4	1,772.6	378.3	0.85x	1.27x	10.9%	1.16	N/A
2016	10	150.0	548.8	335.7	434.6	770.3	221.6	0.61x	1.40x	12.9%	1.15	2nd
2017	15	182.9	1,410.6	673.7	938.1	1,611.8	201.2	0.48x	1.14x	6.3%	0.97	3rd
2018	12	150.0	398.4	146.7	325.1	471.8	73.4	0.37x	1.18x	9.2%	1.02	3rd
2019	30	432.9	2,759.5	2,514.6	1,228.4	3,742.9	983.4	0.91x	1.36x	9.0%	0.98	2nd
2020	3	0.0	77.3	15.3	57.3	72.6	(4.7)	0.20x	0.94x	-4.1%	0.91	N/A
2021	2	186.9	23.2	0.0	13.8	13.8	(9.4)	0.00x	0.59x	-71.3%	0.58	N/A
Total Real	142	1,939.6	11,296.6	9,605.5	5,263.1	14,868.6	3,572.0	0.85x	1.32x	7.6%	0.98	
Estate	142	1,333.0	11,290.0	9,005.5	3,203.1	14,000.0	3,312.0	0.038	1.34	1.070	0.36	

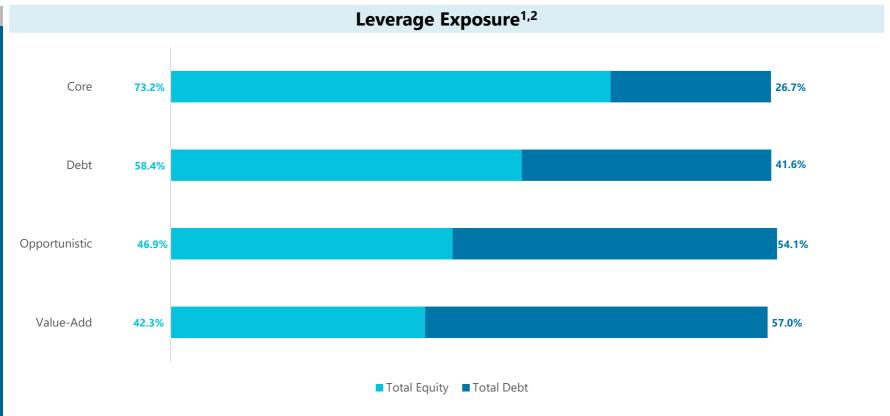
- Based on best available cash flow adjusted market values.
- Commitment amounts reflect only commingled fund investments.
- 3. Fund benchmark data provided by Burgiss Private IQ as of the reporting date. Quartile rankings exclude IMAs.

Leverage Exposure

Real Estate

for the quarter ended September 30, 2021





			Cumulative	Cumulative	Market	Total	Total			Since	Since	Total Debt-	Total Equity-	Total Debt-	Total Equity-
	Number of	Commitments	Contributions	Distributions	Value	Value	Gain / (Loss)	Distributed to	Total Value to	Inception	Inception	Fund Level	Fund Level	Fund Level	Fund Level
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME	(mm)	(mm)	(%)	(%)
Core	94	440.9	8,907.9	8,058.1	4,158.7	12,216.8	3,308.9	0.90x	1.37x	8.1%	1.01	6,745.0	18,486.9	26.7%	73.2%
Debt	12	0.0	580.9	460.5	158.0	618.5	37.5	0.79x	1.06x	8.0%	1.07	109.3	153.6	41.6%	58.4%
Opportunistic	23	1,015.4	1,261.4	1,023.9	624.0	1,648.0	386.5	0.81x	1.31x	7.0%	0.93	5,532.3	4,801.7	54.1%	46.9%
Value-Add	13	483.3	546.3	63.0	322.4	385.4	(161.0)	0.12x	0.71x	-10.2%	0.46	75,541.1	56,077.5	57.0%	42.3%
Total Real Estate	142	1,939.6	11,296.6	9,605.5	5,263.1	14,868.6	3,572.0	0.85x	1.32x	7.6%	0.98	87,927.7	79,519.8	52.3%	47.3%

- 1. Based on best available cash flow adjusted market values and includes only active investments.
- 2. Commitment amounts reflect only commingled fund investments.

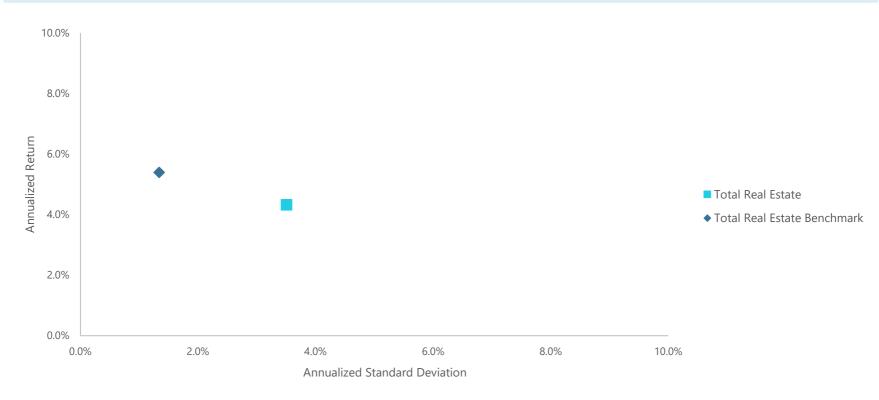
Risk vs. Return

Real Estate

for the quarter ended September 30, 2021



3 Year (Annualized)¹



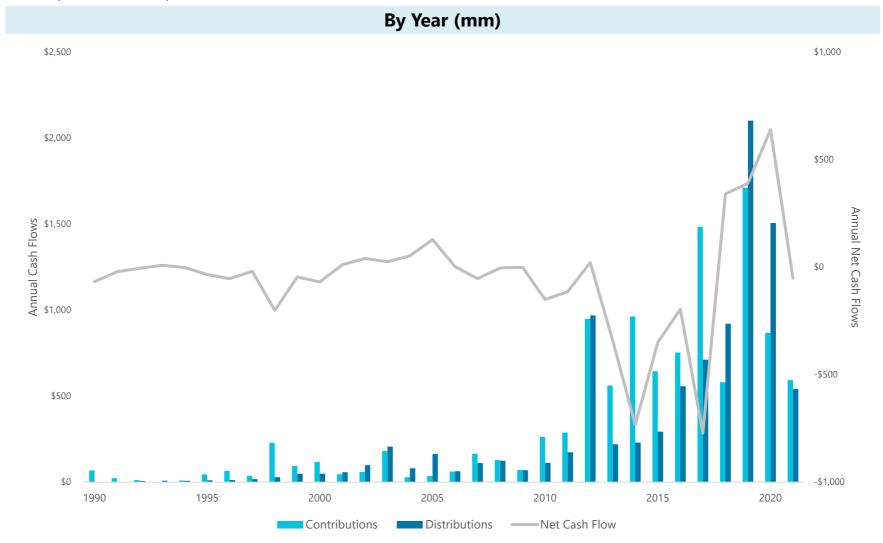
	Annualized	Standard	Sharpe	Information		Tracking
	Return	Deviation	Ratio	Ratio	Beta	Error
Total Real Estate	4.3%	3.5%				
Total Real Estate Benchmark	5.4%	1.3%	(0.08)	(0.09)	1.17	3.1%

Annual Cash Flow Activity

Real Estate

for the quarter ended September 30, 2021





Summary

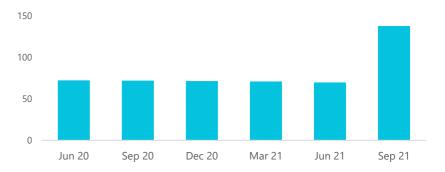
Private Real Assets ex. Real Estate for the guarter ended September 30, 2021



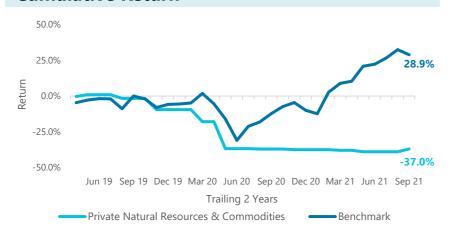
Performance (net) 60.0% 40.0% 20.0% 0.0% -20.0% QTD YTD 1 Year 3 Year 5 Year 10 Year ITD ■ Private Natural Resources & Commodities Benchmark 3 Year 10 Year ITD OTD YTD 1 Year 5 Year **Private Natural Resources & Commodities** 3.2% 0.8% 0.0% -16.8% Benchmark 5.4% 43.2% 47.0% 16.8% Excess -2.3% -42.3% -46.9% -33.6%

Asset Growth (mm)

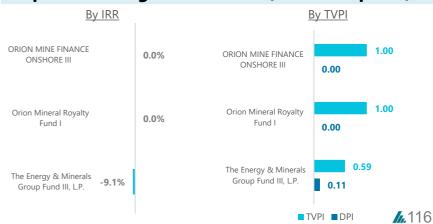
	QTD	1 Year	3 Year
Beginning Market Value	70	72	114
Net Cash Flow	66	66	66
Gain/Loss	2	0.0	-42
Ending Market Value	138	138	138



Cumulative Return



Top Performing Investments (since inception)



Summary

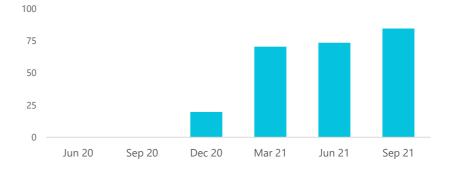
Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



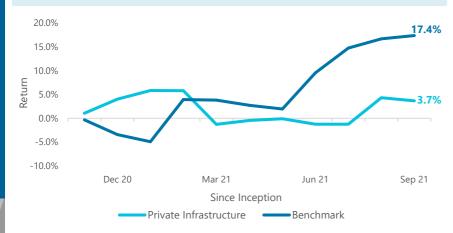
Performance (net) 25.0% 20.0% 15.0% 10.0% 5.0% 0.0% -5.0% QTD YTD 1 Year 3 Year 5 Year 10 Year ITD ■ Private Infrastructure Benchmark OTD YTD 1 Year 3 Year 5 Year 10 Year ITD **Private Infrastructure** 5.0% -0.3% 4.0% Benchmark 7.1% 21.5% 19.1% -2.2% -21.9% -15.1% Excess

Asset Growth (mm)			
	QTD	1 Year	3 Year
Beginning Market Value	74	0	0
Net Cash Flow	7	85	85
Gain/Loss	4	0	0
Ending Market Value	85	85	85

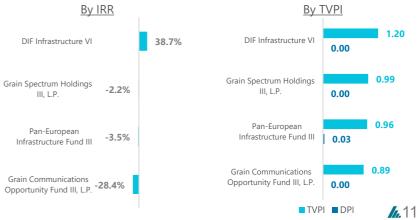
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Cumulative Return



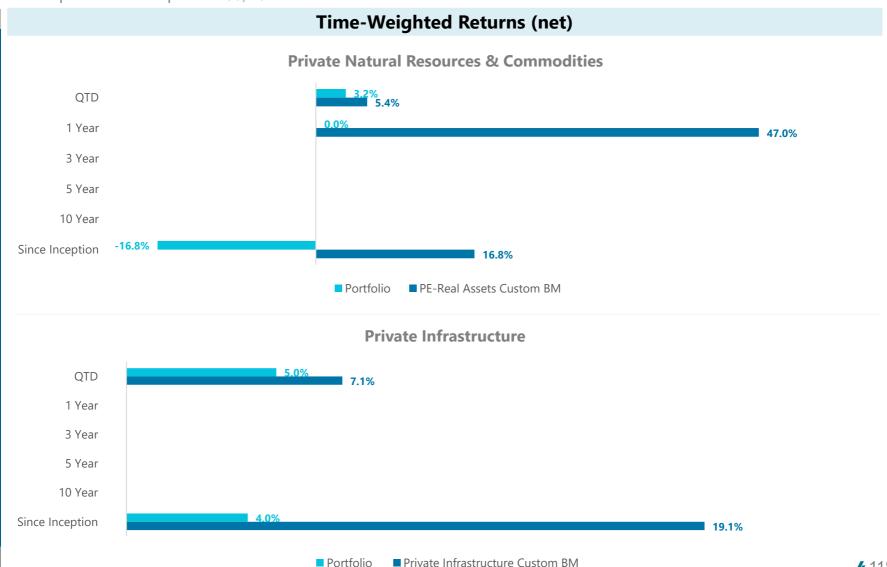
Top Performing Investments (since inception)



Historical Returns

Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



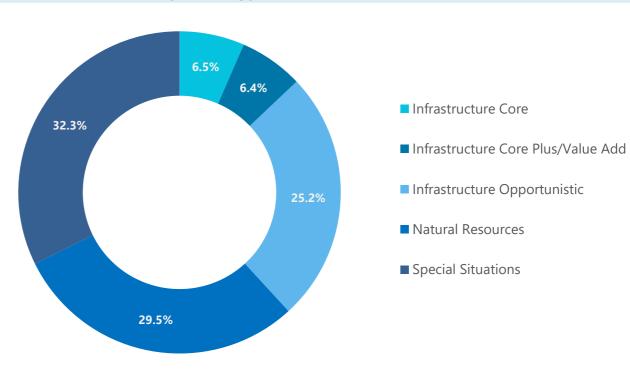


Performance by Strategy

Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



By Strategy¹



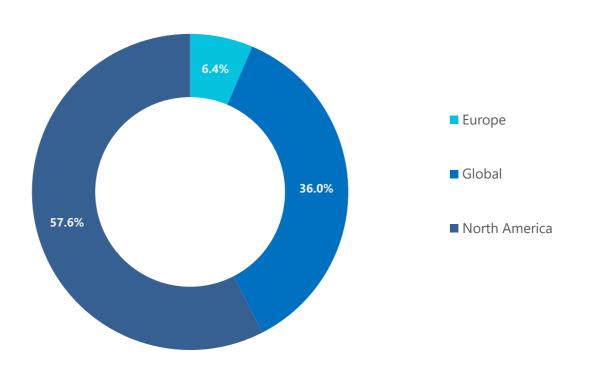
			Cumulative	Cumulative			Total			Since	Since
	Number of	Commitments	Contributions	Distributions	Market Value	Total Value	Gain / Loss	Distributed to	Total Value to	Inception	Inception
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME
Infrastructure Core	1	173.8	12.1	0.0	14.5	14.5	2.4	0.00x	1.20x	38.7%	1.15
Infrastructure Core Plus/Value Add	1	115.9	15.3	0.5	14.3	14.8	(0.6)	0.03x	0.96x	-3.6%	0.77
Infrastructure Opportunistic	3	265.5	57.8	0.0	56.2	56.2	(1.6)	0.00x	0.97x	-4.7%	0.95
Natural Resources	2	250.0	65.6	0.0	65.6	65.6	0.0	0.00x	1.00x	0.0%	1.00
Special Situations	2	200.0	200.9	108.1	71.9	180.0	(20.9)	0.54x	0.90x	-4.5%	0.74
Total Private Real Assets ex. Real Estate	9	1,005.3	351.7	108.5	222.5	331.0	(20.7)	0.31x	0.94x	-3.9%	0.82

Performance by Geography

Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



By Geography¹



			Cumulative	Cumulative			Total			Since	Since
	Number of	Commitments	Contributions	Distributions	Market Value	Total Value	Gain / Loss	Distributed to	Total Value to	Inception	Inception
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME
Europe	1	115.9	15.3	0.5	14.3	14.8	(0.6)	0.03x	0.96x	-3.6%	0.77
Global	4	561.9	77.7	0.0	80.1	80.1	2.4	0.00x	1.03x	38.1%	1.02
North America	4	327.5	258.7	108.1	128.1	236.1	(22.5)	0.42x	0.91x	-4.5%	0.78
Total Private Real Assets ex. Real Estate	9	1,005.3	351.7	108.5	222.5	331.0	(20.7)	0.31x	0.94x	-3.9%	0.82

Performance by Vintage Year

Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



By Vintage Year¹

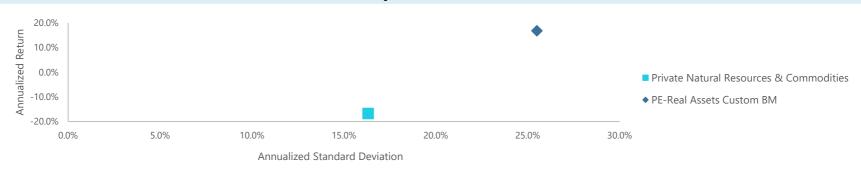
	Number of	Commitments	Cumulative Contributions	Cumulative Distributions	Market Value	Total Value	Total Gain / Loss	Distributed to	Total Value to	Since Inception	Since Inception
	Investments	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Paid-In	Paid-In	Net IRR	PME
2004	1	50.0	50.0	91.4	0.0	91.4	41.4	1.83x	1.83x	31.1%	1.40
2014	1	150.0	150.9	16.7	71.9	88.6	(62.3)	0.11x	0.59x	-9.1%	0.44
2020	3	349.7	74.1	0.5	74.8	75.2	1.2	0.01x	1.02x	2.2%	0.92
2021	4	455.5	76.7	0.0	75.8	75.8	(0.9)	0.00x	0.99x	-20.2%	0.99
Total Private Real Assets ex. Real Estate	9	1,005.3	351.7	108.5	222.5	331.0	(20.7)	0.31x	0.94x	-3.9%	0.82

Risk vs. Return

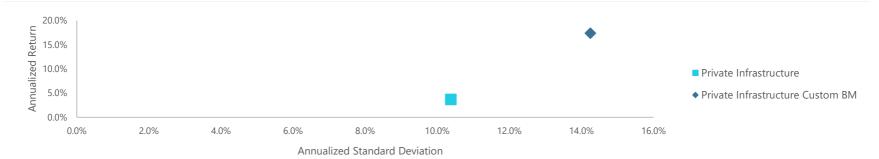
Private Real Assets ex. Real Estate for the quarter ended September 30, 2021



Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Natural Resources & Commodities	-16.8%	16.3%				
PE-Real Assets Custom BM	16.8%	25.5%	(0.63)	(0.40)	0.19	25.9%

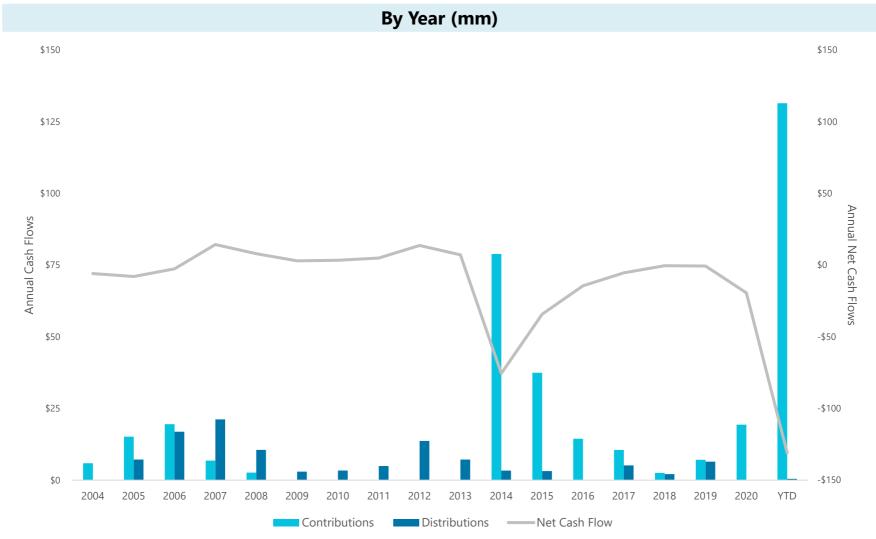


	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Infrastructure	3.7%	10.4%				
Private Infrastructure Custom BM	17.4%	14.2%	(0.38)	(0.22)	(0.12)	18.4%

Annual Cash Flow Activity

Private Real Assets ex. Real Estate for the quarter ended September 30, 2021





Summary

Diversified Hedge Funds for the quarter ended September 30, 2021



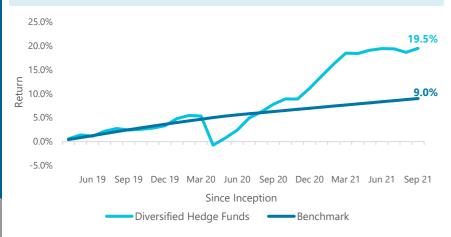
Performance (net all)¹



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	0.0%	7.5%	10.8%				7.4%
Benchmark	0.6%	1.9%	2.6%				3.5%
Excess	-0.6%	5.6%	8.3%				3.9%

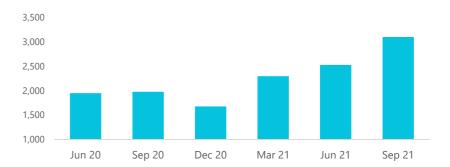
^{1.} Diversified Hedge Funds returns are net of all fees and expenses.

Cumulative Return

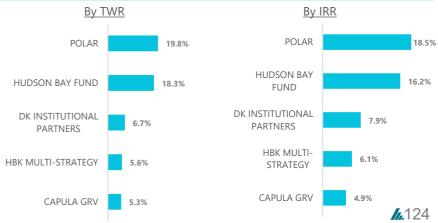


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	2,526	1,978	
Net Cash Flow	567	924	
Gain/Loss	5	196	
Ending Market Value	3,098	3,098	



Top Performing Investments (since inception)

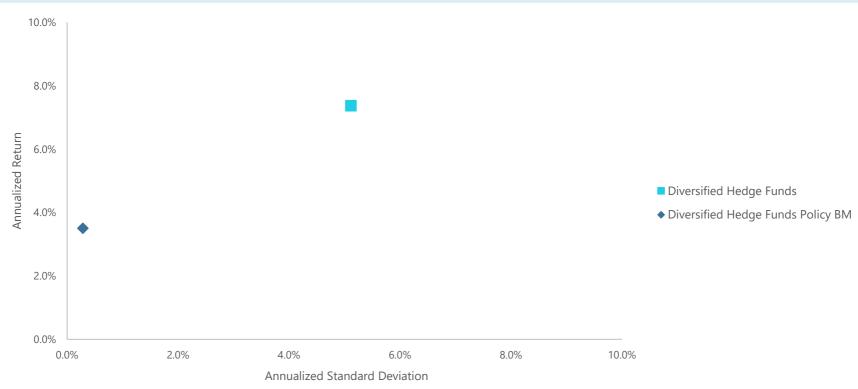


Risk vs. Return

Diversified Hedge Funds for the quarter ended September 30, 2021



Since Inception (Annualized)¹



	Annualized	Standard	Sharpe	Information		Tracking
	Return	Deviation	Ratio	Ratio	Beta	Error
Diversified Hedge Funds	7.4%	5.1%				
Diversified Hedge Funds Policy BM	3.5%	0.3%	0.22	0.21	(4.87)	5.2%

Performance Detail

Diversified Hedge Funds for the quarter ended September 30, 2021



Annualized Net All Returns¹

		Ending	Prior Quarter							
	% of Composite	Market Value	Ending MV	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	100.0%	3,098	2,526	0.0%	7.5%	10.8%	5 real	J feat		7.4%
Diversified Hedge Funds Policy BM	100.0%	3,098	2,320	0.6%	1.9%	2.6%				3.5%
ğ ,	02.60/	2.050	2.240				6.604			
LACERA HF DIRECT	92.6%	2,869	2,340	0.0%	7.1%	10.2%	6.6%			4.8%
Custom Hedge Fund BM				0.6%	1.9%	2.6%	4.1%			4.5%
AM ASIA STRATEGIES FUND	4.0%	123	100	-1.9%						-1.9%
BREVAN HOWARD MASTER FUND	12.8%	397	251	-1.8%						-1.5%
CAPULA GRV	17.0%	525	376	-0.3%	1.5%	1.9%				5.3%
CAXTON GLOBAL INVESTMENTS	6.4%	199	206	-3.4%						-0.3%
DK INSTITUTIONAL PARTNER	11.0%	342	242	-0.1%	8.5%	12.8%	7.2%			6.7%
HBK MULTI-STRATEGY	11.1%	344	340	1.3%	7.0%	10.4%	6.4%			5.6%
HUDSON BAY	15.3%	474	464	2.1%	16.0%	19.7%				18.3%
POLAR	15.0%	464	461	0.6%	9.0%	14.4%				19.8%
HF EMERGING MANAGERS PROGRAM	5.0%	155	0							0.0%
Custom Hedge Fund BM										0.2%
STABLE ASSET MANAGEMENT	5.0%	155	0							0.0%
STABLE FUND INVESTMENTS	5.0%	155	0							0.0%
AMUNDSEN	2.1%	65	0							0.0%
LINEAR B	1.0%	30	0							-0.2%
SPARTA	1.0%	30	0							0.0%
TRUTINO	1.0%	30	0							0.1%
STABLE SOI	0.0%	0	0							
AMUNDSEN SOI	0.0%	0	0							
LINEAR B SOI	0.0%	0	0							
TRUTINO SOI	0.0%	0	0							



emerging manager program

Emerging Manager Program

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Los Angeles County Employees Retirement Association

for the quarter ended September 30, 2021

Annualized Net Returns

alized Net i	vetui iis			
Ending Market Value	OTD	1 Voor	2 Veer	5 Year
(IIIII)	QID	i rear	5 fear	5 fear
			10.9%	
164.3	0.4%	33.5%		
	-1.1%	28.9%		
100.8	20.3%	86.9%	31.0%	26.7%
90.9	15.7%	93.6%	18.4%	40.0%
116.2	19.7%	69.4%	36.5%	
107.8	3.5%	34.2%		
	7.6%	42.8%	23.2%	19.3%
73.0	2.6%	3.4%	1.5%	5.7%
1.5	-4.2%	-11.1%	-2.2%	11.4%
149.0	10.1%	15.2%	20.7%	-52.6%
20.7	0.6%	3.5%	-4.0%	5.5%
	4.4%	10.3%	7.7%	8.8%
194.8	0.4%	1.6%	-0.5%	1.9%
	3.8%	7.6%	5.1%	6.1%
	Ending Market Value (mm) 81.6 164.3 100.8 90.9 116.2 107.8 73.0 1.5 149.0 20.7	Market Value (mm) QTD 81.6	Ending Market Value (mm) QTD 1 Year 81.6 -0.5% 60.1% 164.3 0.4% 33.5% -1.1% 28.9% 100.8 20.3% 86.9% 90.9 15.7% 93.6% 116.2 19.7% 69.4% 107.8 3.5% 34.2% 7.6% 42.8% 73.0 2.6% 3.4% -11.1% 149.0 10.1% 15.2% 20.7 0.6% 3.5% 4.4% 10.3%	Ending Market Value (mm) QTD 1 Year 3 Year 81.6 (164.3) -0.5% (164.3) 60.1% (10.9%



risk reports

Summary

for the quarter ended September 30, 2021



Risk Summary

	Value
Total Risk	11.76
Benchmark Risk	11.10
Active Risk	1.13
Portfolio Beta	1.06
EffectiVe Duration	1.87

