LACERS
LA CITY EMPLOYEES' RETIREMENT SYSTEM

Board of Administration Agenda

REGULAR MEETING

TUESDAY, MARCH 22, 2022

TIME: 10:00 A.M.

MEETING LOCATION:

In accordance with Government Code Section 54953, subsections (e)(1) and (e)(3), and in light of the State of Emergency proclaimed by the Governor on March 4, 2020 relating to COVID-19 and ongoing concerns that meeting in person would present imminent risks to the health or safety of attendees and/or that the State of Emergency continues to directly impact the ability of members to meet safely in person, the LACERS Board of Administration's March 22, 2022 meeting will be conducted via telephone and/or videoconferencing.

Important Message to the Public

Information to call-in to listen and or participate:
Dial: (669) 254-5252 or (669) 216-1590
Meeting ID# 161 845 4529

Instructions for call-in participants:

1- Dial in and enter Meeting ID
2- Automatically enter virtual "Waiting Room"
3- Automatically enter Meeting
4- During Public Comment, **press *9** to raise hand
5- Staff will call out the last 3-digits of your phone number to make your comment

Information to listen only: Live Board Meetings can be heard at: (213) 621-CITY (Metro), (818) 904-9450 (Valley), (310) 471-CITY (Westside), and (310) 547-CITY (San Pedro Area).

Notice to Paid Representatives

If you are compensated to monitor, attend, or speak at this meeting, City law may require you to register as a lobbyist and report your activity. See Los Angeles Municipal Code §§ 48.01 *et seq*. More information is available at ethics.lacity.org/lobbying. For assistance, please contact the Ethics Commission at (213) 978-1960 or ethics.commission@lacity.org.

Request for Services

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, Telecommunication Relay Services (TRS), or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, five or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at ***(213) 855-9348*** and/or email at ***ani.ghoukassian@lacers.org***.

Disclaimer to Participants

Please be advised that all LACERS Board and Committee Meeting proceedings are audio recorded.

CLICK HERE TO ACCESS BOARD REPORTS

I. PUBLIC COMMENTS AND GENERAL PUBLIC COMMENTS ON MATTERS WITHIN THE BOARD'S JURISDICTION AND COMMENTS ON ANY SPECIFIC MATTERS ON THE AGENDA – *THIS WILL BE THE ONLY OPPORTUNITY FOR PUBLIC COMMENT* - **PRESS *9 TO RAISE HAND DURING PUBLIC COMMENT PERIOD**

II. APPROVAL OF MINUTES FOR THE MEETING OF FEBRUARY 22, 2022 AND POSSIBLE BOARD ACTION

III. BOARD PRESIDENT VERBAL REPORT

IV. GENERAL MANAGER VERBAL REPORT

A. REPORT ON DEPARTMENT OPERATIONS

B. UPCOMING AGENDA ITEMS

V. RECEIVE AND FILE ITEMS

A. MONTHLY REPORT ON SEMINARS AND CONFERENCES FOR FEBRUARY 2022

VI. COMMITTEE REPORT(S)

A. INVESTMENT COMMITTEE VERBAL REPORT FOR THE MEETING ON MARCH 8, 2022

B. BENEFITS ADMINISTRATION COMMITTEE VERBAL REPORT FOR THE MEETING ON MARCH 22, 2022

VII. BOARD/DEPARTMENT ADMINISTRATION

A. FINDINGS TO CONTINUE TELECONFERENCE MEETINGS AND DETERMINATION THAT COVID-19 STATE OF EMERGENCY CONTINUES TO DIRECTLY IMPACT THE ABILITY OF MEMBERS TO MEET SAFELY IN PERSON AND POSSIBLE BOARD ACTION

B. ACTUARIAL RISK ASSESSMENT AND REVIEW OF FUNDED STATUS OF THE RETIREMENT AND HEALTH PLANS AS OF JUNE 30, 2021

C. PRELIMINARY PROPOSED BUDGET, PERSONNEL, AND ANNUAL RESOLUTIONS FOR FISCAL YEAR 2022-23 AND POSSIBLE BOARD ACTION

D. FAMILY DEATH BENEFIT PLAN – CONSIDERATION OF BENEFIT PAYABLE ON BEHALF OF DECEASED ADULT DISABLED CHILD ABBY MARIA FRANCES BANAS AND POSSIBLE BOARD ACTION

VIII. INVESTMENTS

A. CHIEF INVESTMENT OFFICER VERBAL REPORT INCLUDING DISCUSSION ON THE PORTFOLIO EXPOSURE TO GLOBAL EVENTS

B. PRESENTATION BY NEPC, LLC OF THE PORTFOLIO PERFORMANCE REVIEW FOR THE QUARTER ENDING DECEMBER 31, 2021

C. PRIVATE EQUITY AND REAL ESTATE INVESTMENT POLICIES AND POSSIBLE BOARD ACTION

D. U.S. SECURITIES AND EXCHANGE COMMISSION'S PROPOSED RULES ON PRIVATE FUND ADVISERS AND POSSIBLE BOARD ACTION

IX. OTHER BUSINESS

X. NEXT MEETING: The next Regular meeting of the Board is scheduled for Tuesday, April 12, 2022 at 10:00 a.m. at LACERS, 202 West 1st Street, Suite 500, Los Angeles, CA 90012, and/or via telephone and/or videoconferencing. Please continue to view the LACERS website for updated information on public access to Board meetings while response to public health concerns relating to the novel coronavirus continue.