Risk Decomposition

		Portfolio			Active	
	Risk			Risk		
Risk Source	Contribution	%Risk	Correlation	Contribution	%Risk	Correlation
Total Risk	11.76	100.00	1.00	1.13	100.00	1.00
Local Market Risk	11.30	96.13	1.00	1.13	99.63	1.00
Common Factor Risk	11.28	95.92	1.00	0.92	81.58	0.90
Equity	9.30	79.13	0.97	0.53	46.34	0.65
Fixed Income	0.37	3.13	0.39	-0.01	-0.61	-0.07
Private Real Estate	1.05	8.95	0.69	0.03	2.47	0.13
Commodity	0.14	1.17	0.55	-0.01	-0.81	-0.11
Hedge Fund	0.00	0.00	0.01	0.01	0.46	0.07
Private Equity	0.41	3.53	0.19	0.38	33.73	0.58
Specific Risk	0.03	0.21	0.05	0.20	18.05	0.42
Currency Risk	0.45	3.87	0.50	0.00	0.37	0.04

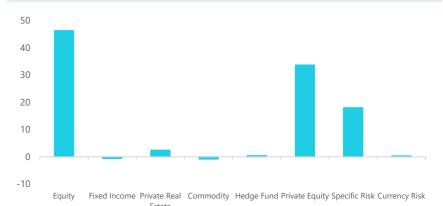
Contribution to Risk



■ %CR to TR ■ Weight%

	Mkt Value			Risk	
	(mm)	Weight%	Total Risk	Contribution	%CR to TR
Total Fund	71,968	100.0%	11.76	11.76	100.00
Growth	36,768	51.1%	18.74	9.47	80.54
Credit	7,818	10.9%	4.75	0.42	3.60
Real Assets and Inflation Hedges	12,529	17.4%	13.49	2.12	18.02
Risk Reduction and Mitigation	14,323	19.9%	2.95	0.03	0.27
Overlay	529	0.7%	-	-0.29	(2.44)

Active Risk from Risk Factors

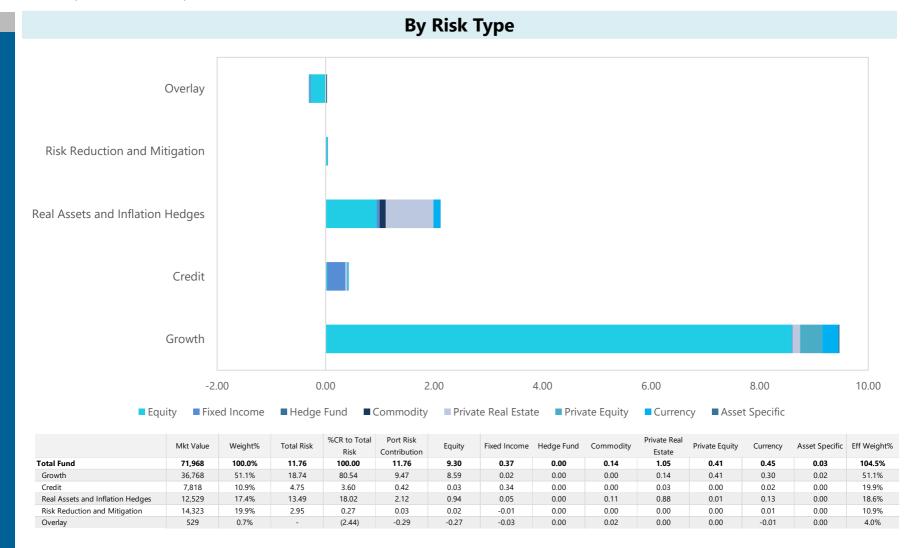


Risk Contribution Breakdown



for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

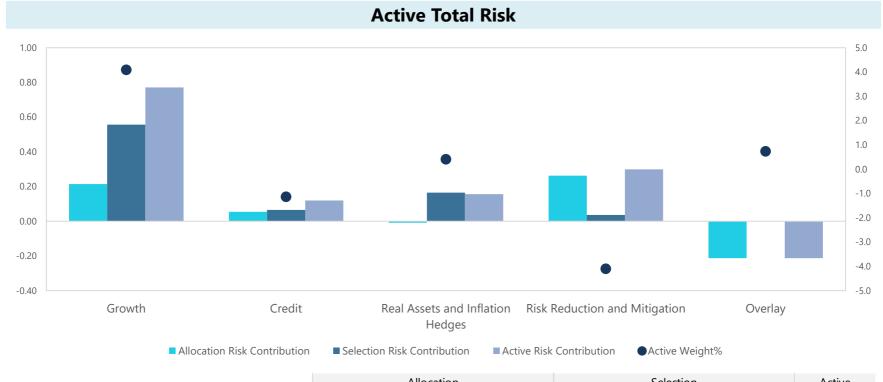


Allocation Selection

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for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association



			Allocation			Active		
	Active	Volatility	Correlation	Risk	Volatility	Correlation	Risk	Risk
	Weight%	Volatility	Correlation	Contribution	Volatility	Correlation	Contribution	Contribution
Active Total Risk	0.00			0.31			0.82	1.13
Growth	4.09	7.75	0.68	0.21	1.41	0.77	0.56	0.77
Credit	-1.14	8.36	-0.57	0.05	1.47	0.41	0.07	0.12
Real Assets and Inflation Hedges	0.41	6.07	-0.34	-0.01	2.01	0.47	0.16	0.16
Risk Reduction and Mitigation	-4.10	11.44	-0.56	0.26	0.80	0.23	0.04	0.30
Overlay	0.74	-	-0.53	-0.21	0.00	0.00	0.00	-0.21

Portfolio Allocation



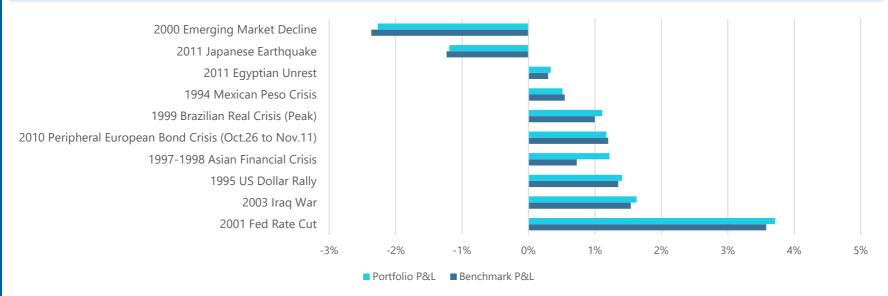
for the quarter ended September 30, 2021



		Weight%					
Region	Portfolio	Benchmark	Active	Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
Total Fund	100.00%	100.00%	0.00%	11.76	1.13	100.00	0.01
North America	74.42%	78.42%	-4.00%	11.13	1.02	89.59	0.01
Asia Pacific	8.68%	8.86%	-0.18%	15.22	0.04	3.91	0.01
Europe, Middle East, Africa	11.40%	10.71%	0.69%	20.02	0.15	13.05	0.04
Global	2.86%	0.00%	2.86%	7.16	-0.09	-8.19	-0.03
South America	0.78%	1.05%	-0.27%	25.19	0.05	4.68	0.01
Rest Of World	1.85%	0.96%	0.89%	7.91	-0.03	-3.04	-0.04



Top 10 Best Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	3.71%	3.58%	2,669,275,080
2003 Iraq War	1.63%	1.54%	1,170,413,494
1995 US Dollar Rally	1.41%	1.35%	1,012,963,113
1997-1998 Asian Financial Crisis	1.22%	0.73%	876,739,383
2010 Peripheral European Bond Crisis (Oct.26 to Nov.11)	1.17%	1.20%	842,891,608
1999 Brazilian Real Crisis (Peak)	1.11%	1.00%	798,577,989
1994 Mexican Peso Crisis	0.51%	0.55%	368,094,834
2011 Egyptian Unrest	0.33%	0.30%	240,715,228
2011 Japanese Earthquake	-1.19%	-1.23%	(857,875,718)
2000 Emerging Market Decline	-2.27%	-2.37%	(1,633,465,322)

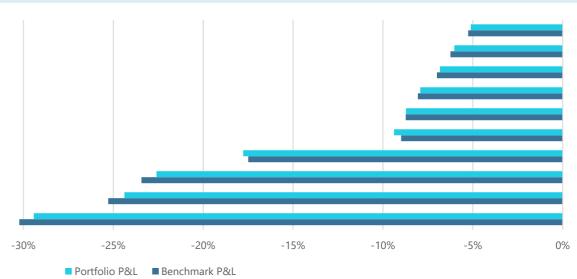
Stress Tests

for the quarter ended September 30, 2021



Top 10 Worst Stress Scenarios

2006 Emerging Market Crash
2001 Sept 11
1998 Russian Financial Crisis
2011 US Debt Ceiling Act
2007-2008 Equity Slow Grind
1987 Market Crash (Aug. to Nov.)
2000-2003 Tech Crash & Recession
2008 Lehman Bust
2008 - 2009 Global Financial Crisis
2007-2009 Subprime and Credit Crisis



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-29.42%	-30.23%	(21,174,232,903)
2008 - 2009 Global Financial Crisis	-24.38%	-25.28%	(17,547,203,011)
2008 Lehman Bust	-22.59%	-23.43%	(16,261,072,517)
2000-2003 Tech Crash & Recession	-17.78%	-17.49%	(12,792,764,530)
1987 Market Crash (Aug. to Nov.)	-9.39%	-8.99%	(6,755,369,229)
2007-2008 Equity Slow Grind	-8.72%	-8.73%	(6,273,007,128)
2011 US Debt Ceiling Act	-7.92%	-8.06%	(5,703,196,917)
1998 Russian Financial Crisis	-6.83%	-7.00%	(4,913,451,483)
2001 Sept 11	-6.03%	-6.24%	(4,342,142,502)
2006 Emerging Market Crash	-5.11%	-5.26%	(3,680,871,551)



manager scorecards

	L//.CERA			Р	erformance		rganization & Operations		ESG	Pa	artnership	Fees & Terms
	Los Angeles County Employees Retire PUBLIC MARKETS MANAGE				1 to 5 (with 5 the best)		S+, S, or S- (with S+ the best)	(wi	1 to 5 th 5 the best)	(w	A, B, or C vith A the best)	1 to 5 (with 5 the best)
	3rd Quarter 2021				sco ^{re}	_/	SCORE		ÇO ^{RÉ}		SCORE.	GORE
	Manager	Market Value (in \$ millions)	% of Total Fund		Risk-Adjusted Return	ER						
	GLOBAL EQUITY											
	ACADIAN DEVELOPED MARKETS	636.0	0.9%		5		S		3		В	3
	BTC EURO TILTS	712.9	1.0%		4		S+		4		Α	3
	CAPITAL GROUP DEVELOPED MARKETS	469.6	0.6%		5		S		2		В	3
	CEVIAN CAPITAL II - ACTIVIST	388.9	0.5%		2		S+		4		Α	1
	CORNERCAP US SC - EMP	81.6	0.1%		3		S		1		Α	3
	FRONTIER US SMID GROWTH	294.8	0.4%		2		S		2		В	1
GROWTH	GENESIS EMERGING MARKETS	667.6	0.9%		3		S+		3		Α	1
8	GLOBAL ALPHA IE SC - EMP	164.3	0.2%	*	3		S		3		Α	3
8	JANA JSI FUND V - ACTIVIST	123.6	0.2%		4		S-		2		Α	1
	JPMAM STRATEGIC BETA NON-U.S.	627.9	0.9%	*	3		S		2		В	3
	JPMAM STRATEGIC BETA U.S.	4,862.6	6.7%	*	3		S		2		В	3
	LAZARD EMERGING MARKETS	470.6	0.6%		4		S		3		В	3
	QMA US SMALL CAP CORE	197.7	0.3%		1		S-		2		Α	3
	SSGA MSCI ACWI IMI	15,769.4	21.7%	*	3		S+		_		Α	5
	SYMPHONY FINANCIAL - ACTIVIST	251.5	0.3%		4		S		2		Α	3
	SYSTEMATIC US SMALL CAP VALUE	192.0	0.3%		1		S-		2		Α	3
	HIGH YIELD											
	BEACH POINT	315.6	0.4%		5		S+		2		Α	1
	BLACKROCK HY ETF	744.2	1.0%	*	3		S+		_		A	5
	BRIGADE CAP MGMT	703.8	1.0%		4		S		1		В	3
	PINEBRIDGE INVESTMENTS	503.1	0.7%	*	3	Ŏ	S		+		В	3
	DANK LOANS											
CREDIT	BANK LOANS	417.9	0.60/		2		S		2		В	1
¥	BAIN CAPITAL CREDIT CREDIT SUISSE BANK LOANS	1,149.6	0.6% 1.6%	*	3		S		+		В	5
o .	CRESCENT CAPITAL	516.5	0.7%		3		S		2		В	1
	TENNENBAUM CAPITAL	591.2	0.7%		5		S+		2		В	1
		331.2	0.070				J .		-		J	-
	EMERGING MARKET DEBT											
	ABERDEEN ASSET MANAGEMENT	450.9	0.6%		2		S		4		В	3
	ASHMORE INVESTMENT MANAGEMENT	426.4	0.6%		1		S		4		В	3
	NATURAL RECOURSES & COMMANDITIES							1				
- 10	NATURAL RESOURCES & COMMODITIES CREDIT SUISSE COMMODITY	534.8	0.7%		3		S		1		В	3
& GES	DWS NATURAL RESOURCES	1,316.8	1.8%	*	3		S		2		В A	3 5
- 58 ED0	NEUBERGER BERMAN/GRESHAM	514.1	0.7%		3		S		1		В	1
REAL ASSETS & INFLATION HEDGES	PIMCO COMMODITY PLUS	528.1	0.7%		4		S-		1		В	1
AS		320.1	0.770		4		,		-		-	-
₹ ¥	INFRASTRUCTURE											
품근	DWS INFRASTRUCTURE	2,213.1	3.0%	*	3		S		2		Α	5
	TIPS											
	BLACKROCK TIPS	2,060.9	2.8%	*	3		S+		1		Α	5
						_						



PUBLIC MARKETS	MANAGER SCORECARD
3rd Quarter 2021	

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)
scoke.		SCORE	sco ^{rt}	sco rt	scont
Risk-Adjusted Return	ER				
4		S+	_	A	5
2 5	ŏ	s s	4	A B	5

Exceeds 3-Year Net Excess Return
Meets 3-Year Net Excess Return
Below 3-Year Net Excess Return

Footnotes

CASH SSGA CASH

Manager

INVESTMENT GRADE BONDS

PUGH CAPITAL MGMT

WELLS CAPITAL

BTC US DEBT INDEX FUND

RISK REDUCTION & MITIGATION

• 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

Market Value

7,397.8

1,182.1

2,303.0

647.8

(in \$ millions) Total Fund

10.2%

1.6%

3.2%

0.9%

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

	L//.CERA			P	erformance	0	rganization & Operations	ESG	Partnership	Fees & Terms
	Los Angeles County Employees R PRIVATE MARKETS MAN			_(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)
	3rd Quarter 2021				şci ^{qk}		SCORE.	SCORE.	sco ^{rt}	SCORE.
	Manager	Market Value (in \$ millions)	% of Total Fund							
	GLOBAL/LARGE BUYOUT									
	Advent International Group	73.8	0.1%		*		S+	3	С	4
	Blackstone Management	297.5	0.4%		1		S-	4	С	5
	CVC Capital Partners	398.6	0.5%		5		S+	4	Α	4
	Green Equity Investors	314.3	0.4%		1		S+	3	В	4
	Hellman & Friedman	376.6	0.5%		2		S+	3	В	4
	MBK	384.1	0.5%		4		S	4	Α	2
	Silver Lake Partners	546.7	0.8%		5		S+	3	В	5
	Thoma Bravo LLC	56.2	0.1%		*		S+	3	В	3
	Vista Equity Partners	815.4	1.1%		3		S-	3	Α	2
	MID-MARKET BUYOUT									
	Accel-KKR Capital Partners	60.3	0.1%		*		S	3	Α	2
	BlackFin Capital Partners	10.8	0.0%		*		S	3	В	2
	Carlyle Group	445.1	0.6%		3		S+	4	Α	4
	Clearlake Capital	397.5	0.5%		5		S+	4	Α	4
	GHO	0.0	0.0%		*		S	3	В	2
	Gilde Partners	115.9	0.2%		4		S-	2	С	5
>	Harvest Partners	137.1	0.2%		2		S	1	С	2
	Marlin Equity	29.6	0.0%		2		S-	2	С	3
PRIVATE EQUITY	Onex Partners	243.5	0.3%		4		S	4	Α	5
<u> </u>	PAI	101.7	0.1%		*		S-	2	В	4
쁜	Riverside Capital	96.8	0.1%		1		S+	4	Α	3
₹	Siris Capital Group	114.0	0.2%		2		S+	2	Α	4
_ ≥	Sterling Partners	96.9	0.1%		5		S	3	Α	4
2	STG	0.0	0.0%		*		S	3	Α	3
	Triton	96.5	0.1%		*		S-	3	C	5
	Veritas	0.0	0.0%		*		S+	3	В	3
	Vinci Partners	29.1	0.0%		*		S	4	В	5
	Webster Wynnchurch Capital	0.0 19.5	0.0% 0.0%		*		S S+	3 3	B B	2 3
	wymenaren eapitai	15.5	0.070				J .	J	J	J
	SMALL BUYOUT					1				
	AE Industrial Partners	82.6	0.1%		*		S+	3	Α	3
	Atlantic Street Capital	32.0	0.0%		*		S	3	Α	3
	Clarion	15.1	0.0%		*		S	2	С	4
	Excellere Partners	98.0	0.1%		4		S-	3	Α	3
	Incline Equity Partners	32.4	0.0%		3		S	2	С	4
	Insignia Capital Partners	155.7	0.2%		5		S	1	В	5
	Juggernaut Capital Partners	261.4	0.4%		3		S	3	Α	4
	Lightyear Capital	231.6	0.3%		5		S	2	Α	5
	Livingbridge	57.4	0.1%		1		S+	4	Α	3
	Monteflore Investment	3.2	0.0%		*		S	4	В	4
	One Rock Capital Partners	119.6	0.2%		2		S	3	Α	4
	Palladium Equity Partners	94.1	0.1%		1		S-	4	С	2



Performance	Organization & Operations	ESG	Partnership	Fees & Terms
1 to 5	S+, S, or S-	1 to 5	A, B, or C	1 to 5
(with 5 the best)	(with S+ the best)	(with 5 the best)	(with A the best)	(with 5 the best)

	Los Angeles County Employees Ref PRIVATE MARKETS MANA			(1 to 5 with 5 the best)	S+, S, or S- (with S+ the b		1 to 5 h 5 the best)	(w	A, B, or C ith A the best)	(1 to 5 (with 5 the best)
	3rd Quarter 2021				sco ^{rt}	کې	JRE .	SCORE		SCORRE		SCORFE.
	Manager	Market Value (in \$ millions)	% of Total Fund									
	GROWTH											
	Australis Partners	122.0	0.2%		1	S		4		Α		5
	JMI Equity	2.9	0.0%		2	S		3		С		2
	RedBird Capital Partners	152.3	0.2%		*	S		4		Α		4
	Summit Partners	78.2	0.1%		4	S	+	3		Α		4
	TA Associates	67.7	0.1%		*	S	+	4		В		4
	Technology Crossover Ventures	28.4	0.0%		5	S		2		В		3
	VENTURE CAPITAL											
	BlueRun Ventures	86.4	0.1%		4	S		2		Α		2
≥	Canaan Partners	108.8	0.1%		3	S	+	3		Α		4
5	GGV Capital	632.6	0.9%		2	S		3		Α		3
ਰ ਵ	Institutional Venture Partners	258.7	0.4%		3	S		1		С		5
ATE EQ (continued)	Joy Capital	73.4	0.1%		*	S		2		Α		4
H is	Lilly Asia Ventures	197.2	0.3%		5	S		4		В		2
PRIVATE EQUITY (continued)	Sinovation Ventures	75.2	0.1%		1	S		2		В		2
	Storm Ventures LLC	128.7	0.2%		1	S		3		Α		4
<u>R</u>	Union Square	161.9	0.2%		5	S	+	1		В		5
-	SPECIAL SITUATIONS											
	Alchemy Partners	18.4	0.0%		*	S		3		В		4
	Black Diamond	102.0	0.1%		1	S		3		С		4
	Centerbridge	98.9	0.1%		5	S		4		Α		2
	FUND OF FUNDS											
	Gateway	976.5	1.3%		5	S		3		В		4
	MS GTB Capital Partners	277.9	0.4%		1	S		4		Α		2
	J.P. Morgan	452.9	0.6%		3	S	+	+		В		4

L//.CER/			Performance	rganization & Operations	ESG	Partnership	Fees & Terms
Los Angeles County Employe PRIVATE MARKETS N		RD	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)
3rd Quarter 2021			SCORE	SCORE	SCORE	SCORE	SCORE
Manager		% of al Fund					
COMMINGLED FUNDS							
AERMONT Real Estate Fund IV	16.9	0.0%	*	S	4	В	3
AEW Value Investors Asia III	53.1	0.1%	3	S	4	Α	4
AG Asia Realty Fund IV	48.3	0.1%	*	S	3	В	3
AG Europe Realty Fund II	61.3	0.1%	4	S	3	В	3
Bain Capital Real Estate Fund I		0.1%	*	S	3	Α	3
Bain Capital Real Estate Fund II	0.0	0.0%	*	S	3	Α	3
CapMan Nordic Real Estate Fund	II 53.0 (0.1%	3	S	3	Α	3
CapMan Nordic Real Estate Fund	III 14.4 (0.0%	*	S	3	Α	3
Capri Urban Investors	29.0	0.0%	3	S-	1	С	3
CityView Bay Area Fund II	79.2	0.1%	1	S	2	Α	3
CityView Southern California Fun	dII 1.5 (0.0%	2	S	2	Α	3
CityView Western Fund I, L.P.	148.0	0.2%	4	S	2	Α	3
Core Property Index Fund	104.3	0.1%	*	S	2	В	5
Europa Fund IV	13.1	0.0%	1	S	3	А	2
Heitman Asia-Pacific Property In	estors 44.1 (0.1%	2	S	4	В	4
Invesco Real Estate Asia Fund	163.1	0.2%	5	S	4	А	5
Prologis European Logistics Fund	(PELF) 201.3 (0.3%	5	S	4	Α	1
RREEF Core Plus Industrial Fund (0.3%	5	S	3	Α	5
Starwood Capital Hospitality Fun	20.8	0.0%	1	S	2	Α	3
TPG Real Estate Partners III		0.1%	*	S	3	А	3
SEPARATE ACCOUNTS							
Cityview Core I.M.A.	174.1	0.2%	1	S	2	A	1
Clarion I.M.A.	340.0	0.5%	5	S	4	Α	4
Clarion Takeover Core IMA	409.1	0.6%	*	S	4	Α	4
Clarion Takeover Value IMA	57.3	0.1%	*	S	4	Α	3
Clarion Takeover Value IMA Vint	ige 2012 1.1	0.0%	*	S	4	Α	4
Heitman I.M.A.	494.0	0.7%	5	S	3	Α	4
RREEF Core/High Return I.M.A. II	806.3	1.1%	2	S	3	Α	5
RREEF Takeover I.M.A.		1.0%	*	S	3	Α	4
Stockbridge I.M.A.	629.5	0.9%	5	S	3	A	4

	L//.CERA			Pe	erformance		anization & perations		ESG		Partnership		Fees & Terms
		Los Angeles County Employees Retirement Association PRIVATE MARKETS MANAGER SCORECARD		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)	
	3rd Quarter 2021				sco re		s cort		s cORE		SCORE		s cort
	Manager	Market Value (in \$ millions)	% of Total Fund										
	HEDGE FUNDS												
	AM Asia	123.0	0.2%		4		S		2		Α		5
	Brevan Howard	397.3	0.5%		4		S+		2		В		2
	Capula GRV	525.4	0.7%		5		S		1		В		4
	Caxton	199.3	0.3%		5		S		3		В		3
<u> </u>	DK Institutional Partners	341.9	0.5%		3		S		1		В		3
유	HBK Multistrategy	344.5	0.5%		3		S		1		В		4
~	Hudson Bay	473.7	0.7%		5		S		1		В		3
ILLIQUID CREDIT	Polar	463.6	0.6%		5		S		2		Α		5
5 1	ILLIQUID CREDIT												
g	Barings	73.8	0.1%		5		S		3		Α		5
	Beach Point	519.4	0.7%		3		S+		1		Α		3
=	Glendon	134.3	0.2%		1		S		1		В		2
	Magnetar	524.7	0.7%		*		S		2		Α		4
	Napier Park	741.3	1.0%		*		S		2		Α		4
	Oaktree	87.9	0.1%		4		S		2		В		2
	PIMCO Tac Opps	806.3	1.1%		*		S-		3		В		4
	Quadrant	83.2	0.1%		2		S+		1		Α		5

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

ees & Term

• 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, 2021



Earnings by Quarter



Top Earning Funds

	% of Total Fund Earnings	Total Earnings	Cash Earnings	Non-Cash Earnings
SSGA MSCI ACWI IMI	58.6%	1,547,093	318,098	1,228,995
BLACKROCK TIPS	7.5%	198,159	189,331	8,827
JPMAM STRATEGIC BETA U.S.	6.8%	180,967	39,521	141,445
WELLS CAPITAL	5.2%	136,529	102,958	33,571
BRIGADE CAP MGMT	3.4%	90,864	86,712	4,152

Earnings by Functional Category



Top Earning Securities



for the quarter ended September 30, 2021



Growth

	Average	Fees ¹	Annualized
	Market Value (\$ mm)	rees	Effective Rate (bps)
Active			
Acadian Asset Management	\$650.8	\$600,599	36.9
BTC Europe Alpha Tilts	\$729.9	\$643,898	35.3
Capital Guardian	\$470.3	\$407,854	34.7
Cevian Capital	\$394.4	\$1,065,230	108.0
CornerCap	\$81.7	\$107,693	52.8
Frontier Capital Management	\$299.9	\$562,340	75.0
Genesis Investment Management	\$677.8	\$1,173,566	69.3
Global Alpha	\$165.9	\$297,094	71.6
JANA Partners ²	\$120.0	\$300,000	100.0
Lazard Asset Management	\$482.4	\$761,048	63.1
QMA	\$197.5	\$266,713	54.0
Symphony Financial	\$216.1	\$405,129	75.0
Systematic	\$194.3	\$267,184	55.0
Subtotal:	\$4,681.0	\$6,858,348	58.6
Factor-Based			
JPMAM Strategic Beta Non-US	\$637.7	\$53,506	3.4
JPMAM Strategic Beta US	\$4,974.8	\$417,432	3.4
Subtotal:	\$5,612.5	\$470,939	3.4
Passive			
SSGA MSCI ACWI IMI	\$16,072.7	\$287,954	0.7
Subtotal:	\$16,072.7	\$287,954	0.7
Currency Hedge			
50% Developed Mkt. Currency Hedge	\$7,657.5	\$286,370	1.5
Subtotal:	\$7,657.5	\$286,370	1.5

^{1.} Reflects estimated investment management fees only.

^{2.} Based on committed capital of \$120 million.

for the quarter ended September 30, 2021



Credit

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
High Yield			
Beach Point Capital	\$315.1	\$354,487	45.0
Brigade Capital Management	\$698.9	\$705,273	40.4
Subtotal: ²	\$1,014.0	\$1,059,760	41.8
Bank Loans			
Bain Capital	\$417.9	\$571,896	54.7
Credit Suisse Bank Loan	\$1,144.1	\$564,830	19.7
Crescent Capital Group	\$514.3	\$595,537	46.3
Tennenbaum Capital Partners	\$588.2	\$1,194,802	81.3
Subtotal:	\$2,664.4	\$2,927,065	43.9
Emerging Market Debt			
Aberdeen Standard Investments	\$457.9	\$421,838	36.9
Ashmore Investment Management	\$426.4	\$517,159	48.5
Subtotal:	\$884.2	\$938,997	42.5
Illiquid Credit			
Beach Point Capital - Fund II	\$16.2	\$173,058	426.3
Beach Point Capital - Fund III	\$199.9	\$470,136	94.1
Subtotal: ³	\$1,429.1	\$643,194	18.0

^{1.} Reflects estimated investment management fees only.

^{2.} BlackRock High Yield ETF fees are deducted directly from the fund by the manager.

^{3.} Magnetar and Napier Park market values are included in the subtotal, but the fees are deducted directly from the fund by the manager.

for the quarter ended September 30, 2021



Real Assets & Inflation Hedges

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Natural Resources & Commodities			
Credit Suisse	\$519.8	\$334,403	25.7
DWS Natural Resources	\$1,325.1	\$614,855	18.6
Neuberger Berman/Gresham	\$493.4	\$463,750	37.6
PIMCO	\$513.1	\$475,425	37.1
Subtotal:	\$2,851.4	\$1,888,432	26.5
Infrastructure			
DWS Infrastructure	\$2,246.1	\$1,042,196	18.6
Subtotal:	\$2,246.1	\$1,042,196	18.6
Treasury Inflation-Protected Securities			
BlackRock TIPS	\$2,073.1	\$51,685	1.0
Subtotal:	\$2,073.1	\$51,685	1.0

for the quarter ended September 30, 2021



Risk Reduction & Mitigation

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Investment Grade Bonds			
Pugh Capital Management	\$1,189.8	\$351,704	11.8
Wells Capital Management	\$2,317.6	\$467,196	8.1
Subtotal: ²	\$11,087.2	\$981,296	3.5
Cash			
SSGA Cash	\$840.4	\$84,036	4.0
Parametric Cash Overlay ³	\$4,135.0	\$267,976	2.6
Subtotal:	\$4,975.4	\$352,012	2.8

Reflects estimated investment management fees only.

^{2.} Includes BTC US Debt Index.

^{3.} Cash overlay program is not part of Risk Reduction & Mitigation, but included for fee reporting purposes only.



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.

BASIS POINTS (BPS)

One one-hundredth of one percent. One hundred basis points equal one percent.

BFTA

Yield

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market: a beta of more than one indicates higher risk than the market.

BRIGADE CUSTOM INDEX

Inception - 3/31/20 50% Bloomberg Barclays Ba to B U.S. High Yield / 50% Credit Suisse Leveraged Loan Index 4/1/20 - Present Bloomberg Barclays U.S. Corporate High

CASH POLICY BM

Inception – 3/31/19 FTSE 6-Month U.S. T-Bill Index 4/1/19 – Present FTSE 3-Month U.S. T-Bill Index

CORE & VALUE-ADDED REAL **ESTATE POLICY BM**

NFI ODCE + 50 bps (3-month lag)

CREDIT POLICY BM

(1-month lag)

25% Bloomberg Barclays Ba to B U.S. High Yield / 33% Credit Suisse Leveraged Loan Index / 17% Emerging Markets Debt Custom BM / 25% Illiquid Credit Custom BM

CUSTOM HEDGE FUND BM

Inception – 3/31/19 FTSE 3-Month U.S. T-Bill Index + 500 bps (1-month lag) 4/1/19 - Present FTSE 3-Month U.S. T-Bill Index + 250 bps

1,149



D

DIVERSIFIED HEDGE FUNDS POLICY BM

FTSE 3-Month U.S. T-Bill Index + 250 bps (1-month lag)

DURATION

A measure of the price sensitivity of a bond portfolio to changes in interest rates.

DISTRIBUTED TO PAID-IN (DPI)

A measure of distributions received relative to contributed capital.

E

EAFE CUSTOM INDEX

Inception - 6/30/06 MSCI EAFE (Net) 6/30/06 – Present MSCI EAFE + Canada (Net)

EMERGING MARKET DEBT (EMD) POLICY BM

50% JP Morgan EMBI Global Diversified / 25% JP Morgan GBI-EM GD / 25% JP Morgan CEMBI BD

F

FUTURES CONTRACT

Agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price and a stipulated future date.



G

GLOBAL EQUITY POLICY BM

4/1/2019 – 6/31/2019 80% MSCI ACWI IMI Net / 20% MSCI WORLD IMI ex U.S. (100% Currency Hedged) 7/1/2019 – Present MSCI ACWI IMI Net

GROWTH POLICY BM

Based on sub-asset market values
74% Global Equity Custom BM / 21%
Private Equity - Growth Custom BM / 4%
Opportunistic Real Estate Custom BM

H

HIGH YIELD BOND

A bond with a low investment quality and credit worthiness, usually with a rating of BB or less.

ILLIQUID CREDIT POLICY BM

Bloomberg Barclays U.S. Aggregate Index + 250 bps (1-month lag)

INFORMATION RATIO

The excess return (alpha) per unit of active risk (tracking error).

INTERNAL RATE OF RETURN (IRR)

A total rate of return that gives full weight to the size and timing of cash flows over the period measured and fully reflects unrealized gains and losses in addition to realized gains and losses, interest and dividend income.

K

KAPLAN & SCHOAR PUBLIC MARKET EQUIVALENT (KS-PME)

A ratio that benchmarks the performance of a fund against an appropriate public market index while accounting for the timing of a fund's cash flows. M

MC TO TOTAL TRACKING ERROR

This value represents the change in the active risk of an asset's portfolio or group that would result from a one percent increase in the asset's effective position plus an equal short position in the benchmark.

MSCI EM IMI CUSTOM INDEX

Inception – 12/31/00 MSCI EM (Gross) 12/31/00 – 8/31/08 MSCI EM (Net) 8/31/08 – Present MSCI EM IMI (Net) N

NATURAL RESOURCES & COMMODITIES POLICY BM

50% Bloomberg Commodity Index / 50% S&P Global Large MidCap Commodity and Resources Index

Glossary



0

OPPORTUNISTIC REAL ESTATE POLICY BM

NFI ODCE + 300 bps (3-month lag)

P

PRIVATE EQUITY – CREDIT CUSTOM BM

Bloomberg Barclays U.S. Aggregate + 250 bps (3-month lag)

PRIVATE EQUITY – GROWTH POLICY BM

MSCI ACWI IMI Net Index + 200 bps (3-month lag)

PRIVATE EQUITY – REAL ASSETS CUSTOM BM

S&P Global Large MidCap Commodity and Resources Index (3-month lag)

PRIVATE INFRASTRUCTURE CUSTOM BM

Dow Jones Brookfield Global Infrastructure Index (3-month lag)

R

REAL ASSETS & INFLATION HEDGES POLICY BM

Based on sub-asset market values
41% Core & Value-Added Real Estate
Custom BM / 24% Natural Resources &
Commodities Custom BM / 18% DJ
Brookfield Global Infrastructure /
18% Bloomberg Barclays U.S. TSY TIPS

RISK REDUCTION & MITIGATION POLICY BM

Based on sub-asset market values 79% Bloomberg Barclays Aggregate / 17% Diversified Hedge Funds Custom BM / 4% FTSE 3-month Treasury Bill



S

SHARPE RATIO

Measures the performance of an investment compared to a risk-free asset, after adjusting for its risk. It is the difference between the returns of the investment and the risk-free return, divided by the standard deviation of the investment.

STANDARD DEVIATION

Statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater the degree of dispersion, the greater the risk.

TIME-WEIGHTED RATE OF RETURN (TWR)

A measure of the compound rate of growth in a portfolio. Often used to compare the returns of investment managers because it eliminates the distorting effects on growth rates created by inflows and outflows of money.

TOTAL PRIVATE EQUITY BENCHMARK

Inception – 3/31/19
Private Equity Target (Russell 3000 rolling 10 year + 500 bps)
3/31/19 – Present
Composite weighted blend of Private Equity-Growth Custom BM, Private Equity-Credit Custom BM, and Private Equity-Real Assets Custom BM

TOTAL REAL ESTATE BENCHMARK

Inception – 3/31/19
Real Estate Target (NCREIF ODCE Net + 40 bps)
3/31/19 – Present
Composite weighted blend of
Opportunistic Real Estate Custom BM,
NPI Income Lagged, and Core & ValueAdded Real Estate Custom BM

TOTAL RISK

The total (gross) risk to an asset (or portfolio), which is the standard deviation of the asset's total return distribution, expressed in percent. Total risk is forecasted using MSCI Barra's multiple factor models. The total risk for an asset depends on the asset's exposures to the risk factors, the factor variance/covariance matrix, and the forecast selection risk of the asset.



TOTAL RISK CONTRIBUTION

The percent of total risk that an individual asset or risk source contributes. For example, a % CR to Total Risk of 10% indicates that 10% of the portfolio's total risk is arising from the portfolio's position in that particular asset.

TOTAL VALUE TO PAID-IN (TVPI)

A measure of total value created relative to capital invested.

TRACKING ERROR

The volatility of a manager's excess return. It is measured by subtracting the benchmark return from the manager's return and calculating the standard deviation.



YIELD TO MATURITY

The return a bond earns on the price at which it was purchased if it were held to maturity. It assumes that coupon payments can be reinvested at the yield to maturity.

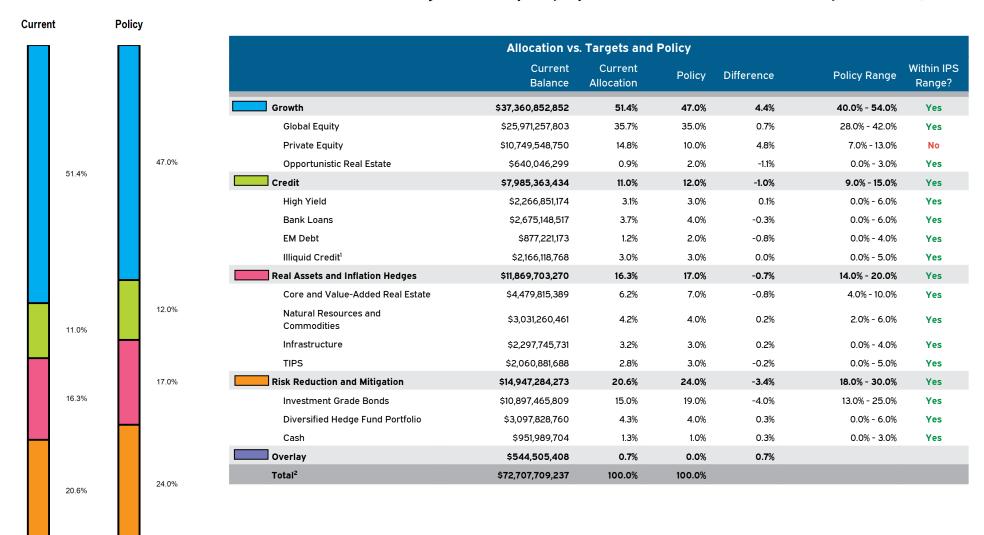


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Fund Evaluation Report



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0.7%

0.0%

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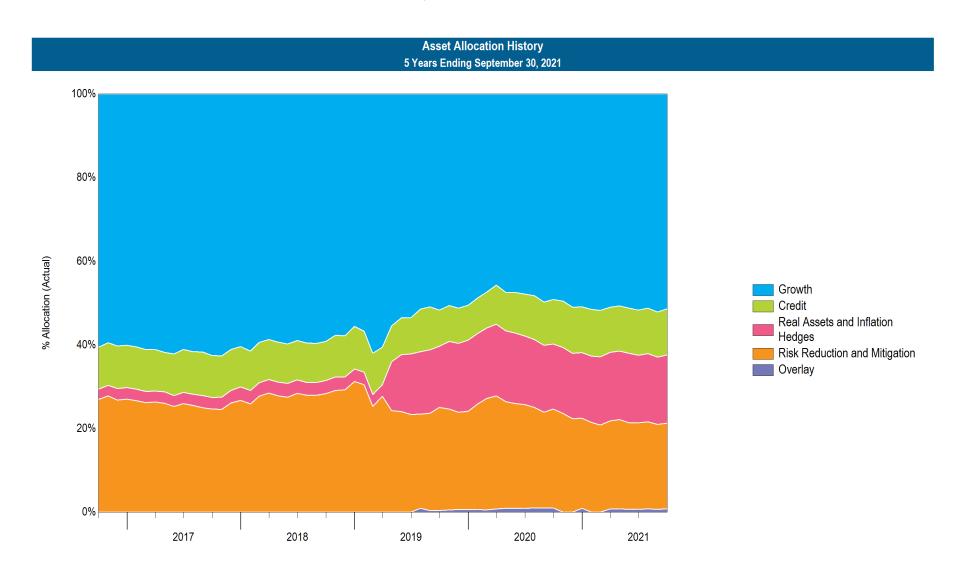
¹ Illiquid Credit contains credit hedge funds, real estate debt, private debt strategies and private equity-related debt.

² Totals may not add up due to rounding.

^{*} The Functional Framework became effective April 1, 2019.

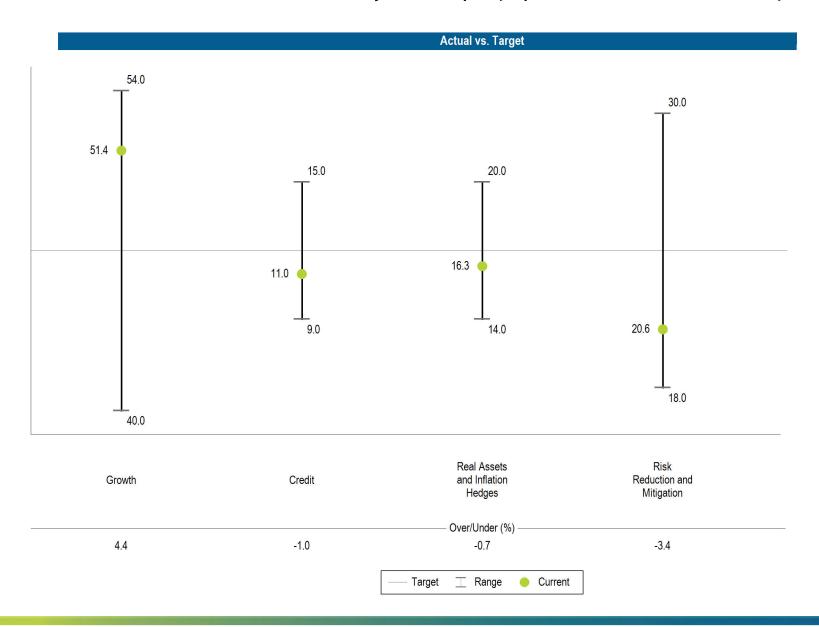


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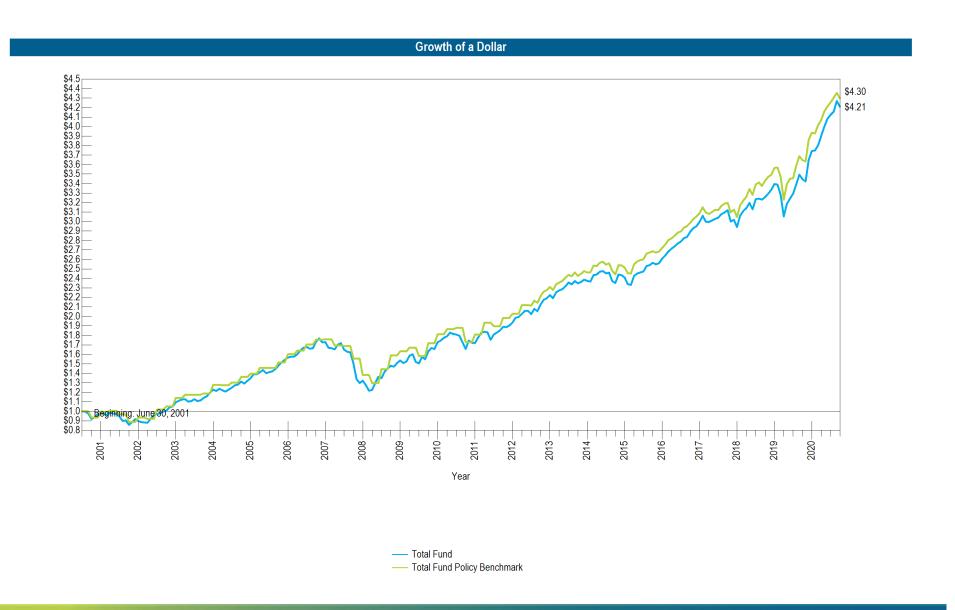


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	Asset Class Performance	e Summary	(Net)						
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD ¹ (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund (Net)	72,707,709,237	100.0	-1.4	2.1	2.1	22.2	10.5	10.4	9.8
Total Fund Policy Benchmark			<u>-1.3</u>	<u>1.0</u>	<u>1.0</u>	<u>17.9</u>	<u>10.4</u>	<u>9.8</u>	<u>9.5</u>
Excess Return			-0.1	1.1	1.1	4.3	0.1	0.6	0.3
Growth (Net)	37,360,852,852	51.4	-2.5	3.0	3.0	36.9	-		
Growth Custom Blended Benchmark			<u>-2.6</u>	<u>1.0</u>	<u>1.0</u>	<u>31.4</u>			
Excess Return			0.1	2.0	2.0	5.5			
Credit (Net)	7,985,363,434	11.0	0.0	1.2	1.2	13.9			
Credit Custom Blended Benchmark			<u>-0.1</u>	<u>1.0</u>	<u>1.0</u>	<u>6.9</u>			
Excess Return			0.1	0.2	0.2	7.0			
Real Assets and Inflation Hedges (Net)	11,869,703,270	16.3	-0.1	2.5	2.5	16.9			
Real Assets & Inflation Hedges Custom BM			<u>0.6</u>	<u>2.4</u>	<u>2.4</u>	<u>17.2</u>			
Excess Return			-0.7	0.1	0.1	-0.3			
Risk Reduction and Mitigation (Net)	14,947,284,273	20.6	-0.5	0.1	0.1	1.1			
Risk Reduction and Mitigation Custom Blended Benchmark			<u>-0.7</u>	<u>0.2</u>	<u>0.2</u>	<u>-0.3</u>			
Excess Return			0.2	-0.1	-0.1	1.4			
Overlay (Net)	544,505,408	0.7							

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¹ Fiscal Year begins July 1.

^{*} See Glossary for all custom index definitions.



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	Trailing Perfor	mance							
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund (Net)	72,707,709,237	100.0	-1.4	2.1	2.1	22.2	10.5	10.4	9.8
Total Fund (Gross)			-1.3	2.3	2.3	22.7	10.9	10.7	10.1
Total Fund Policy Benchmark			<u>-1.3</u>	<u>1.0</u>	<u>1.0</u>	<u>17.9</u>	<u>10.4</u>	<u>9.8</u>	<u>9.5</u>
Excess Return (vs. Net)			-0.1	1.1	1.1	4.3	0.1	0.6	0.3
Growth (Net) ¹	37,360,852,852	51.4	-2.5	3.0	3.0	36.9			
Growth (Gross)			-2.4	3.2	3.2	37.7	-		
Growth Custom Blended Benchmark			<u>-2.6</u>	<u>1.0</u>	<u>1.0</u>	<u>31.4</u>			
Excess Return (vs. Net)			0.1	2.0	2.0	5.5			
Global Equity (Net)	25,971,257,803	35.7	-3.7	-0.8	-0.8	29.9		-	
Global Equity (Gross)			-3.6	-0.8	-0.8	30.1	-		
Global Equity Custom BM			<u>-4.0</u>	<u>-1.1</u>	<u>-1.1</u>	<u>28.9</u>			
Excess Return (vs. Net)			0.3	0.3	0.3	1.0			
Acadian Developed Markets (Net)	635,955,860	0.9	-3.7	-1.8	-1.8	30.6	9.7	12.3	11.0
Acadian Developed Markets (Gross)			-3.7	-1.7	-1.7	31.1	10.1	12.7	11.4
EAFE Custom Benchmark			<u>-2.9</u>	<u>-0.7</u>	<u>-0.7</u>	<u> 26.5</u>	<u>7.9</u>	<u>8.9</u>	<u>7.9</u>
Excess Return (vs. Net)			-0.8	-1.1	-1.1	4.1	1.8	3.4	3.1
BTC Euro Tilts (Net)	712,945,961	1.0	-3.7	-0.6	-0.6	30.3	8.4	9.2	9.5
BTC Euro Tilts (Gross)			-3.7	-0.5	-0.5	30.8	8.9	9.7	10.0
MSCI EUROPE			<u>-4.8</u>	<u>-1.6</u>	<u>-1.6</u>	<u>27.3</u>	<u>7.8</u>	<u>8.9</u>	<u>8.2</u>
Excess Return (vs. Net)			1.1	1.0	1.0	3.0	0.6	0.3	1.3

¹ 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 (%)
BTC Passive Currency Hedge (Net)	60,181,386	0.1	0.8	1.0	1.0	0.4	0.4	0.7	1.1
BTC Passive Currency Hedge (Gross)			0.8	1.0	1.0	0.4	0.4	0.7	1.1
Capital Guardian (Net)	469,629,282	0.6	-4.6	-1.8	-1.8	21.5	14.3	14.4	11.2
Capital Guardian (Gross)			-4.5	-1.7	-1.7	22.0	14.7	14.8	11.6
EAFE Custom Benchmark			<u>-2.9</u>	<u>-0.7</u>	<u>-0.7</u>	<u> 26.5</u>	<u>7.9</u>	<u>8.9</u>	<u>7.9</u>
Excess Return (vs. Net)			-1.7	-1.1	-1.1	-5.0	6.4	5.5	3.3
Cevian Capital (Net)	388,921,308	0.5	-2.9	0.0	0.0	34.7	7.7	9.2	
Cevian Capital (Gross)			-2.8	0.2	0.2	36.2	8.9	10.6	
MSCI EUROPE			<u>-4.8</u>	<u>-1.6</u>	<u>-1.6</u>	<u>27.3</u>	<u>7.8</u>	<u>8.9</u>	
Excess Return (vs. Net)			1.9	1.6	1.6	7.4	-0.1	0.3	
CornerCap (Net)	81,602,318	0.1	-1.0	-0.5	-0.5	60.1	10.9		
CornerCap (Gross)			-0.9	-0.4	-0.4	61.0	11.5		
Russell 2000			<u>-3.0</u>	<u>-4.4</u>	<u>-4.4</u>	<u>47.7</u>	<u>10.5</u>		
Excess Return (vs. Net)			2.0	3.9	3.9	12.4	0.4		
Frontier Capital Management (Net)	294,827,716	0.4	-3.2	-2.6	-2.6	44.2	10.9	12.6	14.9
Frontier Capital Management (Gross)			-3.1	-2.4	-2.4	45.3	11.8	13.5	15.8
Russell 2500			<u>-3.2</u>	<u>-2.7</u>	<u>-2.7</u>	<u>45.0</u>	<u>12.5</u>	<u>14.3</u>	<u>15.3</u>
Excess Return (vs. Net)			0.0	0.1	0.1	-0.8	-1.6	-1.7	-0.4

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Genesis (Net)	667,614,949	0.9	-3.2	-8.0	-8.0	17.4	10.9	10.0	7.2
Genesis (Gross)			-3.2	-7.9	-7.9	18.2	11.8	10.8	7.9
MSCI EM IMI Custom Index			<u>-3.7</u>	<u>-7.4</u>	<u>-7.4</u>	<u>20.8</u>	<u>9.1</u>	<u>9.3</u>	<u>6.2</u>
Excess Return (vs. Net)			0.5	-0.6	-0.6	-3.4	1.8	0.7	1.0
Global Alpha IE EMP (Net)	164,326,059	0.2	-2.5	0.4	0.4	33.5			
Global Alpha IE EMP (Gross)			-2.4	0.6	0.6	34.4			
MSCI EAFE Small Cap			<u>-3.6</u>	<u>0.9</u>	<u>0.9</u>	<u>29.0</u>			
Excess Return (vs. Net)			1.1	-0.5	-0.5	4.5			
Jana Partners (Net)	123,629,090	0.2	5.6	3.3	3.3	36.7	16.0	20.5	
Jana Partners (Gross)			5.7	3.9	3.9	43.0	20.4	25.3	
S&P 500			<u>-4.7</u>	<u>0.6</u>	<u>0.6</u>	<u>30.0</u>	<u>16.0</u>	<u>16.9</u>	
Excess Return (vs. Net)			10.3	2.7	2.7	6.7	0.0	3.6	
JPMAM Strategic BETA NON-U.S. (Net)	627,850,261	0.9	-3.1	-2.5	-2.5	24.6			
JPMAM Strategic BETA NON-U.S. (Gross)			-3.1	-2.5	-2.5	24.5			
MSCI ACWI ex USA IMI			<u>-3.2</u>	<u>-2.6</u>	<u>-2.6</u>	<u>25.2</u>			
Excess Return (vs. Net)			0.1	0.1	0.1	-0.6			
JPMAM Strategic BETA U.S. (Net)	4,862,621,981	6.7	-4.7	0.3	0.3	30.8			
JPMAM Strategic BETA U.S. (Gross)			-4.7	0.3	0.3	30.8			
MSCI USA IMI Gross			<u>-4.5</u>	<u>0.0</u>	<u>0.0</u>	<u>32.3</u>			
Excess Return (vs. Net)			-0.2	0.3	0.3	-1.5			

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Lazard Emerging Markets (Net)	470,586,039	0.6	-4.0	-8.1	-8.1	24.1	13.0	11.1	
Lazard Emerging Markets (Gross)			-3.9	-8.0	-8.0	25.0	13.8	11.9	
MSCI Emerging Markets			<u>-4.0</u>	<u>-8.1</u>	<u>-8.1</u>	<u>18.2</u>	<u>8.6</u>	<u>9.2</u>	
Excess Return (vs. Net)			0.0	0.0	0.0	5.9	4.4	1.9	
SSGA MSCI ACWI IMI (Net)	15,769,380,283	21.7	-4.0	-1.1	-1.1	29.5			
SSGA MSCI ACWI IMI (Gross)			-4.0	-1.1	-1.1	29.5			
MSCI ACWI IMI Net (DAILY)			<u>-4.0</u>	<u>-1.1</u>	<u>-1.1</u>	<u>28.9</u>			
Excess Return (vs. Net)			0.0	0.0	0.0	0.6			
Symphony Financial Partners (Net)	251,517,047	0.3	6.9	13.1	13.1	19.2	13.5		
Symphony Financial Partners (Gross)			7.0	13.3	13.3	20.0	16.0		
MSCI Japan Small Cap			<u>1.1</u>	<u>3.4</u>	<u>3.4</u>	<u>14.5</u>	<u>4.6</u>		
Excess Return (vs. Net)			5.8	9.7	9.7	4.7	8.9		
Systematic Financial Management (Net)	191,988,299	0.3	-2.6	-2.8	-2.8	54.9	8.7		
Systematic Financial Management (Gross)			-2.5	-2.7	-2.7	55.8	9.3		
Russell 2000			<u>-3.0</u>	<u>-4.4</u>	<u>-4.4</u>	<u>47.7</u>	<u>10.5</u>		
Excess Return (vs. Net)			0.4	1.6	1.6	7.2	-1.8		
Quantitative Management Associates (Net)	197,669,220	0.3	-1.3	-1.0	-1.0	53.3	5.4		
Quantitative Management Associates (Gross)			-1.3	-0.8	-0.8	54.1	6.0		
Russell 2000			<u>-3.0</u>	<u>-4.4</u>	<u>-4.4</u>	<u>47.7</u>	<u>10.5</u>		
Excess Return (vs. Net)			1.7	3.4	3.4	5.6	-5.1		

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Private Equity - Growth (Net)	10,749,548,750	14.8	0.4	13.1	13.1	58.4			
Private Equity - Growth (Gross)			0.6	13.8	13.8	61.2			
Private Equity - Growth Custom BM			<u>1.4</u>	<u>7.7</u>	<u>7.7</u>	<u>43.7</u>			
Excess Return (vs. Net)			-1.0	5.4	5.4	14.7			
Opportunistic Real Estate (Net)	640,046,299	0.9	-0.1	7.4	7.4	17.5	11.3	11.8	9.5
Opportunistic Real Estate (Gross)			-0.1	7.4	7.4	19.8	13.0	13.6	12.1
Opportunistic Real Estate Custom BM			<u>1.5</u>	<u>4.4</u>	<u>4.4</u>	<u>10.3</u>	<u>7.7</u>	<u>8.8</u>	<u>11.8</u>
Excess Return (vs. Net)			-1.6	3.0	3.0	7.2	3.6	3.0	-2.3

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Credit (Net) ¹	7,985,363,434	11.0	0.0	1.2	1.2	13.9			
Credit (Gross)			0.1	1.3	1.3	14.5			
Credit Custom Blended Benchmark			<u>-0.1</u>	<u>1.0</u>	<u>1.0</u>	<u>6.9</u>			
Excess Return (vs. Net)			0.1	0.2	0.2	7.0			
High Yield (Net)	2,266,851,174	3.1	0.2	0.8	0.8	12.9			
High Yield (Gross)			0.2	8.0	0.8	13.1			
BBgBarc US High Yield TR			<u>0.0</u>	<u>0.9</u>	<u>0.9</u>	<u>11.3</u>			
Excess Return (vs. Net)			0.2	-0.1	-0.1	1.6			
Beach Point (Net)	315,629,671	0.4	0.2	0.5	0.5	9.7	6.7	6.5	
Beach Point (Gross)			0.2	0.6	0.6	10.2	7.3	7.1	
Beach Point Custom BM			<u>0.0</u>	<u>0.9</u>	<u>0.9</u>	<u>11.3</u>	<u>6.1</u>	<u>5.9</u>	
Excess Return (vs. Net)			0.2	-0.4	-0.4	-1.6	0.6	0.6	
BlackRock HY ETF (Net)	744,189,606	1.0	-0.2	0.5	0.5	10.1			
BlackRock HY ETF (Gross)			-0.2	0.5	0.5	10.1			
BBgBarc US High Yield TR			<u>0.0</u>	<u>0.9</u>	<u>0.9</u>	<u>11.3</u>			
Excess Return (vs. Net)			-0.2	-0.4	-0.4	-1.2			
Brigade Capital Management (Net)	703,778,148	1.0	0.7	1.2	1.2	19.8	6.3	6.6	7.2
Brigade Capital Management (Gross)			0.8	1.3	1.3	20.2	7.0	7.4	8.0
Brigade Custom Index			<u>0.0</u>	<u>0.9</u>	<u>0.9</u>	<u>11.3</u>	<u>6.7</u>	<u>6.1</u>	<u>6.4</u>
Excess Return (vs. Net)			0.7	0.3	0.3	8.5	-0.4	0.5	0.8

¹ Includes accounts that are lagged by 1-month, 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 (%)
Pinebridge Investments (Net)	503,054,038	0.7	0.0						
Pinebridge Investments (Gross)			0.0						
BBgBarc US High Yield TR			<u>0.0</u>						
Excess Return (vs. Net)			0.0						
Bank Loans (Net)	2,675,148,517	3.7	0.5	1.4	1.4	9.7			
Bank Loans (Gross)			0.6	1.5	1.5	10.1			
CS Leveraged Loan Index			<u>0.7</u>	<u>1.1</u>	<u>1.1</u>	<u>8.5</u>			
Excess Return (vs. Net)			-0.2	0.3	0.3	1.2			
Bain Capital (Net)	417,881,638	0.6	0.7	1.6	1.6	11.4	5.1	5.3	
Bain Capital (Gross)			0.7	1.7	1.7	12.1	5.8	6.1	
Bank Loans Custom Index			<u>0.7</u>	<u>1.1</u>	<u>1.1</u>	<u>8.5</u>	<u>4.9</u>	<u>5.2</u>	
Excess Return (vs. Net)			0.0	0.5	0.5	2.9	0.2	0.1	
Credit Suisse Bank Loans (Net)	1,149,630,721	1.6	0.5	1.0	1.0	7.3			
Credit Suisse Bank Loans (Gross)			0.5	1.1	1.1	7.5			
CS Leveraged Loan Index			<u>0.7</u>	<u>1.1</u>	<u>1.1</u>	<u>8.5</u>			
Excess Return (vs. Net)			-0.2	-0.1	-0.1	-1.2			
Crescent Capital Group (Net)	516,461,836	0.7	0.5	1.0	1.0	11.8	6.4	6.3	
Crescent Capital Group (Gross)			0.6	1.2	1.2	12.3	6.9	6.9	
Bank Loans Custom Index			<u>0.7</u>	<u>1.1</u>	<u>1.1</u>	<u>8.5</u>	<u>4.9</u>	<u>5.2</u>	
Excess Return (vs. Net)			-0.2	-0.1	-0.1	3.3	1.5	1.1	

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Tennenbaum Capital (Net)	591,174,322	0.8	0.5	2.1	2.1	11.3	7.4	7.9	
Tennenbaum Capital (Gross)			0.6	2.3	2.3	12.1	8.1	8.7	
CSFB Leveraged Loan Index 1 Month Lagged			<u>0.5</u>	<u>0.9</u>	<u>0.9</u>	<u>8.5</u>	<u>4.1</u>	<u>4.7</u>	
Excess Return (vs. Net)			0.0	1.2	1.2	2.8	3.3	3.2	
EM Debt (Net)	877,221,173	1.2	-2.5	-1.7	-1.7	6.8	4.2		
EM Debt (Gross)			-2.5	-1.5	-1.5	7.3	4.8		
EMD Custom			<u>-2.1</u>	<u>-1.1</u>	<u>-1.1</u>	<u>4.4</u>	<u>5.6</u>		
Excess Return (vs. Net)			-0.4	-0.6	-0.6	2.4	-1.4		
Aberdeen Asset Management (Net)	450,857,607	0.6	-2.4	-1.3	-1.3	6.0	5.4		
Aberdeen Asset Management (Gross)			-2.3	-1.3	-1.3	6.4	5.8		
EMD Custom			<u>-2.1</u>	<u>-1.1</u>	<u>-1.1</u>	<u>4.4</u>	<u>5.6</u>		
Excess Return (vs. Net)			-0.3	-0.2	-0.2	1.6	-0.2		
Ashmore Investment Management (Net)	426,363,566	0.6	-2.7	-2.0	-2.0	7.7	3.1		
Ashmore Investment Management (Gross)			-2.6	-1.8	-1.8	8.3	3.7		
EMD Custom			<u>-2.1</u>	<u>-1.1</u>	<u>-1.1</u>	<u>4.4</u>	<u>5.6</u>		
Excess Return (vs. Net)			-0.6	-0.9	-0.9	3.3	-2.5		

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Illiquid Credit (Net)	2,166,118,768	3.0	0.3	2.9	2.9	26.0			
Illiquid Credit (Gross)			0.3	3.1	3.1	27.8			
Illiquid Credit Custom BM			<u>0.0</u>	<u>2.3</u>	<u>2.3</u>	<u>2.4</u>			
Excess Return (vs. Net)			0.3	0.6	0.6	23.6			
Beach Point - Fund II (Net)	15,416,421	0.0	2.3	2.3	2.3	2.8	8.6	7.0	
Beach Point - Fund II (Gross)			2.3	2.9	2.9	21.7	13.4	11.1	
Opportunistic Custom Index 1 Month Lag			<u>0.5</u>	<u>1.6</u>	<u>1.6</u>	<u>9.3</u>	<u>5.6</u>	<u>5.7</u>	
Excess Return (vs. Net)			1.8	0.7	0.7	-6.5	3.0	1.3	
Beach Point - Fund III (Net)	188,395,171	0.3	0.4	4.1	4.1	28.4	12.0		
Beach Point - Fund III (Gross)			0.4	5.9	5.9	41.2	16.6		
Opportunistic Custom Index 1 Month Lag			<u>0.5</u>	<u>1.6</u>	<u>1.6</u>	<u>9.3</u>	<u>5.6</u>		
Excess Return (vs. Net)			-0.1	2.5	2.5	19.1	6.4		
Grosvenor OPCRD 2 HFOF (Net)	45,468,751	0.1	0.6	3.3	3.3	17.7	2.1	4.7	
Grosvenor OPCRD 2 HFOF (Gross)			0.6	3.3	3.3	17.7	2.1	4.7	
Grosvenor Custom Benchmark			<u>0.0</u>	<u>2.3</u>	<u>2.3</u>	<u>2.4</u>	<u>8.2</u>	<u>7.3</u>	
Excess Return (vs. Net)			0.6	1.0	1.0	15.3	-6.1	-2.6	
Magnetar Credit Fund (Net)	524,662,253	0.7	-0.6	0.5	0.5	42.6			
Magnetar Credit Fund (Gross)			-0.6	0.5	0.5	42.6			
Illiquid Credit Custom BM			<u>0.0</u>	<u>2.3</u>	<u>2.3</u>	<u>2.4</u>			
Excess Return (vs. Net)			-0.6	-1.8	-1.8	40.2			

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Napier Park (Net)	741,317,760	1.0	1.0	2.4	2.4	24.3			
Napier Park (Gross)			1.0	2.4	2.4	24.3			
Illiquid Credit Custom BM			<u>0.0</u>	<u>2.3</u>	<u>2.3</u>	<u>2.4</u>			
Excess Return (vs. Net)			1.0	0.1	0.1	21.9			
Pimco TAC OPPS Funds (Net)	278,216,965	0.4	0.5	2.8	2.8	17.7			
Pimco TAC OPPS Funds (Gross)			0.5	2.8	2.8	17.7			
PIMCO Tac Opps Custom BM			<u>0.0</u>	<u>2.3</u>	<u>2.3</u>	<u>2.5</u>			
Excess Return (vs. Net)			0.5	0.5	0.5	15.2			
Private Equity - Credit (Net)	215,950,177	0.3	0.0	12.1	12.1	58.5			
Private Equity - Credit (Gross)			0.0	12.1	12.1	58.5			
PE-Credit Custom Benchmark			<u>0.9</u>	<u>2.5</u>	<u>2.5</u>	<u>2.2</u>			
Excess Return (vs. Net)			-0.9	9.6	9.6	56.3			
Real Estate - Credit (Net)	156,691,270	0.2	0.0	0.8	0.8	6.8	8.6	8.4	
Real Estate - Credit (Gross)			0.0	1.0	1.0	7.7	9.5	9.5	
NPI Income Lagged			<u>0.4</u>	<u>1.1</u>	<u>1.1</u>	<u>4.2</u>	<u>4.4</u>	<u>4.5</u>	
Excess Return (vs. Net)			-0.4	-0.3	-0.3	2.6	4.2	3.9	

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Real Assets and Inflation Hedges (Net)¹	11,869,703,270	16.3	-0.1	2.5	2.5	16.9			
Real Assets and Inflation Hedges (Gross)			-0.1	2.6	2.6	17.3			
Real Assets & Inflation Hedges Custom BM			<u>0.6</u>	<u>2.4</u>	<u>2.4</u>	<u>17.2</u>			
Excess Return (vs. Net)			-0.7	0.1	0.1	-0.3			
Core and Value-Added Real Estate (Net)	4,479,815,389	6.2	0.0	4.1	4.1	6.9	3.1	4.7	7.0
Core and Value-Added Real Estate (Gross)			0.1	4.2	4.2	7.6	3.7	5.3	7.6
Core & Value-Added Real Estate Custom BM			<u>1.3</u>	<u>3.8</u>	<u>3.8</u>	<u>7.6</u>	<u>5.1</u>	<u>6.2</u>	<u>9.1</u>
Excess Return (vs. Net)			-1.3	0.3	0.3	-0.7	-2.0	-1.5	-2.1
Natural Resources and Commodities (Net)	3,031,260,461	4.2	2.5	2.9	2.9	42.1	5.5	4.8	-1.9
Natural Resources and Commodities (Gross)			2.7	3.1	3.1	42.7	5.9	5.1	-1.5
Natural Resources & Commodities Custom BM			<u>3.0</u>	<u>2.8</u>	<u>2.8</u>	<u>42.6</u>	<u>6.8</u>	<u>4.5</u>	<u>-2.7</u>
Excess Return (vs. Net)			-0.5	0.1	0.1	-0.5	-1.3	0.3	8.0
Public Natural Resources and Commodities (Net)	2,893,738,386	4.0	2.5	2.9	2.9	43.5			
Public Natural Resources and Commodities (Gross)			2.5	2.9	2.9	43.9			
Natural Resources & Commodities Custom BM			<u>3.0</u>	<u>2.8</u>	<u>2.8</u>	<u>42.6</u>			
Excess Return (vs. Net)			-0.5	0.1	0.1	0.9			
Credit Suisse Commodity (Net)	534,796,971	0.7	4.4	6.3	6.3	41.8	7.5	4.9	-2.2
Credit Suisse Commodity (Gross)			4.4	6.4	6.4	42.1	7.8	5.1	-1.9
Bloomberg Commodity Index TR USD			<u>5.0</u>	<u>6.6</u>	<u>6.6</u>	<u>42.3</u>	<u>6.9</u>	<u>4.5</u>	<u>-2.7</u>
Excess Return (vs. Net)			-0.6	-0.3	-0.3	-0.5	0.6	0.4	0.5

¹ 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)	1,316,765,181	1.8	0.0	-0.8	-0.8	43.8			
DWS Natural Resources (Gross)			0.0	-0.8	-0.8	44.1			
S&P Global Large/MidCap Commodities & Resources			<u>1.0</u>	<u>-0.9</u>	<u>-0.9</u>	<u>41.9</u>			
Excess Return (vs. Net)			-1.0	0.1	0.1	1.9			
Neuberger Berman/ Gresham (Net)	514,116,312	0.7	5.1	6.1	6.1	42.6	5.5	5.7	-1.6
Neuberger Berman/ Gresham (Gross)			5.2	6.2	6.2	43.1	5.9	6.1	-1.2
Bloomberg Commodity Index TR USD			<u>5.0</u>	<u>6.6</u>	<u>6.6</u>	<u>42.3</u>	<u>6.9</u>	<u>4.5</u>	<u>-2.7</u>
Excess Return (vs. Net)			0.1	-0.5	-0.5	0.3	-1.4	1.2	1.1
PIMCO Commodities (Net)	528,059,920	0.7	4.5	6.1	6.1	44.1	7.2	5.8	-1.1
PIMCO Commodities (Gross)			4.5	6.2	6.2	44.6	7.5	6.2	-0.7
Bloomberg Commodity Index TR USD			<u>5.0</u>	<u>6.6</u>	<u>6.6</u>	<u>42.3</u>	<u>6.9</u>	<u>4.5</u>	<u>-2.7</u>
Excess Return (vs. Net)			-0.5	-0.5	-0.5	1.8	0.3	1.3	1.6
Private Natural Resources and Commodities (Net)	137,522,075	0.2	3.2	3.2	3.2	0.0			
Private Natural Resources and Commodities (Gross)			7.9	7.9	7.9	4.7			
PE - Real Assets Custom BM			<u>-2.7</u>	<u>5.5</u>	<u>5.5</u>	<u>47.0</u>			
Excess Return (vs. Net)			5.9	-2.3	-2.3	-47.0			
Orion Mine Finance Fund III (Net)	54,573,391	0.1	0.0						
Orion Mine Finance Fund III (Gross)			8.5						
PE - Real Assets Custom BM			<u>-2.7</u>						
Excess Return (vs. Net)			2.7						

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Orion Mining Royalty Fund I (Net)	11,048,713	0.0	0.0						
Orion Mining Royalty Fund I (Gross)			0.0						
PE - Real Assets Custom BM			<u>-2.7</u>						
Excess Return (vs. Net)			2.7						
PE - Real Assets & Inflation Hedges (Net)	71,899,971	0.1	3.2	3.2	3.2	0.0			
PE - Real Assets & Inflation Hedges (Gross)			3.2	3.2	3.2	0.0			
PE - Real Assets Custom BM			<u>-2.7</u>	<u>5.5</u>	<u>5.5</u>	<u>47.0</u>			
Excess Return (vs. Net)			5.9	-2.3	-2.3	-47.0			
Infrastructure (Net)	2,297,745,731	3.2	-3.0	-0.3	-0.3	20.7			
Infrastructure (Gross)			-2.9	-0.2	-0.2	20.9			
DJ Brookfield Global Infrastructure TR			<u>-3.0</u>	<u>-0.8</u>	<u>-0.8</u>	<u>20.6</u>			
Excess Return (vs. Net)			0.0	0.5	0.5	0.1			
Public Infrastructure (Net)	2,213,119,380	3.0	-3.0	-0.4	-0.4	21.3			
Public Infrastructure (Gross)			-3.0	-0.4	-0.4	21.5			
DJ Brookfield Global Infrastructure TR			<u>-3.0</u>	<u>-0.8</u>	<u>-0.8</u>	<u>20.6</u>			
Excess Return (vs. Net)			0.0	0.4	0.4	0.7			
DWS Infrastructure (Net)	2,213,119,380	3.0	-3.0	-0.4	-0.4	21.3			
DWS Infrastructure (Gross)			-3.0	-0.4	-0.4	21.5			
DJ Brookfield Global Infrastructure TR			<u>-3.0</u>	<u>-0.8</u>	<u>-0.8</u>	<u>20.6</u>			
Excess Return (vs. Net)			0.0	0.4	0.4	0.7			

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Private Infrastructure (Net)	84,626,351	0.1	-0.6	5.0	5.0				
Private Infrastructure (Gross)			-0.6	4.8	4.8				
Private Infrastructure Policy BM			<u>0.6</u>	<u>7.2</u>	<u>7.2</u>				
Excess Return (vs. Net)			-1.2	-2.2	-2.2				
DIF Infrastructure VI (Net)	14,500,476	0.0	-1.8	45.4	45.4				
DIF Infrastructure VI (Gross)			-1.8	43.4	43.4				
Private Infrastructure Policy BM			<u>0.6</u>	<u>7.2</u>	<u>7.2</u>				
Excess Return (vs. Net)			-2.4	38.2	38.2				
Grain Communications Opportunity III (Net)	9,829,440	0.0	0.0	-3.5	-3.5				
Grain Communications Opportunity III (Gross)			0.0	-3.5	-3.5				
Private Infrastructure Policy BM			<u>0.6</u>	<u>7.2</u>	<u>7.2</u>				
Excess Return (vs. Net)			-0.6	-10.7	-10.7				
Grain Spectrum Holdings III (Net)	45,989,024	0.1	0.0	-0.1	-0.1				
Grain Spectrum Holdings III (Gross)			0.0	-0.1	-0.1				
Private Infrastructure Policy BM			<u>0.6</u>	<u>7.2</u>	<u>7.2</u>				
Excess Return (vs. Net)			-0.6	-7.3	-7.3				
Pan European Infrastructure Fund III (Net)	14,307,411	0.0	-1.8	5.2	5.2				
Pan European Infrastructure Fund III (Gross)			-1.8	5.2	5.2				
Private Infrastructure Policy BM			<u>0.6</u>	<u>7.2</u>	<u>7.2</u>				
Excess Return (vs. Net)			-2.4	-2.0	-2.0				

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
TIPS (Net)	2,060,881,688	2.8	-0.8	1.6	1.6	4.9			
TIPS (Gross)			-0.8	1.6	1.6	4.9			
BBgBarc US TIPS TR			<u>-0.7</u>	<u>1.8</u>	<u>1.8</u>	<u>5.2</u>			
Excess Return (vs. Net)			-0.1	-0.2	-0.2	-0.3			
Blackrock TIPS (Net)	2,060,881,688	2.8	-0.8	1.6	1.6	4.9			
Blackrock TIPS (Gross)			-0.8	1.6	1.6	4.9			
BBgBarc US TIPS TR			<u>-0.7</u>	<u>1.8</u>	<u>1.8</u>	<u>5.2</u>			
Excess Return (vs. Net)			-0.1	-0.2	-0.2	-0.3			
Risk Reduction and Mitigation $(\mathbf{Net})^1$	14,947,284,273	20.6	-0.5	0.1	0.1	1.1	-		
Risk Reduction and Mitigation (Gross)			-0.5	0.1	0.1	1.1			
Risk Reduction and Mitigation Custom Blended Benchmark			<u>-0.7</u>	<u>0.2</u>	<u>0.2</u>	<u>-0.3</u>			
Excess Return (vs. Net)			0.2	-0.1	-0.1	1.4			
Investment Grade Bonds (Net)	10,897,465,809	15.0	-0.9	0.1	0.1	-0.4	5.6	3.5	3.8
Investment Grade Bonds (Gross)			-0.9	0.1	0.1	-0.4	5.7	3.6	3.9
BBgBarc US Aggregate TR			<u>-0.9</u>	<u>0.1</u>	<u>0.1</u>	<u>-0.9</u>	<u>5.4</u>	<u>2.9</u>	<u>3.0</u>
Excess Return (vs. Net)			0.0	0.0	0.0	0.5	0.2	0.6	0.8
BTC US Debt Index (Net)	7,397,776,546	10.2	-0.9	0.1	0.1	-0.9	5.4	3.0	3.1
BTC US Debt Index (Gross)			-0.9	0.1	0.1	-0.9	5.4	3.0	3.1
BBgBarc US Aggregate TR			<u>-0.9</u>	<u>0.1</u>	<u>0.1</u>	<u>-0.9</u>	<u>5.4</u>	<u>2.9</u>	<u>3.0</u>
Excess Return (vs. Net)			0.0	0.0	0.0	0.0	0.0	0.1	0.1

¹ Includes accounts that are lagged by 1-month.

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Dodge & Cox (Net)	193,190	0.0							
Dodge & Cox (Gross)									
Member Home Loan Program (MHLP) (Net)	13,936,486	0.0	0.4	1.5	1.5	5.4	5.3	7.1	5.2
Member Home Loan Program (MHLP) (Gross)			0.5	1.6	1.6	5.7	5.6	7.4	5.4
PIMCO (Net)	275,442	0.0							
PIMCO (Gross)									
Pugh Capital Management (Net)	1,182,067,100	1.6	-0.9	0.0	0.0	-0.6	5.7	3.1	3.2
Pugh Capital Management (Gross)			-0.9	0.0	0.0	-0.5	5.8	3.3	3.4
BBgBarc US Aggregate TR			<u>-0.9</u>	<u>0.1</u>	<u>0.1</u>	<u>-0.9</u>	<u>5.4</u>	<u>2.9</u>	<u>3.0</u>
Excess Return (vs. Net)			0.0	-0.1	-0.1	0.3	0.3	0.2	0.2
Wells Capital Management (Net)	2,303,033,274	3.2	-0.9	0.1	0.1	-0.4	6.0	3.4	3.7
Wells Capital Management (Gross)			-0.9	0.1	0.1	-0.3	6.1	3.5	3.8
BBgBarc US Aggregate TR			<u>-0.9</u>	<u>0.1</u>	<u>0.1</u>	<u>-0.9</u>	<u>5.4</u>	<u>2.9</u>	<u>3.0</u>
Excess Return (vs. Net)			0.0	0.0	0.0	0.5	0.6	0.5	0.7
Western Asset Management (Net)	183,770	0.0							
Western Asset Management (Gross)									

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Diversified Hedge Fund Portfolio (Net)	3,097,828,760	4.3	0.7	0.1	0.1	10.8			
Diversified Hedge Fund Portfolio (Gross)			0.7	0.1	0.1	10.8	-		-
Diversified Hedge Funds Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>			
Excess Return (vs. Net)			0.5	-0.5	-0.5	8.2			
LACERA HF Direct (Net)	2,868,761,273	3.9	0.8	0.0	0.0	10.2	6.6		
LACERA HF Direct (Gross)			8.0	0.0	0.0	10.2	6.6		
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>	<u>4.1</u>		
Excess Return (vs. Net)			0.6	-0.6	-0.6	7.6	2.5		
AM Asia Strategies Fund (Net)	123,041,846	0.2	-0.1	-1.9	-1.9				
AM Asia Strategies Fund (Gross)			-0.1	-1.9	-1.9				
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			-0.3	-2.5	-2.5				
Brevan Howard Master Fund (Net)	397,260,899	0.5	0.7	-1.8	-1.8				
Brevan Howard Master Fund (Gross)			0.7	-1.8	-1.8				
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			0.5	-2.4	-2.4				
Capula GRV (Net)	525,441,650	0.7	0.3	-0.3	-0.3	1.9			
Capula GRV (Gross)			0.3	-0.3	-0.3	1.9			
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>			
Excess Return (vs. Net)			0.1	-0.9	-0.9	-0.7			

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Caxton Global Investments (Net)	199,315,344	0.3	0.3	-3.4	-3.4				
Caxton Global Investments (Gross)			0.3	-3.4	-3.4				
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			0.1	-4.0	-4.0				
DK Institutional Partners (Net)	341,920,421	0.5	0.2	-0.2	-0.2	12.8	7.2		
DK Institutional Partners (Gross)			0.2	-0.2	-0.2	12.8	7.2		
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>	<u>4.1</u>		
Excess Return (vs. Net)			0.0	-0.8	-0.8	10.2	3.1		
HBK Multistrategy (Net)	344,450,461	0.5	1.6	1.3	1.3	10.4	6.4		
HBK Multistrategy (Gross)			1.6	1.3	1.3	10.4	6.4		
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>	<u>4.1</u>		
Excess Return (vs. Net)			1.4	0.7	0.7	7.8	2.3		
Hudson Bay Fund (Net)	473,713,200	0.7	2.2	2.1	2.1	19.7			
Hudson Bay Fund (Gross)			2.2	2.1	2.1	19.7			
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>			
Excess Return (vs. Net)			2.0	1.5	1.5	17.1			
Polar (Net)	463,617,452	0.6	0.2	0.6	0.6	14.5			
Polar (Gross)			0.2	0.6	0.6	14.5			
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>	<u>2.6</u>			
Excess Return (vs. Net)			0.0	0.0	0.0	11.9			

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Hedge Fund Emerging Managers Program (Net)	154,950,216	0.2	0.0	0.0	0.0				
Hedge Fund Emerging Managers Program (Gross)			0.0	0.0	0.0		-		
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			-0.2	-0.6	-0.6				
Stable Asset Management (Net)	154,950,216	0.2	0.0	0.0	0.0				
Stable Asset Management (Gross)			0.0	0.0	0.0				
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			-0.2	-0.6	-0.6				
Stable Fund Investments (Net)	154,950,216	0.2	0.0	0.0	0.0	-	-		
Stable Fund Investments (Gross)			0.0	0.0	0.0				
Hedge Fund Custom BM			<u>0.2</u>	<u>0.6</u>	<u>0.6</u>				
Excess Return (vs. Net)			-0.2	-0.6	-0.6				
Amundsen (Net)	65,000,000	0.1	0.0						
Amundsen (Gross)			0.0						
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)			-0.2						
Linear B (Net)	29,933,999	0.0	-0.2						
Linear B (Gross)			-0.2						
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)			-0.4						

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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Sparta (Net)	30,000,000	0.0	0.0						
Sparta (Gross)			0.0						
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)			-0.2						
Trutino (Net)	30,016,217	0.0	0.1						
Trutino (Gross)			0.1						
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)			-0.1						
Stable SOI (Net)	0	0.0	0.0						
Stable SOI (Gross)			0.0			-	-		
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)			-0.2						
Amundsen SOI (Net)	0	0.0							
Amundsen SOI (Gross)									
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)									
Linear B SOI (Net)	0	0.0							
Linear B SOI (Gross)									
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)									

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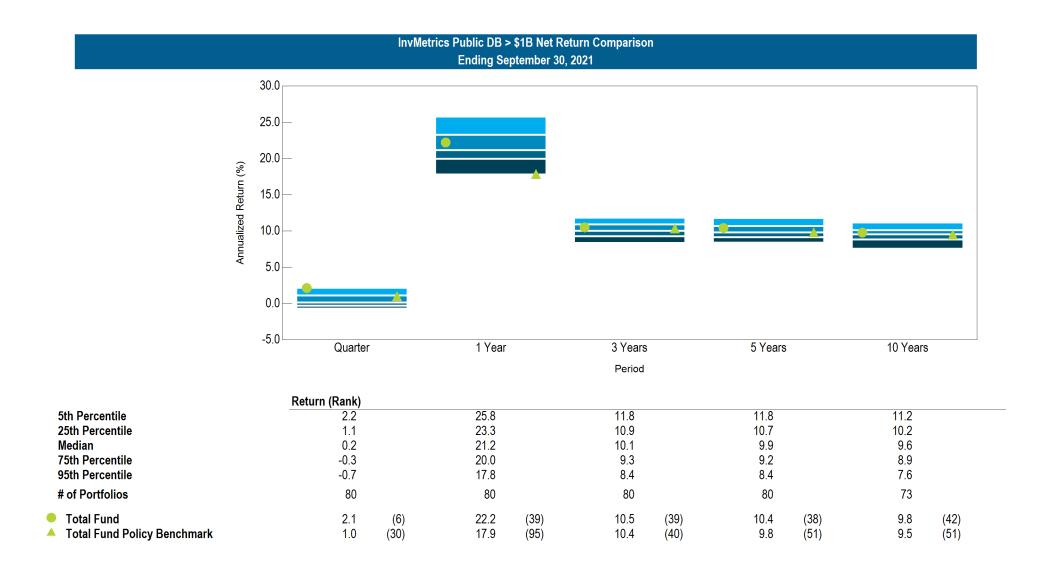
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	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Trutino SOI (Net)	0	0.0							
Trutino SOI (Gross)									
Hedge Fund Custom BM			<u>0.2</u>						
Excess Return (vs. Net)									
Cash (Net)	951,989,704	1.3	0.1	0.2	0.2	0.7	1.6	1.5	1.0
Cash (Gross)			0.1	0.2	0.2	0.8	1.7	1.6	1.1
Cash Custom BM			<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>1.2</u>	<u>1.2</u>	<u>0.7</u>
Excess Return (vs. Net)			0.1	0.2	0.2	0.6	0.4	0.3	0.3
SSGA Cash (Net)			0.0	0.0	0.0	0.1			
SSGA Cash (Gross)			0.0	0.0	0.0	0.1			
Cash Custom BM			<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>			
Excess Return (vs. Net)			0.0	0.0	0.0	0.0			
Overlay (Net)	544,505,408	0.7							
Overlay (Gross)									
Parametric Overlay (Net)	544,505,408	0.7							
Parametric Overlay (Gross)									

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Total Fund | September 30, 2021





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		Benchmark History
		As of September 30, 2021
Total Fund		
10/1/2019	Present	35% Global Equity Custom BM / 10% PE-Credit Custom Benchmark / 2% Opportunistic Real Estate Custom BM / 3% Bloomberg U.S. High Yield / 4% Credit Suisse Leveraged Loans / 2% EMD Custom / 3% Illiquid Credit Custom BM / 7% Core & Value-Added Real Estate Custom BM / 4% Natural Resources & Commodities Custom BM / 3% DJ Brookfield Global Infrastructure 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% Opportunistic Real Estate Custom BM / 4% Bloomberg U.S. High Yield / 3% Credit Suisse Leveraged Loans / 1% EMD Custom / 2% Illiquid Credit Custom BM / 8% Core & Value-Added Real Estate Custom BM / 3% Natural Resources & Commodities Custom BM / 2% DJ Brookfield Global Infrastructure 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)

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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

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Custom Benchmarks Glossary

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).

Credit Custom Blended BM:~25% BBg Barc US High Yield Ba/B / 33.3% Credit Suisse Leveraged Loan Index / 25% Illiquid Credit Custom BM / 16.7% EMD

Custom BM.

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:BBg Barc US Aggregate Index + 250 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 with a (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.



Los Angeles County Employees Retirement Association

Los Angeles County Employees Retirement Association | September 30, 2021

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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.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

MEKETA INVESTMENT GROUP Page 32 of 32





FOR INFORMATION ONLY

November 23, 2021

TO: Trustees – Board of Investments

FROM: Jude Pérez

Principal Investment Officer

FOR: December 8, 2021 Board of Investments Meeting

SUBJECT: OPEB QUARTERLY PERFORMANCE BOOK

Attached is the OPEB Master Trust quarterly performance book as of September 30, 2021. 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

EdB:JP



Investments Division

OPEB MASTER TRUST

PERFORMANCE REPORT

For the quarter ended September 30, 2021





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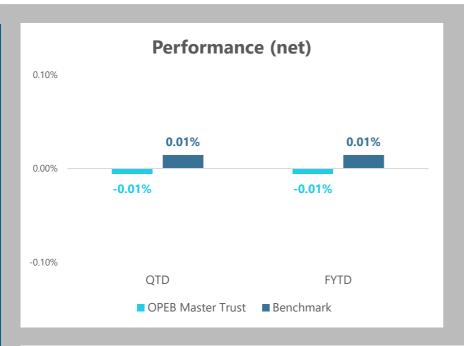


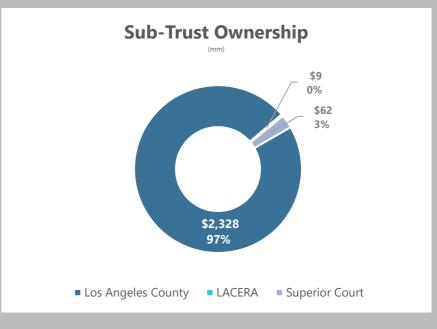
opeb trust

Quarterly Snapshot

for the quarter ended September 30, 2021









^{1. 3-}year annualized.

^{2.} Percentage of managers that outperformed the benchmark for the guarter.

Summary

for the quarter ended September 30, 2021



Performance (net) 25.0% 15.0% -5.0% QTD YTD 1 Year 3 Year 5 Year 10 Year ITD OPEB Master Trust Benchmark OPEB Master Trust 9.8% 21.6% 9.8% 10.6% -- 7.9%

	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
OPEB Master Trust	0.0%	9.8%	21.6%	9.8%	10.6%		7.9%
Benchmark	0.0%	9.7%	21.6%	9.5%	10.0%		6.9%
Excess	0.0%	0.1%	0.0%	0.3%	0.5%		1.0%
Sub-Trusts							
Los Angeles County	0.0%	9.8%	21.6%	9.8%	10.6%		7.3%
LACERA	0.0%	9.8%	21.6%	9.8%	10.6%		7.3%
Superior Court	0.0%	9.7%	21.5%	9.6%	10.4%		9.9%

Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year	5 Year
OPEB Growth	-1.1%	-1.0%	29.1%	12.7%	13.4%
OPEB MT Growth Policy BM	-1.1%	-1.1%	28.9%	12.4%	13.1%
Excess	0.0%	0.1%	0.2%	0.3%	0.3%
OPEB Credit	0.1%	0.1%	7.3%	4.4%	
OPEB MT Credit Policy BM	0.2%	0.2%	8.1%	4.9%	
Excess	-0.1%	-0.1%	-0.8%	-0.5%	
OPEB Real Assets & Inflation Hedges	2.5%	2.5%	29.4%	8.4%	
OPEB MT RA & IH Policy BM	2.6%	2.6%	29.7%	8.3%	
Excess	-0.1%	-0.1%	-0.3%	0.1%	
OPEB Risk Reduction & Mitigation	0.1%	0.1%	-0.7%	4.6%	3.1%
OPEB MT RR & M Policy BM	0.0%	0.0%	-0.7%	4.5%	3.1%
Excess	0.0%	0.0%	0.0%	0.1%	0.0%

Exposure

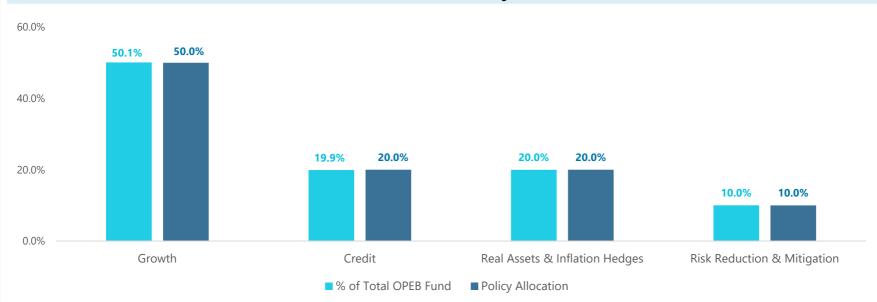


Asset Allocation

for the quarter ended September 30, 2021



Actual vs. Policy¹



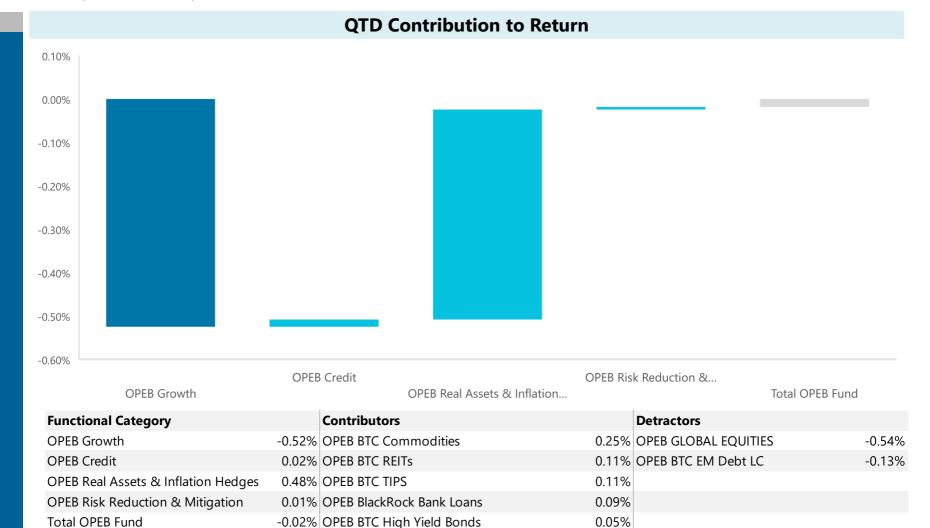
	Ending Market Value	% of Total OPEB Fund	Policy Allocation	Over / Under	Over / Under
Total OPEB Fund	2,385	100.0%			
Growth	1,195	50.1%	50.0%	0.1%	2
Credit	475	19.9%	20.0%	-0.1%	-2
Real Assets & Inflation Hedges	476	20.0%	20.0%	0.0%	-1
Risk Reduction & Mitigation	239	10.0%	10.0%	0.0%	1
Operational Cash	0	0.0%			

^{1.} Total OPEB Fund ending market value excludes residual cash in sub-trusts.

Contribution to Return



for the quarter ended September 30, 2021

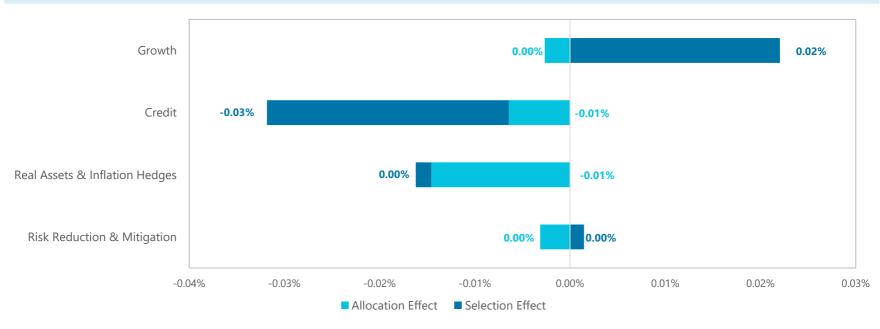


Return Attribution





QTD Performance Attribution^{1,2}



	Ending Market Value	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Total OPEB Fund	2,385	100.0%	100.0%	0.0%	0.0%	-0.03%	0.00%	-0.04%
Growth	1,195	50.1%	50.0%	-1.1%	-1.1%	0.00%	0.02%	0.02%
Credit	475	19.9%	20.0%	0.1%	0.2%	-0.01%	-0.03%	-0.03%
Real Assets & Inflation Hedges	476	20.0%	20.0%	2.5%	2.6%	-0.01%	0.00%	-0.03%
Risk Reduction & Mitigation	239	10.0%	10.0%	0.1%	0.0%	0.00%	0.00%	0.00%
Operational Cash	0	0.0%						

^{1.} Total OPEB Fund ending market value excludes residual cash in sub-trusts.

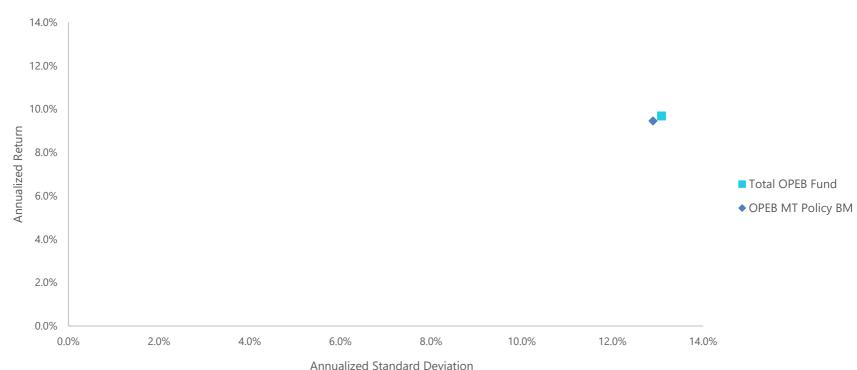
^{2.} Total Value Add includes Interaction Effect.

Risk vs. Return





3 Year (Annualized)¹



	Annualized	Standard	Sharpe	Information		Tracking
	Return	Deviation	Ratio	Ratio	Beta	Error
Total OPEB Fund	9.7%	13.1%				
OPEB MT Policy BM	9.5%	12.9%	0.00	0.18	0.99	0.3%

Performance Detail

L///CERA

for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association

Annualized Net Returns

		Ending	Prior Quarter							
	% of	Market Value	Ending MV							
	Total Fund	(mm)	(mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
OPEB MASTER TRUST	100.0%	2,399	2,307	0.0%	9.8%	21.6%	9.8%	10.6%		7.9%
OPEB MT Policy BM				0.0%	9.7%	21.6%	9.5%	10.0%		6.9%
Sub-Trusts										
Los Angeles County	97.0%	2,328	2,236	0.0%	9.8%	21.6%	9.8%	10.6%		7.3%
LACERA	0.4%	9	9	0.0%	9.8%	21.6%	9.8%	10.6%		7.3%
Superior Court	2.6%	62	62	0.0%	9.7%	21.5%	9.6%	10.4%		9.9%
OPEB GROWTH	49.8%	1,195	1,150	-1.1%	11.6%	29.1%	12.7%	13.4%		13.9%
OPEB MT Growth Policy BM				-1.1%	11.4%	28.9%	12.4%	13.1%		13.6%
OPEB GLOBAL EQUITIES	49.8%	1,195	1,145	-1.1%	11.6%	29.1%	12.7%	13.4%		9.8%
MSCI ACWI IMI Net				-1.1%	11.4%	28.9%	12.4%	13.1%		9.5%
OPEB CREDIT	19.8%	475	473	0.1%	1.8%	7.3%	4.4%			4.4%
OPEB MT Credit Policy BM				0.2%	2.2%	8.1%	4.9%			5.0%
OPEB BlackRock Bank Loans	10.0%	240	238	0.9%	3.6%	7.1%	3.7%			4.0%
S&P/LSTA Leverage Loan				1.1%	4.4%	8.4%	4.1%			4.4%
OPEB BTC EM Debt LC	3.7%	90	93	-3.2%	-6.7%	2.2%	3.1%			2.2%
JPM GBI-EM Global Diversified				-3.1%	-6.4%	2.6%	3.7%			2.8%
OPEB BTC High Yield Bonds	6.0%	145	142	0.9%	4.4%	11.0%	6.4%			6.7%
BBG BARC US Corp HY				0.9%	4.5%	11.3%	6.9%			7.1%
OPEB Real Assets & Inflation Hedges	19.9%	476	449	2.5%	18.8%	29.4%	8.4%			7.6%
OPEB MT RA & IH Policy BM				2.6%	18.9%	29.7%	8.3%			7.6%
OPEB BTC Commodities	4.0%	96	90	6.6%	29.0%	42.1%	6.8%			5.6%
Bloomberg Commodity Index Total Return				6.6%	29.1%	42.3%	6.9%			5.6%
OPEB BTC REITS	9.8%	236	219	1.2%	24.4%	40.4%	8.1%			7.7%
DJ US SELECT REAL ESTATE SECURITIES				1.3%	24.5%	40.6%	8.3%			7.9%
OPEB BTC TIPS	6.0%	144	140	1.8%	3.5%	5.2%	7.5%			6.7%
Bloomberg U.S. Treasury: U.S. TIPS				1.8%	3.5%	5.2%	7.4%			6.6%
OPEB Risk Reduction & Mitigation	10.0%	239	238	0.1%	-1.2%	-0.7%	4.6%	3.1%		3.2%
OPEB MT RR & M Policy BM				0.0%	-1.2%	-0.7%	4.5%	3.1%		3.0%
OPEB BTC Inv. Grade Bonds	8.0%	192	191	0.1%	-1.6%	-0.9%	5.4%			5.0%
BBG BARC Agg				0.1%	-1.6%	-0.9%	5.4%			4.9%
OPEB SSGA Cash	2.0%	47	47	0.0%	0.0%	0.0%				1.1%
FTSE 6 M Treasury Bill Index				0.0%	0.1%	0.1%				0.8%
								-		•



risk reports

Summary

for the quarter ended September 30, 2021

L///CERA
Los Angeles County Employees Retirement Association

Risk Summary

	Value
Total Risk	12.92
Benchmark Risk	12.32
Active Risk	1.05
Portfolio Beta	1.05
Effective Duration	1.79

Contribution to Risk



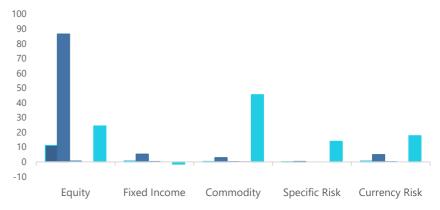
■%CR to TR ●Weight%

				Risk	
	Mkt Value (mm)	Weight%	Total Risk	Contribution	%CR to TR
OPEB Master Trust	2,306	100.0%	12.92	12.92	100.00
Growth	1,133	49.1%	19.06	9.26	71.66
Credit	474	20.5%	4.67	0.78	6.00
Real Assets and Inflation Hedges	461	20.0%	15.67	2.90	22.42
Risk Reduction and Mitigation	238	10.3%	2.85	-0.01	-0.08

Risk Decomposition

		Portfolio			Active			
	Risk			Risk				
Risk Source	Contributio	%Risk	Correlation	Contribution	%Risk	Correlation		
Total Risk	12.92	100.00	1.00	1.05	100.00	1.00		
Local Market Risk	12.28	95.04	1.00	0.86	82.25	0.97		
Common Factor Risk	12.24	94.68	1.00	0.72	68.33	0.90		
Equity	11.18	86.52	0.99	0.26	24.31	0.61		
Fixed Income	0.68	5.27	0.63	-0.02	-1.50	-0.03		
Commodity	0.37	2.90	0.58	0.48	45.52	0.75		
Specific Risk	0.05	0.36	0.06	0.15	13.92	0.37		
Currency Risk	0.64	4.96	0.55	0.19	17.75	0.64		

Active Risk from Risk Factors



Risk Contribution Breakdown



for the quarter ended September 30, 2021

Los Angeles County Employees Retirement Association





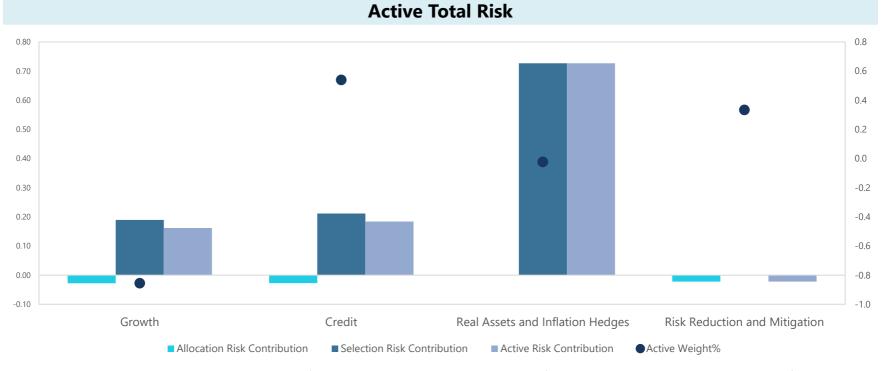
	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific	Eff Weight%
OPEB Master Trust	2,306	100.0%	12.92	100.00	12.92	11.18	0.68	0.00	0.37	0.00	0.00	0.64	0.05	104.2%
Growth	1,133	49.1%	19.06	71.66	9.26	8.78	0.00	0.00	0.00	0.00	0.00	0.45	0.03	49.3%
Credit	474	20.5%	4.67	6.00	0.78	0.00	0.58	0.00	0.00	0.00	0.00	0.19	0.01	20.5%
Real Assets and Inflation Hedges	461	20.0%	15.67	22.42	2.90	2.40	0.11	0.00	0.37	0.00	0.00	0.00	0.01	24.0%
Risk Reduction and Mitigation	238	10.3%	2.85	-0.08	-0.01	0.00	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	10.3%

Allocation Selection



for the quarter ended September 30, 2021





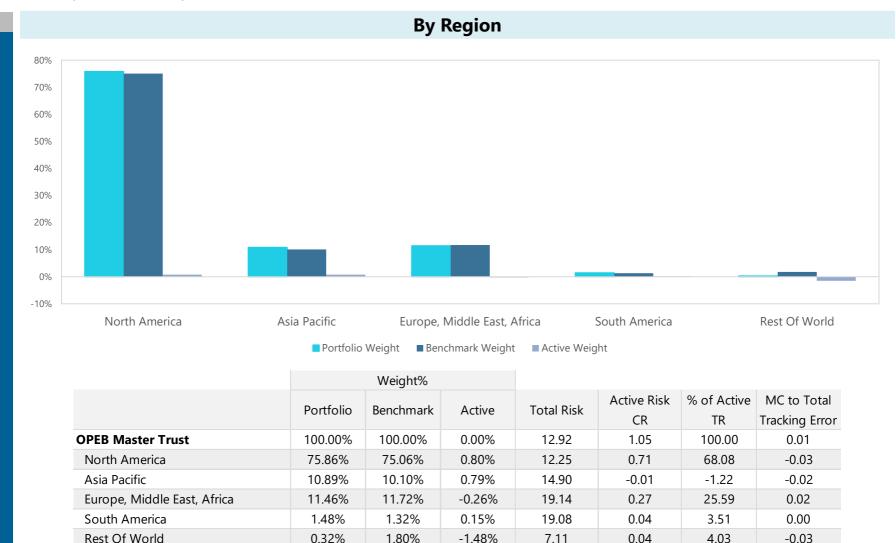
			Allocation			Active		
	Active	Volatility	Correlation	Risk	Volatility	Correlation	Risk	Risk
	Weight%	Volatility	Correlation	Contribution	Volatility		Contribution	Contribution
Active Total Risk				-0.08			1.13	1.05
Growth	-0.86	6.36	0.51	-0.03	0.71	0.54	0.19	0.16
Credit	0.54	8.48	-0.60	-0.03	2.85	0.36	0.21	0.18
Real Assets and Inflation Hedges	-0.02	5.01	0.04	0.00	4.29	0.85	0.73	0.73
Risk Reduction and Mitigation	0.33	12.72	-0.52	-0.02	0.12	-0.01	0.00	-0.02

Portfolio Allocation



for the guarter ended September 30, 2021

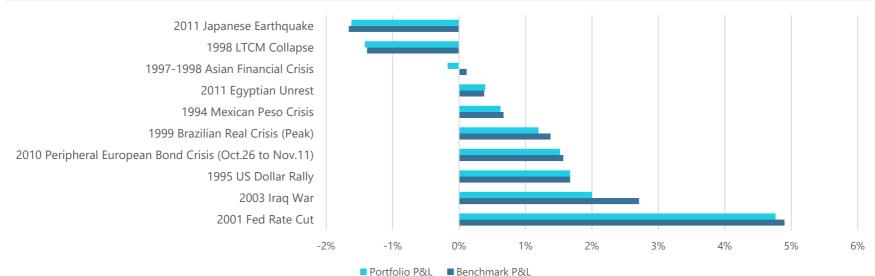




for the quarter ended September 30, 2021



Top 10 Best Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.76%	4.90%	109,823,581
2003 Iraq War	2.00%	2.71%	46,141,305
1995 US Dollar Rally	1.67%	1.67%	38,581,107
2010 Peripheral European Bond Crisis (Oct.26 to Nov.11)	1.52%	1.57%	35,047,057
1999 Brazilian Real Crisis (Peak)	1.20%	1.38%	27,583,614
1994 Mexican Peso Crisis	0.62%	0.67%	14,369,458
2011 Egyptian Unrest	0.39%	0.38%	9,092,429
1997-1998 Asian Financial Crisis	-0.17%	0.11%	(3,982,670)
1998 LTCM Collapse	-1.42%	-1.39%	(32,716,340)
2011 Japanese Earthquake	-1.62%	-1.66%	(37,359,895)

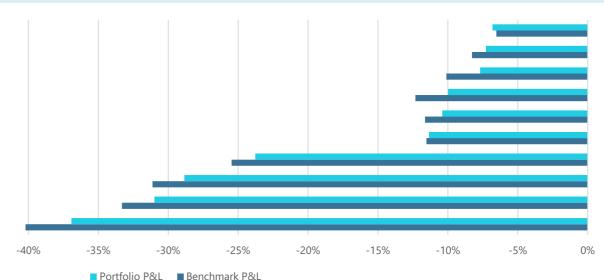
Stress Tests

for the quarter ended September 30, 2021



Top 10 Worst Stress Scenarios

2006 Emerging Market Crash
2001 Sept 11
1998 Russian Financial Crisis
2007-2008 Equity Slow Grind
2011 US Debt Ceiling Act
1987 Market Crash (Aug. to Nov.)
2000-2003 Tech Crash & Recession
2008 Lehman Bust
2008 - 2009 Global Financial Crisis
2007-2009 Subprime and Credit Crisis



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-36.92%	-40.20%	(851,438,688)
2008 - 2009 Global Financial Crisis	-30.99%	-33.31%	(714,556,086)
2008 Lehman Bust	-28.85%	-31.12%	(665,230,972)
2000-2003 Tech Crash & Recession	-23.77%	-25.47%	(548,210,168)
1987 Market Crash (Aug. to Nov.)	-11.35%	-11.53%	(261,697,658)
2011 US Debt Ceiling Act	-10.41%	-11.63%	(240,001,082)
2007-2008 Equity Slow Grind	-9.99%	-12.33%	(230,337,343)
1998 Russian Financial Crisis	-7.70%	-10.11%	(177,521,265)
2001 Sept 11	-7.28%	-8.28%	(167,924,730)
2006 Emerging Market Crash	-6.81%	-6.54%	(157,067,994)



appendix



A

ANNUAL RETURN

The total return of a security over a specified period, expressed as an annual rate of interest.

ACTIVE RISK

The expected standard deviation of the differential return between the portfolio and the benchmark. Active total risk arises from active management, and it is the result of active weights (deviations from the benchmark at the asset level) and therefore active exposures; for passively managed portfolios, it is referred to as "total tracking error."

ACTIVE RISK CONTRIBUTION

Percent contribution to active total risk (or tracking error). The percent of active total risk that an individual asset or risk source contributes. For example, a % CR to Active Total Risk of 10% indicates that 10% of the portfolio's active total risk is arising from the active position in that particular asset.

B

BASIS POINTS (BPS)

One one-hundredth of one percent. One hundred basis points equal one percent.

BETA

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market; a beta of more than one indicates higher risk than the market.

D

DURATION

A measure of the price sensitivity of a bond portfolio to changes in interest rates.



E

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.



HIGH VIELD BOND

A bond with a low investment quality and credit worthiness, usually with a rating of BB or less.



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.

0

OPEB MT CREDIT POLICY BM

50% S&P/LSTA Leverage Loan Index / 30% BBG BARC US Corp HY Index / 20% JPM GBI-EM Global Diversified Index

OPEB MT GROWTH POLICY BM

MSCI ACWI IMI Net

OPEB MT POLICY BM

Inception – 6/30/18
80% MSCI ACWI IMI Net / 20% FTSE 6 M
Treasury Bill Index
7/1/18 – Present
50% OPEB MT Growth Policy BM / 20%
OPEB MT Credit Policy BM / 20% OPEB
MT RA & IH Policy BM / 10% OPEB BM
RR & M Policy BM

OPEB MT RA & IH POLICY BM

50% DJ US SELECT REAL ESTATE SECURITIES INDEX / 30% BBG BARC US Treasury TIPS Index / 20% Bloomberg Commodity Index Total Return

OPEB MT RR & M POLICY BM

Inception – 6/30/18
FTSE 6 M Treasury Bill Index
7/1/18 – Present
80% BBG BARC Agg / 20% FTSE 6 M
Treasury Bill Index

S

SHARPE RATIO

Average return earned in excess of the risk-free rate per unit of total risk.

STANDARD DEVIATION

Statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater the degree of dispersion, the greater the risk.

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.



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.

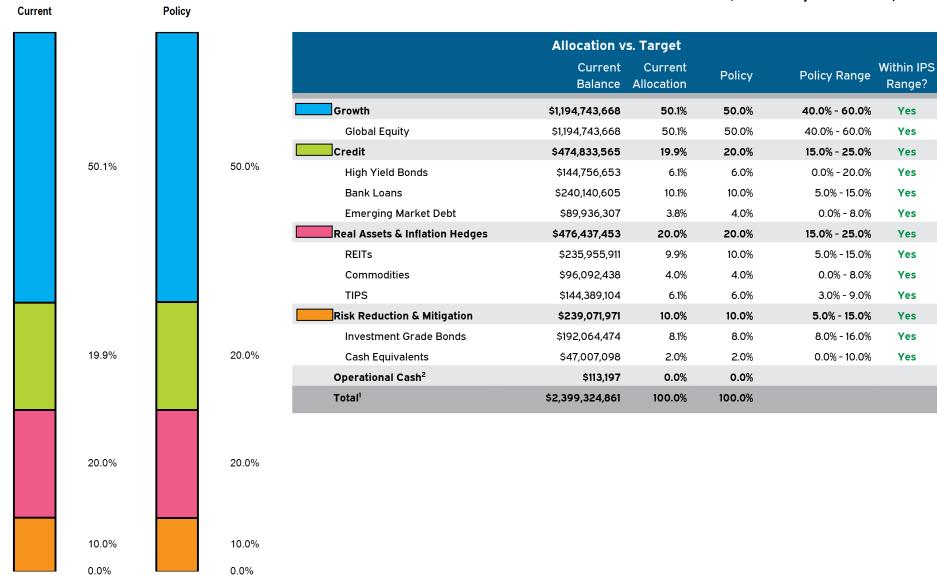


LACERA: OPEB Master Trust

September 30, 2021

Fund Evaluation Report

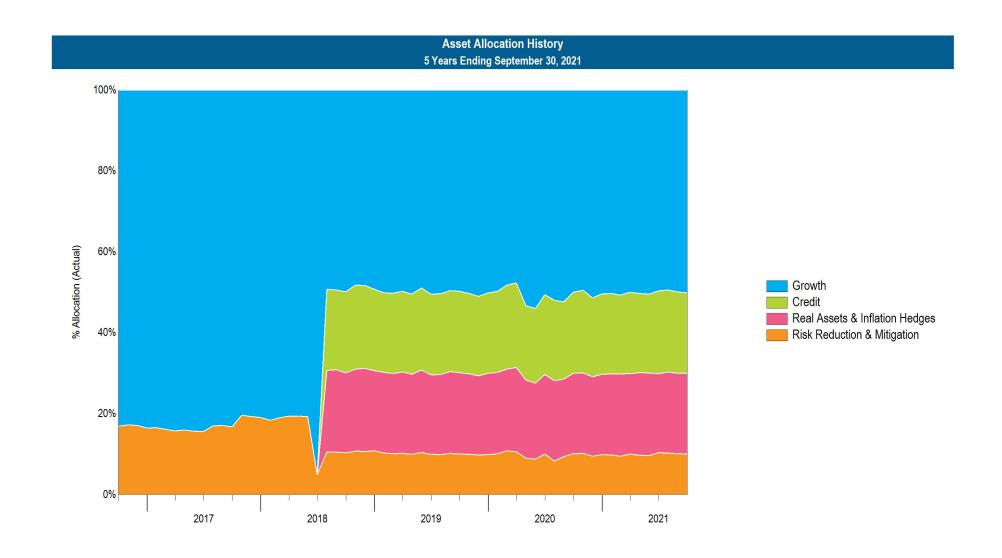




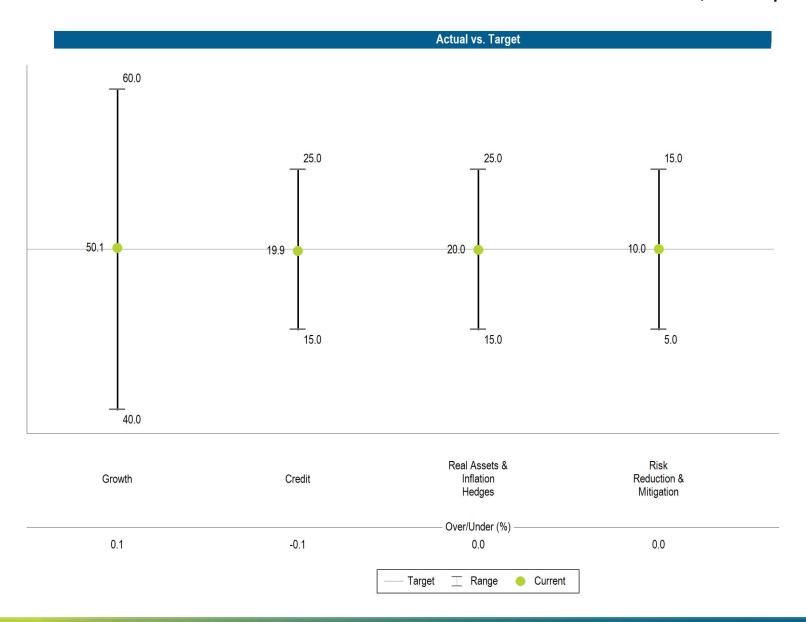
¹Total market value includes cash held at the participant level.

² includes unsettled trade activity.











Total Fund | As of September 30, 2021

	Trailing Net Performa	nce					
	Market Value¹ (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
Total Fund (Net)	2,399,324,861	100.0	0.0	0.0	21.6	9.8	10.6
Total Fund (Gross)			0.0	0.0	21.6	9.9	10.6
Custom OPEB Master Trust BM			<u>0.0</u>	<u>0.0</u>	<u>21.6</u>	<u>9.5</u>	<u>10.1</u>
Excess Return (vs. Net)			0.0	0.0	0.0	0.3	0.5
Growth (Net)	1,194,743,668	49.8	-1.1	-1.1	29.1	12.7	13.4
Growth (Gross)			-1.1	-1.1	29.2	12.7	13.4
OPEB Global Equity (Net)	1,194,743,668	49.8	-1.1	-1.1	29.1	12.7	13.4
OPEB Global Equity (Gross)			-1.1	-1.1	29.2	12.7	13.4
MSCI ACWI IMI Net (DAILY)			<u>-1.1</u>	<u>-1.1</u>	<u>28.9</u>	<u>12.4</u>	<u>13.1</u>
Excess Return (vs. Net)			0.0	0.0	0.2	0.3	0.3
Credit (Net)	474,833,565	19.8	0.1	0.1	7.3	4.4	
Credit (Gross)			0.1	0.1	7.4	4.5	
OPEB BTC Bank Loans (Net)	240,140,605	10.0	0.9	0.9	7.1	3.7	
OPEB BTC Bank Loans (Gross)			0.9	0.9	7.1	3.7	
S&P/LSTA Leveraged Loan TR			<u>1.1</u>	<u>1.1</u>	<u>8.4</u>	<u>4.1</u>	
Excess Return (vs. Net)			-0.2	-0.2	-1.3	-0.4	
OPEB BTC EM Debt LC (Net)	89,936,307	3.7	-3.2	-3.2	2.2	3.1	
OPEB BTC EM Debt LC (Gross)			-3.2	-3.2	2.3	3.2	
JPM GBI-EM Global Diversified Index			<u>-3.1</u>	<u>-3.1</u>	<u>2.6</u>	<u>3.7</u>	
Excess Return (vs. Net)			-0.1	-0.1	-0.4	-0.6	

Fiscal Year begins July 1.

¹Total market value includes cash held at the participant level.

The OPEB Master Trust started in February 2013

MEKETA

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
OPEB BTC High Yield Bonds (Net)	144,756,653	6.0	0.9	0.9	11.0	6.4	
OPEB BTC High Yield Bonds (Gross)			0.9	0.9	11.2	6.5	
BBgBarc US High Yield TR			<u>0.9</u>	<u>0.9</u>	<u>11.3</u>	<u>6.9</u>	
Excess Return (vs. Net)			0.0	0.0	-0.3	-0.5	
Real Assets & Inflation Hedges (Net)	476,437,453	19.9	2.5	2.5	29.4	8.4	
Real Assets & Inflation Hedges (Gross)			2.5	2.5	29.4	8.5	
OPEB BTC Commodities (Net)	96,092,438	4.0	6.6	6.6	42.1	6.9	
OPEB BTC Commodities (Gross)			6.6	6.6	42.3	7.0	
Bloomberg Commodity Index TR USD			<u>6.6</u>	<u>6.6</u>	<u>42.3</u>	<u>6.9</u>	
Excess Return (vs. Net)			0.0	0.0	-0.2	0.0	
OPEB BTC REITs (Net)	235,955,911	9.8	1.2	1.2	40.4	8.1	
OPEB BTC REITs (Gross)			1.3	1.3	40.5	8.4	
DJ US Select REIT TR USD			<u>1.3</u>	<u>1.3</u>	<u>40.6</u>	<u>8.3</u>	
Excess Return (vs. Net)			-0.1	-0.1	-0.2	-0.2	
OPEB BTC TIPS (Net)	144,389,104	6.0	1.8	1.8	5.2	7.5	
OPEB BTC TIPS (Gross)			1.8	1.8	5.2	7.6	
BBgBarc US TIPS TR			<u>1.8</u>	<u>1.8</u>	<u>5.2</u>	<u>7.5</u>	
Excess Return (vs. Net)			0.0	0.0	0.0	0.0	
Risk Reduction & Mitigation (Net)	239,071,971	10.0	0.1	0.1	-0.7	4.6	3.1
Risk Reduction & Mitigation (Gross)			0.1	0.1	-0.7	4.6	3.1
OPEB BTC Investment Grade Bonds (Net)	192,064,474	8.0	0.1	0.1	-0.9	5.4	
OPEB BTC Investment Grade Bonds (Gross)			0.1	0.1	-0.9	5.4	
BBgBarc US Aggregate TR			<u>0.1</u>	<u>0.1</u>	<u>-0.9</u>	<u>5.4</u>	
Excess Return (vs. Net)			0.0	0.0	0.0	0.0	

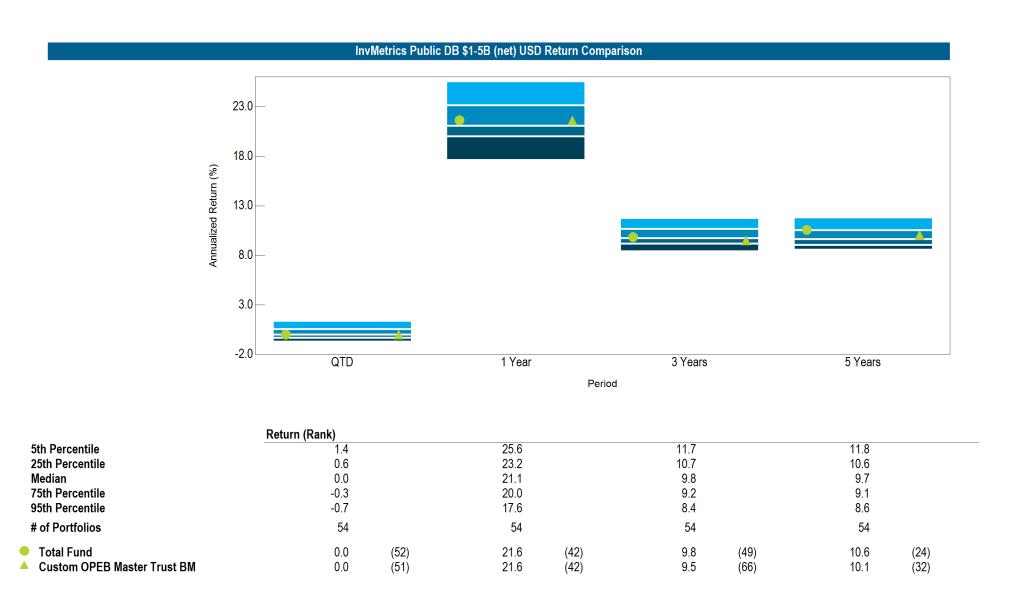


Total Fund | As of September 30, 2021

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)
OPEB Cash (Net)	47,007,098	2.0	0.0	0.0	0.0	1.5	1.6
OPEB Cash (Gross)			0.0	0.0	0.1	1.6	1.6
FTSE 6 Month T-Bill			<u>0.0</u>	<u>0.0</u>	<u>0.1</u>	<u>1.3</u>	<u>1.2</u>
Excess Return (vs. Net)			0.0	0.0	-0.1	0.2	0.4
Operational Cash (Net) Operational Cash (Gross)	113,197	0.0					

MEKETA INVESTMENT GROUP Page 7 of 10







Total Fund | As of September 30, 2021

		Benchmark History As of September 30, 2021
Total Fund		
2/28/2013	Present	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% MSCI ACWI IMI Net/ 6% BBgBarc High Yield/ 10% S&P/ LSTA Leveraged Loan/ 4% JPM GBI-Em/ 2% FTSE6-Month Treasury Bill/8% BBgBarc US Agg/ 6% BBgBarc US Tsy TIPS/ 10% DJ US Select Real Estate/ 4% Bloomberg Commodity Total Return

MEKETA INVESTMENT GROUP
Page 9 of 10



Total Fund | As of September 30, 2021

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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.

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.



November 22, 2021

TO: Each Trustee,

Board of Retirement Board of Investments

FROM: Steven P. Rice, SPR

Chief Counsel

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: Fiduciary Counsel Annual Self-Assessments

At a joint meeting on October 28, 2020, the Boards approved the engagement of three law firms – Klausner, Kaufman, Jensen & Levinson, Nossaman LLP, and Olson Remcho LLP – to serve as a panel of fiduciary counsel. The contracts entered into with the firms require a self-assessment to be delivered by November 1 each year. Attached are the self-assessments for 2021. The assessments are privileged and confidential and protected from public disclosure. Staff welcomes input on fiduciary counsel's services, provided that discussion of this item, which will take place in open session, should not include privileged information about specific assignments.

Staff's input is that all three firms are responsive and giving quality service. From staff's perspective, the three-firm panel approach is working well to ensure that counsel is available for all assignments, obtain different points of view, and capture expertise to serve all of LACERA's fiduciary counsel needs.

Legal Authority

The Boards have plenary authority and fiduciary responsibility for the administration and investment of the fund. Cal. Const., art. XVI, § 17; Cal. Gov't Code §§ 31520, 31595. Government Code Section 31529.6, which is a LACERA-specific provision, states that "the board of retirement and the board of investment may contract with attorneys in private practice for legal services and advice. The boards shall pay reasonable compensation for the legal services and advice." In exercising this authority, it is prudent for the Boards to periodically monitor and assess fiduciary counsel.

Privileged Attachments (Cal. Gov't Code §§ 6254(k), 54957.5(a))

A – Assessment provided by Klausner, Kaufman, Jensen & Levinson

B – Assessment provided by Nossaman LLP

C – Assessment provided by Olson Remcho LLP

c: Santos H. Kreimann Luis Lugo Laura Guglielmo

Jonathan Grabel JJ Popowich



FOR INFORMATION ONLY

November 18, 2021

TO: Each Trustee

Board of Retirement Board of Investments

FROM: Barry W. Lew &

Legislative Affairs Officer

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: 2021 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 September 10, 2021. Any bills that were not passed by the Legislature before adjournment would carry over to the next legislative session since 2022 is the second year of the 2021-22 two-year session. October 10, 2021 was the last day for the Governor to sign or veto bills. Unless otherwise noted, the bills signed into law become effective January 1, 2022.

The 1st session of the 117th Congress (2021-22) is not expected to conclude until January 2022, and staff will continue monitoring the federal legislation in this report.

BOARD-ADOPTED POSITIONS

The BOR reviewed and took positions on 5 bills during the 2021 legislative session. The BOI did not take any positions. Staff worked with LACERA's legislative advocates to send support letters during the legislative cycle.

Support – 4	AJR 9, HR 82, HR 2337, S 1302
Watch – 1	AB 826

2021 Year-End Legislative Report Board of Retirement Board of Investments November 18, 2021 Page 2

I. California Legislation

AJR 9 (Cooper): Social Security

<u>Summary</u>: Would request the Congress of the United States to enact, and the President to sign, legislation that would repeal the Government Pension Offset and the Windfall Elimination Provision from the Social Security Act.

Status: Chaptered by Secretary of State. (07/15/2021)

BOR Position: Support.

AB 826 (Irwin): Compensation and Compensation Earnable

<u>Summary</u>: 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.

Status: In Senate. From third reading. To Inactive File. (09/08/2021)

BOR Position: Watch.

II. Federal Legislation

HR 82 (Davis): Social Security Fairness Act of 2021

<u>Summary</u>: Would amend the Social Security Act to repeal the Government Pension Offset and the Windfall Elimination Provision.

Status: To House Committee on Ways and Means. (01/04/2021)

BOR Position: Support.

HR 2337 (Neal): Public Servants Protection and Fairness Act of 2021

<u>Summary</u>: 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: To House Committee on Ways and Means. (04/01/2021)

BOR Position: Support.

2021 Year-End Legislative Report Board of Retirement Board of Investments November 18, 2021 Page 3

S 1302 (Brown): Social Security Fairness Act

<u>Summary</u>: 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 the California Public Records Act.

AB 361 (Rivas): Open Meetings: State and Local Agencies: Teleconference

<u>Summary:</u> Authorizes a local agency to use teleconferencing without complying with the teleconferencing requirements imposed by the Ralph M. Brown Act when a legislative body of a local agency holds a meeting during a declared state of emergency, when state or local health officials have imposed or recommended measures to promote social distancing during a proclaimed state of emergency, provided certain requirements are met.

AB 473 (Chau): California Public Records Act

<u>Summary:</u> Recodifies and reorganizes the California Public Records Act and is nonsubstantive in effect.

AB 474 (Chau): California Public Records Act: Conforming Provisions

<u>Summary:</u> Enacts various conforming and technical changes related to AB 473, which recodifies and reorganizes the California Public Records Act.

AB 627 (Waldron): Recognition of Tribal Court Orders: Retirement Plans

<u>Summary:</u> Establishes a procedure pursuant to which one or both of the parties to a tribal court proceeding may file an application for recognition of a tribal court order that establishes a right to child support, spousal support payments, or marital property rights to a spouse, former spouse, child, or other dependent of a participant in a retirement plan or other plan of deferred compensation, and that assigns all or a portion of the benefits payable with respect to the plan participant to an alternate payee.

AB 845 (Rodriguez): Disability Retirement: COVID-19 Presumption

<u>Summary:</u> Creates a presumption, applicable to the retirement systems that PEPRA regulates and to specified members in those systems, that would be applied to disability retirements on the basis, in whole or in part, of a COVID-19-related illness.

2021 Year-End Legislative Report Board of Retirement Board of Investments November 18, 2021 Page 4

SB 274 (Wieckowski): Local Government Meetings: Agenda and Documents

<u>Summary:</u> Requires a local agency with an internet website, or its designee, to email a copy of, or website link to, the agenda or a copy of all the documents constituting the agenda packet if the person requests that the items be delivered by email. Requires the legislative body or its designee to send by mail a copy of the agenda or a website link to the agenda and to email a copy of all other documents constituting the agenda packet, if specified criteria or circumstances are met.

SB 634 (Senate Labor, Public Employment and Retirement Committee): Public Employees' Retirement

<u>Summary:</u> Omnibus bill that provides for technical clarifications to CERL. Authorizes a county health officer's duly authorized representative to advise the board of retirement with advice on medical matters. Authorizes the board to contract with a physician in private practice for the medical advice necessary to carry out the purpose of provisions relating to disability retirement. Makes various technical and stylistic changes and corrects obsolete cross-references.

CONCLUSION

In January 2022, the second year of the 2021-22 legislative session will begin. Staff will keep the Boards apprised through the regular monthly legislative status reports.

Reviewed and Approved:

Three 8- Priz

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 Joe Ackler, Ackler & Associates LACERA Division Managers

LACERA Legislative Report 2021-22 Legislative Session Status as of November 18, 2021

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PUBLIC RETIREMENT

CA AB 551 AUTHOR: Rodriguez [D]

Teachers' Retirement System: Individual Plans

INTRODUCED: 02/10/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Authorizes the State Teachers' Retirement System to administer an individual retirement plan as described in Section 408 of Title 26 of the United States Code. Eliminates the requirement that the administration of these plans be for the purpose of accepting a rollover from an annuity contract or custodial account offered by the system.

STATUS:

06/03/2021 In ASSEMBLY. To Inactive File.

CA AB 627 **AUTHOR:** Waldron [R]

Recognition of Tribal Court Orders: Retirement Plans

INTRODUCED: 02/12/2021 DISPOSITION: Enacted

SUMMARY:

Establishes a procedure pursuant to which one or both of the parties to a tribal court proceeding may file an application for recognition of a tribal court order that establishes a right to child support, spousal support payments, or marital property rights to a spouse, former spouse, child, or other dependent of a participant in a retirement plan or other plan of deferred compensation, and that assigns all or a portion of the benefits payable with respect to the plan participant to an alternate payee.

STATUS:

07/09/2021 Chaptered by Secretary of State. Chapter No. 2021-058

CA AB 826 AUTHOR: Irwin [D]

TITLE: Compensation and Compensation Earnable

INTRODUCED: 02/16/2021 LAST AMEND: 08/31/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Relates to the bill, which would apply only in Ventura County. Provides that compensation and compensation earnable include flexible benefits plan allowances paid by a county or a district on behalf of its employees as part of a cafeteria plan, as specified, if certain requirements are met.

STATUS:

09/08/2021 In SENATE. From third reading. To Inactive File.

BOR_Position: Watch 09/01/2021 **IBLC_Recommendation:** Watch 08/12/2021

Staff_Recommendation: Watch

CA AB 1133 AUTHOR: Chen [R]

TITLE: State Employee Hybrid Pension System

INTRODUCED: 02/18/2021

DISPOSITION: Pending - Carryover

SUMMARY:

States the intent of the Legislature to enact legislation that would create a

hybrid retirement benefit, consisting of a defined benefit pension and a defined contribution program, within the Public Employees' Retirement System, that state employees would have the option of electing.

STATUS:

02/18/2021 INTRODUCED.

CA AB 1293 AUTHOR: Cooley [D]

Judges' Retirement System II: Federal Law Limits

 INTRODUCED:
 02/19/2021

 LAST AMEND:
 07/06/2021

 DISPOSITION:
 Enacted

SUMMARY:

Prohibits the amount payable to a member or a judge under the Legislators' Retirement System, the Judges' Retirement System, and the Judges' Retirement System II, including specified adjustments, from exceeding the federal limits on annual defined benefit plan payments and would incorporate specified provisions of federal law by reference. Requires the retirement allowance of specified judges to be increased to reflect adjustments to payment limits prescribed by federal law under certain circumstances.

09/24/2021 Chaptered by Secretary of State. Chapter No. 2021-304

CA SB 278 AUTHOR: Leyva [D]

TITLE: PERS Disallowed Compensation Benefit Adjustments

INTRODUCED: 01/29/2021
LAST AMEND: 09/03/2021
DISPOSITION: Enacted

SUMMARY:

Establishes new procedures under Public Employees,Äô Retirement Law (PERL) for cases in which the Public Employees,Äô Retirement System determines that the benefits of a member or annuitant are, or would be, based on disallowed compensation that conflicts with the California Public Employees,Äô Pension Reform Act and other specified laws and thus impermissible under PERL. Applies these procedures retroactively to determinations made on or after a specified date, under specified circumstances.

STATUS:

09/27/2021 Signed by GOVERNOR.

09/27/2021 Chaptered by Secretary of State. Chapter No. 2021-331

CA SB 294 **AUTHOR:** Leyva [D]

Public Retirement: Leave of Absence: Service Credit

 INTRODUCED:
 02/02/2021

 LAST AMEND:
 06/14/2021

 DISPOSITION:
 Enacted

SUMMARY:

Removes the 12-year limitation for service credit earned on a compensated leave of absence for purposes of service with an employee organization. States that this leave is in addition to any leave to which public employees may be entitled by other laws or by a memorandum of understanding or collective bargaining agreement.

STATUS:

10/05/2021 Signed by GOVERNOR.

10/05/2021 Chaptered by Secretary of State. Chapter No. 2021-539

CA SB 634

AUTHOR: Labor, Public Employment & Retirement Cmt

Public Employees' Retirement

 INTRODUCED:
 02/19/2021

 LAST AMEND:
 06/14/2021

 DISPOSITION:
 Enacted

SUMMARY:

Applies the above-described requirements regarding signed applications and documents to the Cash Balance Benefit Program and the requirement that State Teachers' Retirement System pay certain Medicare Part A premiums; prohibits a member from purchasing service credit for any school year if the purchase would result in more than one year of service for that school year; deletes an obsolete cross-reference and would extend the requirement to return the total gross distribution amount.

STATUS:

09/16/2021 Chaptered by Secretary of State. Chapter No. 2021-186

Comments:

This is an omnibus bill that covers technical amendments for CalPERS, CalSTRS, and CERL retirement systems.

US HR 2954

SPONSOR: Neal [D]

TITLE: Strong Retirement

INTRODUCED: 05/04/2021 DISPOSITION: Pending

SUMMARY:

Secures a Strong Retirement Act of 2021.

STATUS:

05/04/2021 INTRODUCED.

05/04/2021 To HOUSE Committee on WAYS AND MEANS.
05/04/2021 To HOUSE Committee on FINANCIAL SERVICES.
05/04/2021 To HOUSE Committee on EDUCATION AND LABOR.

Comments:

Would gradually raise the age for mandatory distributions to age 75 by 2032.

PUBLIC INVESTMENT

CA AB 539

AUTHOR: Cooley [D]

TITLE: State Teachers' Retirement: Investment Managers

INTRODUCED: 02/10/2021 DISPOSITION: Enacted

SUMMARY:

Authorizes the Teachers' Retirement Board to contract with investment advisers upon the same finding by the Board and approval by the State Personnel Board. Authorizes the Board to establish a competitive bidding process and to specify the contract terms and conditions the Board solely deems necessary and prudent to contract with qualified investment managers and investment advisers.

STATUS:

10/07/2021 Chaptered by Secretary of State. Chapter No. 2021-619

CA AB 890

AUTHOR: Cervantes [D]

Public Employee Retirement Systems: Reports

INTRODUCED: 02/17/2021 LAST AMEND: 05/24/2021 **DISPOSITION**: Enacted

SUMMARY:

Requires the Board of Administration of the Public Employees' Retirement System and the Teachers' Retirement Board to provide reports to the Legislature on the status of achieving objectives and initiatives, to be defined by the boards, regarding participation of emerging managers or diverse managers responsible for asset management within each retirement system's portfolio of investments.

STATUS:

10/04/2021 Chaptered by Secretary of State. Chapter No. 2021-472

CA AB 1019 AUTHOR: Holden [D]

TITLE: Public Employee Retirement Systems: Investments

INTRODUCED: 02/18/2021

DISPOSITION: Pending - Carryover

SUMMARY:

prohibit state trust moneys from being used to make additional or new investments or to renew existing investments in investment vehicles issued or owned by the government of Turkey, unless the government adopts a policy to acknowledge the Armenian Genocide and embark on a path of affording justice to its victims.

STATUS:

03/04/2021 To ASSEMBLY Committee on PUBLIC EMPLOYMENT AND

RETIREMENT.

CA SB 457 AUTHOR: Portantino [D]

Public Employee Retirement Systems: Investments

INTRODUCED: 02/16/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Requires the boards of administration of the Public Employees Retirement System and the State Teachers Retirement System to provide employers that are school districts and cities that participate in the systems an option to elect an investment portfolio that does not contain investment vehicles that are issued or owned by the government of the Republic of Turkey.

STATUS:

05/28/2021 To ASSEMBLY Committee on PUBLIC EMPLOYMENT AND

RETIREMENT.

RETIREMENT PERSONNEL

CA AB 761 AUTHOR: Chen [R]

TITLE: County Employees' Retirement: Personnel: Orange County

 INTRODUCED:
 02/16/2021

 LAST AMEND:
 03/18/2021

 DISPOSITION:
 Enacted

SUMMARY:

Authorizes the board of retirement for Orange County to appoint an administrator, assistant administrators, a chief investment officer, subordinate investment officers, senior management employees, legal counsel, and other specified employees. Provides that the personnel appointed pursuant to these provisions would not be county employees subject to county civil service and merit system rules, and instead would be employees of the retirement system. **STATUS:**

06/28/2021 Signed by GOVERNOR.

06/28/2021 Chaptered by Secretary of State. Chapter No. 2021-026

PUBLIC EMPLOYMENT

CA AB 17 AUTHOR: Cooper [D]

Peace Officers: Disqualification from Employment

INTRODUCED: 12/07/2020 LAST AMEND: 01/12/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Disqualifies a person from being a peace officer if the person has been discharged from the military for committing an offense that would have been a felony if committed in the state or if the person has been certified as a peace officer and has had that certification revoked by the Commission on Peace Officer Standards and Training.

STATUS:

01/12/2021 From ASSEMBLY Committee on PUBLIC SAFETY with

author's amendments.

01/12/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on PUBLIC SAFETY.

CA AB 444 AUTHOR: Public Employment and Retirement Cmt

State and Local Employees: Pay Warrants: Designees

INTRODUCED: 02/08/2021 DISPOSITION: Enacted

SUMMARY:

Relates to State and local employees. Prescribes a process by which an appointing power would issue a check directly to a designated person instead of delivering employee warrants to that person. Provides that upon sufficient proof of the designee's identity, the appointing power must endorse and deposit the warrant issued to a deceased employee back into the Treasury to the credit of the fund or appropriation upon which it was drawn, then issue a revolving fund check to the designated person.

STATUS:

07/09/2021 Chaptered by Secretary of State. Chapter No. 2021-055

Comments:

The SACRS Legislative Committee is considering a similar proposal that would clarify that a deceased member's last pension check may be issued to a corporation, trust, or estate.

CA AB 1354 AUTHOR: Grayson [D]

Public Employees' Retirement

INTRODUCED: 02/19/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Makes nonsubstantive changes to provisions prohibiting a retired person from being employed by a public employer in the same public retirement system from which the retiree receives pension benefits without reinstatement from retirement into that system, subject to certain exceptions.

STATUS:

02/19/2021 INTRODUCED.

Comments:

This is a spot bill.

CA AB 1460 **AUTHOR:** Bigelow [R]

> TITLE: State Employment: COVID-19 Telework: Costs

INTRODUCED: 02/19/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Authorizes the Department of Human Resources (CalHR) to provide a one-time payment of an unspecified amount to employees who have been required to telework as a result of the COVID-19 pandemic in order to offset costs associated with working remotely.

STATUS:

To ASSEMBLY Committee on PUBLIC EMPLOYMENT AND 03/11/2021

RETIREMENT.

AUTHOR: CA SB 411 Cortese [D]

> TITLE: Public Employees' Retirement System

INTRODUCED: 02/12/2021 LAST AMEND: 04/13/2021 DISPOSITION: Enacted

SUMMARY:

Eliminates the requirement that a person employed without reinstatement in a manner other than authorized by PERL be reinstated, instead providing that reinstatement is permissive. Makes conforming changes and makes specific reference to the duties of employees and employers regarding reinstatement after retirement in violation of PEPRA.

STATUS:

07/23/2021 Signed by GOVERNOR.

07/23/2021 Chaptered by Secretary of State. Chapter No. 2021-136

DISABILITY RETIREMENT

AUTHOR: CA AB 845 Rodriguez [D]

TITLE: Disability Retirement: COVID-19: Presumption

INTRODUCED: 02/17/2021 LAST AMEND: 03/30/2021 DISPOSITION: Enacted

SUMMARY:

Creates a presumption, applicable to the retirement systems that PEPRA regulates and to specified members in those systems, that would be applied to disability retirements on the basis, in whole or in part, of a Coronavirus disease 2019-related illness. Requires that it be presumed the disability arose out of, or in the course of, the member's employment.

STATUS:

07/23/2021 Signed by GOVERNOR.

Chaptered by Secretary of State. Chapter No. 2021-122 07/23/2021

WORKERS COMPENSATION

CA AB 334 **AUTHOR:** Mullin [D]

> TITLE: Workers Compensation: Skin Cancer

INTRODUCED: 01/27/2021

DISPOSITION: Pending - Carryover

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:

09/10/2021 In SENATE. From third reading. To Inactive File.

CA AB 415 AUTHOR: Rivas R [D]

TITLE: Employment: Workers' Compensation

INTRODUCED: 02/03/2021 LAST AMEND: 02/12/2021

Pending - Carryover

SUMMARY:

Relates to workers' compensation. Defines injury for certain public employees regularly exposed to active fires or health hazards directly resulting from firefighting operations to include cancer that develops or manifests during a period of exposure to a known carcinogen while in public employment. Establishes a presumption that the cancer arose out of, and in the course of, employment, unless the presumption is controverted by evidence.

STATUS:

02/12/2021 To ASSEMBLY Committee on INSURANCE.

02/12/2021 From ASSEMBLY Committee on INSURANCE with author's

amendments.

02/12/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on INSURANCE.

CA AB 772 AUTHOR: Ramos [D]

Workers' Compensation: Medical Treatment

INTRODUCED: 02/16/2021 LAST AMEND: 03/25/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Clarifies that an employer is not limited in its ability to insure against an act of domestic terrorism or to provide benefits in excess of those required by existing law following an act of terrorism. Clarifies that when an employer approves a request for medical treatment from a treatment provider, without modification, the employer has completed utilization review under the law.

STATUS:

03/25/2021 To ASSEMBLY Committee on INSURANCE.

03/25/2021 From ASSEMBLY Committee on INSURANCE with author's

amendments.

03/25/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on INSURANCE.

CA AB 872 AUTHOR: Wood [D]

Leave of Absence: Firefighters

 INTRODUCED:
 02/17/2021

 LAST AMEND:
 09/03/2021

 DISPOSITION:
 Vetoed

SUMMARY:

Makes enhanced industrial disability leave benefits for specified state employees employed by the Department of Forestry and Fire Protection applicable only to injuries that occur prior to a specified date. Provides that for injuries occurring on or after a specified date, specified benefits, such as one year of salary in lieu

of disability payments, shall be available to all rank-and-file and supervisory firefighters and members of State Bargaining Unit 8 engaged in active fire suppression or prevention.

STATUS:

10/08/2021 Vetoed by GOVERNOR.

CA AB 991 AUTHOR: Ward [D]

Workers' Compensation: Presumed Injuries

INTRODUCED: 02/18/2021 LAST AMEND: 03/11/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Expands presumptions for hernia, pneumonia, heart trouble, cancer, tuberculosis, bloodborne infectious disease, methicillin-resistant Staphylococcus aureus skin infection, and meningitis-related illnesses and injuries to a lifeguard employed on a year-round, full-time basis by the City of San Diego.

STATUS:

03/11/2021 To ASSEMBLY Committee on INSURANCE.

03/11/2021 From ASSEMBLY Committee on INSURANCE with author's

amendments.

03/11/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on INSURANCE.

CA SB 213 AUTHOR: Cortese [D]

Workers' Compensation: Hospital Employees

INTRODUCED: 01/12/2021 LAST AMEND: 03/04/2021

Pending - Carryover

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. Creates a rebuttable presumption that these injuries that develop or manifest in a hospital employee who provides direct patient care in an acute care hospital arose out of and in the course of the employment. Includes COVID-19 in the definitions of infectious and respiratory diseases.

STATUS:

06/03/2021 In SENATE. Read third time. Failed to pass SENATE.

(20-10)

06/03/2021 In SENATE. Motion to reconsider. 06/03/2021 In SENATE. Reconsideration granted.

06/03/2021 In SENATE. To Inactive File.

CA SB 284 AUTHOR: Stern [D]

Workers' Compensation: Firefighters and Peace Officers

INTRODUCED: 02/01/2021 LAST AMEND: 08/30/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Relates to existing Law which provides that injury includes post-traumatic stress that develops during a period in which the injured person is in the service of the department or unit. Makes that provision applicable to active firefighting members of the State Department of State Hospitals, the State Department of

Developmental Services, and the Military Department, and the Department of Veterans Affairs, including security officers of the Department of Justice when performing assigned duties.

STATUS:

08/30/2021 In ASSEMBLY. Read second time and amended. To

second reading.

08/30/2021 In ASSEMBLY. To Inactive File.

CA SB 335 AUTHOR: Cortese [D]

Workers' Compensation: Liability

INTRODUCED: 02/08/2021 LAST AMEND: 03/10/2021

DISPOSITION: Pending - Carryover

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.

CA SB 788 AUTHOR: Bradford [D]

TITLE: Workers' Compensation: Risk Factors

 INTRODUCED:
 02/19/2021

 LAST AMEND:
 06/17/2021

 DISPOSITION:
 Vetoed

SUMMARY:

Prohibits consideration of race, religious creed, color, national origin, gender, marital status, sex, sexual identity, or sexual orientation to determine the approximate percentage of the permanent disability caused by other factors. Expresses the Legislature's intent to eliminate bias and discrimination in the workers' compensation system.

STATUS:

09/28/2021 Vetoed by GOVERNOR.

BROWN ACT

CA AB 339 AUTHOR: Lee [D]

TITLE: Local Government: Open and Public Meetings

 INTRODUCED:
 01/28/2021

 LAST AMEND:
 09/03/2021

 DISPOSITION:
 Vetoed

SUMMARY:

Requires local agencies to conduct meetings subject to Ralph M. Brown Act consistent with applicable state and federal civil rights laws. Requires all open and public meetings to include an in person public comment opportunity, except in specified circumstances during a declared state or local emergency. Requires all meetings to provide the public with an opportunity to comment on proposed legislation in person and remotely via a telephonic or an internet based service option.

STATUS:

10/07/2021 Vetoed by GOVERNOR.

CA AB 361 AUTHOR: Rivas R [D]

Open Meetings: State and Local Agencies: Teleconference

 INTRODUCED:
 02/01/2021

 LAST AMEND:
 09/03/2021

 DISPOSITION:
 Enacted

SUMMARY:

Authorizes a local agency to use teleconferencing without complying with the teleconferencing requirements imposed by the Ralph M. Brown Act when a legislative body of a local agency holds a meeting during a declared state of emergency, when state or local health officials have imposed or recommended measures to promote social distancing during a proclaimed state of emergency, provided certain requirements are met. Prohibits the closing of the public comment period.

STATUS:

09/16/2021 Chaptered by Secretary of State. Chapter No. 2021-165

CA AB 703 AUTHOR: Rubio [D]

Open Meetings: Local Agencies: Teleconferences

INTRODUCED: 02/12/2021 LAST AMEND: 04/29/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Removes the requirements of the Ralph M. Brown Act particular to teleconferencing and allows for teleconferencing subject to existing provisions regarding the posting of notice of an agenda and the ability of the public to observe the meeting and provide public comment.

STATUS:

04/29/2021 From ASSEMBLY Committee on LOCAL GOVERNMENT with

author's amendments.

04/29/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on LOCAL GOVERNMENT.

Comments:

According to SACRS lobbyists, this will be a two-year bill and not taken up in 2021.

CA SB 274 AUTHOR: Wieckowski [D]

TITLE: Local Government Meetings: Agenda and Documents

INTRODUCED: 01/29/2021 LAST AMEND: 04/05/2021 DISPOSITION: Enacted

SUMMARY:

Requires a local agency with an internet website, or its designee, to email a copy of, or website link to, the agenda or a copy of all the documents constituting the agenda packet if the person requests that the items be delivered by email. Requires the legislative body or its designee to send by mail a copy of the agenda or a website link to the agenda and to email a copy of all other documents constituting the agenda packet, if specified criteria or circumstances are met.

STATUS:

10/09/2021 Chaptered by Secretary of State. Chapter No. 2021-763

PUBLIC RECORDS ACT

CA AB 343 AUTHOR: Fong [R]

TITLE: California Public Records Act Ombudsperson

INTRODUCED: 01/28/2021 LAST AMEND: 05/24/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Establishes, within the California State Auditor's Office, the California Public Records Act Ombudsperson. Requires the California State Auditor to appoint the Ombudsperson subject to certain requirements. Requires the Ombudsperson to receive and investigate requests for review, determine whether the denials of original requests complied with the California Public Records Act, and issue written opinions of its determination.

STATUS:

06/09/2021 To SENATE Committees on JUDICIARY and GOVERNMENTAL

ORGANIZATION.

CA AB 386 AUTHOR: Cooper [D]

Public Employees Retirement: Investments: Confidential

INTRODUCED: 02/02/2021 LAST AMEND: 06/29/2021

DISPOSITION: Pending - Carryover

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.

CA AB 473 AUTHOR: Chau [D]

TITLE: California Public Records Act

 INTRODUCED:
 02/08/2021

 LAST AMEND:
 08/16/2021

 DISPOSITION:
 Enacted

SUMMARY:

Recodifies and reorganizes the provisions of the act. The bill would include provisions to govern the effect of recodification and states that the bill is intended to be entirely nonsubstantive in effect. The bill would contain related legislative findings and declarations. The bill would become operative on a specified date.

STATUS:

10/07/2021 Chaptered by Secretary of State. Chapter No. 2021-614

CA AB 474 AUTHOR: Chau [D]

TITLE: California Public Records Act: Conforming Revisions

 INTRODUCED:
 02/08/2021

 LAST AMEND:
 08/16/2021

 DISPOSITION:
 Enacted

SUMMARY:

Enacts various conforming and technical changes related to another bill, AB 473, which recodifies and reorganizes the California Public Records Act. STATUS:

10/07/2021 Chaptered by Secretary of State. Chapter No. 2021-615

SOCIAL SECURITY

CA AJR 9 **AUTHOR:** Cooper [D]

TITLE: Social Security INTRODUCED: 03/01/2021 **DISPOSITION:** Adopted

SUMMARY:

Requests the Congress of the United States to enact, and the President to sign, legislation that would repeal the Government Pension Offset and the Windfall Elimination Provision from the Social Security Act.

STATUS:

07/15/2021 Chaptered by Secretary of State. 07/15/2021 Resolution Chapter No. 2021-078

BOR_Position: Support *05/05/2021* IBLC_Recommendation: Support 04/15/2021

Staff_Recommendation: Support

SPONSOR: **US HR 82** Davis R [R]

TITLE: Government Pension Offset Repeal

INTRODUCED: 01/04/2021 **DISPOSITION:** Pending

SUMMARY:

Amends the Social Security Act; repeals the Government pension offset and windfall elimination provisions.

STATUS:

01/04/2021 INTRODUCED.

01/04/2021 To HOUSE Committee on WAYS AND MEANS.

BOR_Position: Support 05/05/2021 IBLC_Recommendation: Support 04/15/2021

Staff_Recommendation: Support

SPONSOR: US HR 2337 Neal [D]

> TITLE: Noncovered Employment

INTRODUCED: 04/01/2021 DISPOSITION: Pending

SUMMARY:

Amends Title II of the Social Security Act to provide an equitable Social Security formula for individuals with noncovered employment and to provide relief for individuals currently affected by the Windfall Elimination Provision.

STATUS:

04/01/2021 INTRODUCED.

To HOUSE Committee on WAYS AND MEANS. 04/01/2021

BOR_Position: Support 09/01/2021 IBLC_Recommendation: Support 08/12/2021

Staff_Recommendation: Support

SPONSOR: US S 1302 Brown S [D]

TITLE: Pension Offset INTRODUCED: 04/22/2021 DISPOSITION: Pending

SUMMARY:

Amends Title II of the Social Security Act to repeal the government pension offset and windfall elimination provisions.

STATUS:

04/22/2021 INTRODUCED.

04/22/2021 In SENATE. Read second time. 04/22/2021 To SENATE Committee on FINANCE.

BOR_Position:Support 09/01/2021IBLC_Recommendation:Support 08/12/2021

Staff_Recommendation: Support

HEALTHCARE

CA AB 1092 AUTHOR: Mayes [R]

Public Employees' Retirement: Health Benefits

INTRODUCED: 02/18/2021 LAST AMEND: 04/26/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Precludes a person who has retired under PERS and who obtains work with a subsequent employer from receiving any health benefits offered under PEMHCA if the person's subsequent employer offers health care coverage that provides reasonably comparable benefits. Prohibits, among other things, employees, annuitants, and family members who become eligible to enroll on or after a specified date in Part A and Part B of Medicare from being enrolled in a basic health benefit plan.

STATUS:

04/26/2021 From ASSEMBLY Committee on PUBLIC EMPLOYMENT AND

RETIREMENT With author's amendments.

04/26/2021 In ASSEMBLY. Read second time and amended.

Re-referred to Committee on PUBLIC EMPLOYMENT AND

RETIREMENT.

CA AB 1400 AUTHOR: Kalra [D]

Guaranteed Health Care for All

INTRODUCED: 02/19/2021

DISPOSITION: Pending - Carryover

SUMMARY:

Creates the Guaranteed Health Care for All Program, or CalCare, to provide comprehensive universal single-payer health care coverage and a health care cost control system for the benefit of all residents of the state. Provides that CalCare cover a wide range of medical benefits and other services and would incorporate the health care benefits and standards of other existing federal and state provisions. Creates the CalCare Board to govern CalCare, made up of 9 voting members.

STATUS:

02/19/2021 INTRODUCED.

US HR 4148 SPONSOR: Malinowski [D]

TITLE: First Responders Medicare Option

INTRODUCED: 06/24/2021 DISPOSITION: Pending

SUMMARY:

Amends Title XVIII of the Social Security Act to provide an option for first responders age 50 to 64 who are separated from service due to retirement or disability to buy into Medicare.

STATUS:

06/24/2021 INTRODUCED.

06/24/2021 To HOUSE Committee on WAYS AND MEANS.

06/24/2021 To HOUSE Committee on ENERGY AND COMMERCE. 06/25/2021 In HOUSE Committee on ENERGY AND COMMERCE:

Referred to Subcommittee on HEALTH.

US S 2236 SPONSOR: Brown S [D]

TITLE: Medicare Buy In Option for First Responders

INTRODUCED: 06/24/2021 DISPOSITION: Pending

SUMMARY:

Amends Title XVIII of the Social Security Act to provide an option for first responders age 50 to 64 who are separated from service due to retirement or disability to buy into Medicare.

STATUS:

06/24/2021 INTRODUCED.

06/24/2021 In SENATE. Read second time. 06/24/2021 To SENATE Committee on FINANCE.

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FOR INFORMATION ONLY

November 19, 2021

TO: Trustees,

Board of Investments

FROM: Christine Roseland

Senior Staff Counsel

FOR: December 8, 2021 Board of Investments Meeting

CR

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 8, 2021.

Attachment

c: Santos H. Kreimann

Luis A. Lugo

Jonathan Grabel

Esmeralda Del Bosque

Vache Mahseredjian

Jude Perez

Jim Rice

Christopher Wagner

Steven Rice

John Harrington

Soo Park

Margo McCabe

Lisa Garcia

N

LACERA Legal Division Board of Investments Projects Monthly Status Report - Pending as of November 29, 2021



25% Legal negotiations in process. 25% Legal negotiations in process. 90% Legal negotiations in process. 95% Legal negotiations in process. 10% Legal negotiations in process. 25% Legal negotiations in process. 25% Legal negotiations in process. Notes 100% Completed. 100% Completed. % Complete Completion Completed Completed In Progress Status November 17, 2021 October 13, 2021 March 10, 2021 Approval July 14, 2021 Board Date \$1,500,000,000 \$1,347,300,000 \$100,000,000 \$100,000,000 \$191,000,000 \$265,000,000 Amount V V Y ∀ Terminate Investment Management Agreement Actuarial Review Services Agreement Extension Engagement Agreement Transition Agreement for Long-Term U.S. Treasury Secondary Purchase Secondary Purchase Actuarial Consulting Services Agreement Description Subscription Subscription Extension Bonds Project/ Investment Capital Partners Fund, L.P. Cavanaugh Macdonald Consulting, LLC Management Association LLC)
BlackRock Institutional TIAA-CREF Global Agriculture LLC II, LLC Trust Company, N.A. Revelstoke Capital Partners Fund III, L.P. Smart Infrastructure PGIM Quantitative Solutions (formerly TIAA-CREF Global Agriculture, LLC Milliman Inc. Quantitative Innocap TIQUA **EQUITIES** PRIVATE EQUITY HEDGE FUNDS FIXED INOME REAL ASSETS



FOR INFORMATION ONLY

November 17, 2021

TO: Each Trustee

Board of Retirement Board of Investments

FROM: Ted Granger

Interim Chief Financial Officer

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: MONTHLY TRAVEL & EDUCATION REPORT - OCTOBER 2021

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 2021. Staff travel and education is not included in this report and is reported to the Chief Executive Officer separately.

REVIEWED AND APPROVED:

Santos H. Kreimann Chief Executive Officer

TG/EW/krh

Attachments

c: L. Lugo

- J. Popowich
- L. Guglielmo
- J. Grabel
- S. Rice
- J. Beasley





TRUSTEE TRAVEL AND EDUCATION REPORT FOR FISCAL YEAR 2021 - 2022 OCTOBER 2021

Atte	ndee	Purpose of Travel - Location	Event Dates	Travel Status
Alaı	n Be	ernstein		
Α	1	Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY	08/22/2021 - 08/24/2021	Attended
	2	Edu - 2021 SuperReturn North America - Boston, MA	10/04/2021 - 10/05/2021	Attended
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
Vivi	ian (Gray		
A	1	Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY	08/22/2021 - 08/24/2021	Attended
V	-	Edu - Congressional Black Caucus Foundation - VIRTUAL	09/12/2021 - 09/17/2021	Attended
	-	Edu - Private Credit Outlook: Key Trends and the Road Ahead - VIRTUAL	09/16/2021 - 09/16/2021	Attended
	-	Edu - NASP 32nd Annual Financial Services Virtual Conference - VIRTUAL	09/22/2021 - 09/24/2021	Attended
Dav	id G	Green		
X	-	Edu - 2021 CII Fall Conference - Chicago, IL	09/22/2021 - 09/24/2021	Host Canceled
Eliz	abe	th Greenwood		
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
Pati	rick	Jones		
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
V	-	Edu -SACRS Public Pension Investment Management Program - VIRTUAL	07/13/2021 - 07/22/2021	Attended
	-	Edu - Harvard Kennedy School Executive Education: Leading Smart Policy Design: A Multisectoral Approach to Economic Decisions - VIRTUAL	09/21/2021 - 10/12/2021	Attended
X	-	Edu - Duke University Executive Education Program - Corporate Social Responsibility - Durham, NC	09/23/2021 - 09/25/2021	Host Canceled
Sha	wn	Kehoe		
X	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Canceled
Jos	eph	Kelly		
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
V	-	Edu -SACRS Public Pension Investment Management Program - VIRTUAL	07/13/2021 - 07/22/2021	Attended
	-	Edu - Private Credit Outlook: Key Trends and the Road Ahead - VIRTUAL	09/16/2021 - 09/16/2021	Attended
	-	Edu - Pugh Capital 30th Anniversary Virtual Event Series - VIRTUAL	09/22/2021 - 09/22/2021	Attended
	-	Edu - 2021 Institute of Internal Auditors Los Angeles Conference: Governance, Grit and Gravitas - VIRTUAL	10/04/2021 - 10/06/2021	Attended
Keit	th K	nox		
V	-	Edu - Harvard Business School Audit Committees In A New Era of Governance - VIRTUAL	07/21/2021 - 07/23/2021	Attended
		Edu - Pugh Capital 30th Anniversary Virtual Event Series - VIRTUAL	09/22/2021 - 09/22/2021	Attended
Way	yne	Moore		
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended

Printed: 11/12/2021 1 of 2





TRUSTEE TRAVEL AND EDUCATION REPORT **FOR FISCAL YEAR 2021 - 2022 OCTOBER 2021**

Atter	ndee	Purpose of Travel - Location	Event Dates	Travel Status
Les	Ro	bbins		
V	-	Edu - CALAPRS Trustees Roundtable - VIRTUAL	10/29/2021 - 10/29/2021	Attended
Gina	a Sa	anchez		
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
V	-	Edu - 2021 CII Fall Conference - VIRTUAL	09/22/2021 - 09/24/2021	Attended
	-	Edu - 2021 Virtual NACD Summit - VIRTUAL	10/04/2021 - 10/08/2021	Attended
	-	Edu - PRI Roundtable: The Road to Net-Zero with Ophir Bruck - VIRTUAL	10/12/2021 - 10/12/2021	Attended
	-	Edu - PRI Roundtable: Equity, Diversity & Inclusion with Ophir Bruck - VIRTUAL	10/14/2021 - 10/14/2021	Attended
	-	Edu - CALAPRS Trustees Roundtable - VIRTUAL	10/29/2021 - 10/29/2021	Attended
Х	-	Edu - 2021 CII Fall Conference - Chicago, IL	09/22/2021 - 09/24/2021	Host Canceled
Heri	mar	n Santos		
A	1	Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY	08/22/2021 - 08/24/2021	Attended
В	-	Edu - 2021 Milken Institute Global Conference - Los Angeles, CA	10/17/2021 - 10/20/2021	Attended
	-	Edu - PPI Asia Pacific Roundtable - Pasadena CA	10/27/2021 - 10/29/2021	Attended
V	-	Edu - PPI Roundtable - July 2021 - VIRTUAL	07/13/2021 - 07/15/2021	Attended
	-	Edu - Private Credit Outlook: Key Trends and the Road Ahead - VIRTUAL	09/16/2021 - 09/16/2021	Attended

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FOR INFORMATION ONLY

November 17, 2021

TO: Trustees

Board of Retirement Board of Investments

FROM: Ted Granger

Interim Chief Financial Officer

FOR: December 1, 2021 Board of Retirement Meeting

December 8, 2021 Board of Investments Meeting

SUBJECT: 1ST QUARTER TRUSTEE TRAVEL & EDUCATION REPORTS

Attached for your review is the Trustee Travel & Education Report which includes expenses submitted for reimbursement, paid, or credited relating to events beginning July 1, 2021 through September 30, 2022.

In addition, the Trustee Cancellation & Credit Expenditures Report for Fiscal Years 2020-2021 and 2021-2022 are attached for your reference.

REVIEWED AND APPROVED:

Santos H. Kreimann Chief Executive Officer

Ator M. Thema

TG/EW/krh

Attachments

c: L. Lugo

J. Popowich

L. Guglielmo

J. Grabel

S. Rice

J. Beasley





1ST QUARTER BOARD TRUSTEE TRAVEL AND EDUCATION EXPENDITURE REPORT FOR FISCAL YEAR 2022 FOR EVENTS DURING JULY 2021 - SEPTEMBER 2021

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Alan	Bernstein												
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY - 08/22/2021 - 08/24/2021	Attended	\$3,684.58	\$685.00	\$529.83	\$1,922.40	\$348.35	\$0.00	\$0.00	\$0.00	\$0.00	\$157.00	\$42.00
	Totals for Ala	ın Bernstein:	\$3,684.58	\$685.00	\$529.83	\$1,922.40	\$348.35	\$0.00	\$0.00	\$0.00	\$0.00	\$157.00	\$42.00
Vivia	an Gray												
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY - 08/22/2021 - 08/24/2021	Attended	\$3,569.08	\$685.00	\$529.83	\$1,810.81	\$149.44	\$0.00	\$0.00	\$0.00	\$0.00	\$195.00	\$199.00
V -	Edu - NASP 32nd Annual Financial Services Virtual Conference - VIRTUAL 09/22/2021 - 09/24/2021	Attended	\$75.00	\$75.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for	Vivian Gray:	\$3,644.08	\$760.00	\$529.83	\$1,810.81	\$149.44	\$0.00	\$0.00	\$0.00	\$0.00	\$195.00	\$199.00
Davi	d Green												
Х -	Edu - 2021 CII Fall Conference - Chicago, IL - 09/22/2021 - 09/24/2021	Host Canceled	\$130.33	\$0.00	\$0.00	\$130.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for I	David Green:	\$130.33	\$0.00	\$0.00	\$130.33	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Patr	ick Jones												
V -	Edu -SACRS Public Pension Investment Management Program - VIRTUAL - 07/13/2021 - 07/22/2021	Attended	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for Pa	atrick Jones:	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

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1ST QUARTER BOARD TRUSTEE TRAVEL AND EDUCATION EXPENDITURE **REPORT FOR FISCAL YEAR 2022** FOR EVENTS DURING JULY 2021 - SEPTEMBER 2021

Cat	Purpose of Travel - Location - Travel Dates	Travel Status	Total Expense	Registration	Lodging	Airfare	Ground Transp.	Mileage	Porterage	Parking	Meals	Per Diem	Misc.
Jose	eph Kelly												
V -	Edu -SACRS Public Pension Investment Management Program - VIRTUAL - 07/13/2021 - 07/22/2021	Attended	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for Jo	seph Kelly:	\$500.00	\$500.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Keit	h Knox												
V -	Edu - Harvard Business School Audit Committees In A New Era of Governance - VIRTUAL - 07/21/2021 - 07/23/2021	Attended	\$5,700.00	\$5,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for	Keith Knox:	\$5,700.00	\$5,700.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Hern	man Santos												
A	1 Edu - NCPERS 2021 Public Pension Funding Forum - New York, NY - 08/22/2021 - 08/24/2021	Attended	\$2,709.58	\$685.00	\$706.45	\$503.40	\$160.99	\$84.00	\$0.00	\$160.00	\$0.00	\$263.00	\$146.74
٧ -	Edu - PPI Roundtable - July 2021 - VIRTUAL - 07/13/2021 - 07/15/2021	Attended	\$175.00	\$175.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Totals for Herr	nan Santos:	\$2,884.58	\$860.00	\$706.45	\$503.40	\$160.99	\$84.00	\$0.00	\$160.00	\$0.00	\$263.00	\$146.74
	G	rand Totals:	\$17,043.57	\$9,005.00	\$1,766.11	\$4,366.94	\$658.78	\$84.00	\$0.00	\$160.00	\$0.00	\$615.00	\$387.74

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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 Expiration	Refund Pending
Alan Bernstein												
Edu - SuperReturn International Berlin - Berlin, Germany - 11/09/2021 - 11/12/2021 - Canceled	Х	\$375.02	\$375.02	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$375.02
	Attendee Totals	: \$375.02	\$375.02	\$0.00	\$0.00	\$0.00		\$0.00		\$0.00		\$375.02
David Green												
Edu - 2021 CII Fall Conference - Chicago, IL - 09/22/2021 - 09/24/2021 - Host Canceled	Х	\$130.33	\$0.00	\$0.00	\$130.33	\$0.00	Yes	\$0.00		\$256.80	7/27/2022	\$0.00
	Attendee Totals	: \$130.33	\$0.00	\$0.00	\$130.33	\$0.00		\$0.00		\$256.80		\$0.00
Patrick Jones												
Edu - Duke University Executive Education Program - Corporate Social Responsibility - Durham, NC - 09/23/2021 - 09/25/2021 - Host Canceled	Х	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80	12/31/2021	\$0.00
	Attendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80		\$0.00
	Attendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00		\$616.80		\$0.00
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled	Х	\$23.96	\$0.00	\$0.00 \$23.96	\$0.00 \$0.00	\$0.00 \$0.00	Yes	\$0.00		\$616.80 \$0.00		\$0.00
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/202	Х						Yes Yes					
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/202 Canceled	Х	\$23.96 \$120.00	\$0.00	\$23.96	\$0.00	\$0.00		\$0.00		\$0.00		\$0.00
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/202: Canceled	X 1 - X	\$23.96 \$120.00	\$0.00 \$120.00	\$23.96 \$0.00	\$0.00	\$0.00		\$0.00		\$0.00 \$0.00		\$0.00
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/202 Canceled	X 1 - X	\$23.96 \$120.00	\$0.00 \$120.00	\$23.96 \$0.00	\$0.00	\$0.00		\$0.00		\$0.00 \$0.00 \$0.00	7/27/2022	\$0.00
Shawn Kehoe Edu - 2021 Milken Institute Global Conference - Los Angeles, CA - 10/17/2021 - 10/20/2021 - Canceled Edu - SACRS Fall Conference - Los Angeles CA - 11/09/2021 - 11/12/202: Canceled Gina Sanchez Edu - 2021 CII Fall Conference - Chicago, IL - 09/22/2021 - 09/24/2021 - Host Canceled	X 1 - X Attendee Totals	\$23.96 \$120.00 : \$143.96	\$0.00 \$120.00 \$120.00	\$23.96 \$0.00 \$23.96	\$0.00 \$0.00 \$0.00	\$0.00 \$0.00 \$0.00		\$0.00 \$0.00 \$0.00		\$0.00 \$0.00 \$0.00	7/27/2022	\$0.00 \$0.00 \$0.00

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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. Reg. Cred Credit Expiration Date		Airfare Credit Expiration	Refund Pending
Alan Bernstein											
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
A	tendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
Vivian Gray											
Edu - CII & NYU Corporate Governance Bootcamp - VIRTUAL -9/23/2020 - 9/25/2020 - Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
A	tendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
Shawn Kehoe											
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	Z	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
A	tendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	\$0.00		\$0.00
Les Robbins											
Edu - IFEBP 66th Annual Employee Benefits Conference - Honolulu HI - 11/15/2020 - 11/18/2020 - Host Canceled	Х	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00 12/31/202	\$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
A	tendee Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00	\$0.00		\$0.00
	Grand Totals	: \$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$2,125.00	\$0.00		\$0.00

Category Legend:

- X Canceled events for which expenses have been incurred.
- Z Trip was Canceled Balance of \$0.00