XI. ADJOURNMENT

Agenda of:	**Mar. 22, 2022**
Item No:	**II**

MINUTES OF THE REGULAR MEETING
BOARD OF ADMINISTRATION
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

In accordance with Government Code Section 54953, subsections (e)(1) and (e)(3), and in light of the State of Emergency proclaimed by the Governor on March 4, 2020 relating to COVID-19 and ongoing concerns that meeting in person would present imminent risks to the health or safety of attendees and/or that the State of Emergency continues to directly impact the ability of members to meet safely in person, the LACERS Board of Administration’s February 22, 2022 meeting will be conducted via telephone and/or videoconferencing.

February 22, 2022

10:05 a.m.

PRESENT via Videoconferencing:	President:	Cynthia M. Ruiz
	Vice President:	Sung Won Sohn
	Commissioners:	Annie Chao Elizabeth Lee Nilza R. Serrano Michael R. Wilkinson
	Manager-Secretary:	Neil M. Guglielmo
	Legal Counselor:	Anya Freedman
	Executive Assistant:	Ani Ghoukassian
ABSENT:	Commissioner:	Sandra Lee

The Items in the Minutes are numbered to correspond with the Agenda.

I

PUBLIC COMMENTS AND GENERAL PUBLIC COMMENTS ON MATTERS WITHIN THE BOARD’S JURISDICTION AND COMMENTS ON ANY SPECIFIC MATTERS ON THE AGENDA – *THIS WILL BE THE ONLY OPPORTUNITY FOR PUBLIC COMMENT* – **PRESS *9 TO RAISE HAND DURING PUBLIC COMMENT PERIOD** – President Ruiz asked if any persons wanted to make a general public comment to which there were no responses.

II

APPROVAL OF MINUTES FOR THE MEETING OF JANUARY 25, 2022 AND POSSIBLE BOARD ACTION – Commissioner Serrano moved approval, seconded by Commissioner Chao, and adopted by the following vote: Ayes, Commissioners Chao, Serrano, Wilkinson, Vice President Sohn, and President Ruiz -5; Abstain, Commissioner Elizabeth Lee -1.

III

BOARD PRESIDENT VERBAL REPORT – President Ruiz recognized the turning point in this date and time.

IV

GENERAL MANAGER VERBAL REPORT

A. REPORT ON DEPARTMENT OPERATIONS – Neil M. Guglielmo, General Manager, advised the Board of the following items:

- Onni/Building Access
- Regulation-4 Fire Life Safety testing at Onni Times Square property
- Diversity, Equity and Inclusion (DEI) Initiative
- Strategic Planning Workshop
- LACERS Symposium
- 977 Broadway Building Construction updates
- Health and Welfare Consultant RFP
- Member Communication Statistics
- Top 5 Member inquiries
- Website Statistics for February 2-15, 2022
- LACERS YouTube channel update
- Upcoming events: Seminars & Demos, Aging Mastery Program
- Upcoming March Wellness events: Mom's Computer Technology Class, Fitness Made Simple Exercise Class, Brain Health Class

B. UPCOMING AGENDA ITEMS – Neil M. Guglielmo, General Manager, advised the Board of the following item:

- March Benefits Administration Committee – Open Enrollment Closeout Report

V

RECEIVE AND FILE ITEMS

A. MONTHLY REPORT ON SEMINARS AND CONFERENCES FOR DECEMBER 2021 – This report was received by the Board and filed.

VI

COMMITTEE REPORT(S)

A. INVESTMENT COMMITTEE MEETING VERBAL REPORT FOR THE MEETING ON FEBRUARY 8, 2022 – Commissioner Serrano stated the Committee heard a presentation by Copeland Capital Management, LLC and approved the Investment manager contract with MFS Institutional Advisors, Inc., Real Estate Consulting Services contract with Townsend Holdings

LLC, and the semi-finalists of the Passive U.S., Non-U.S., and Global Index Strategies Request for Proposal.

B. BENEFITS ADMINISTRATION COMMITTEE VERBAL REPORT FOR THE MEETING ON FEBRUARY 22, 2022 – This item was deferred to the next Board Meeting.

VII

BOARD/DEPARTMENT ADMINISTRATION

A. UPDATE TO GENERAL MANAGER DESIGNEE SIGNATURE AUTHORITY AND POSSIBLE BOARD ACTION – Commissioner Wilkinson moved approval of the following Resolution:

SIGNATURE AUTHORITY
FOR GENERAL MANAGER DESIGNEES

RESOLUTION 220222-A

WHEREAS, the Board may delegate authority to the necessary deputies, assistants, and employees of the department and define their duties under Los Angeles City Charter (LACC) Section 511(a); and

WHEREAS, the General Manager is authorized under LACC Section 509 to administer the affairs of the department as its Chief Administrative Officer; and,

WHEREAS, the General Manager determines it is in the best interest of the department to ensure department business is transacted expeditiously on occasions when they are absent or unable to act through the assignment of signature authorities over specific areas of expertise;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the signature authority resolution for the General Manager designees. If practicable, designees shall seek verbal concurrence from the General Manager. Authority is assigned to the position, rather than the individual. This resolution shall be endorsed by the designees and should there be a change in personnel, a new endorsement certificate may be made and kept on file in the Board office; filed with any other necessary office of City government; or any agencies involved in processing LACERS' investment transactions and custodial responsibilities for the securities of LACERS. The proposed resolution will supersede any previously adopted resolutions related to General Manager Designee signature authority and is effective upon adoption.

1. Assistant General Manager(s) – for the approval of contracts in compliance with the contracting limitations established in the LACC; approval of expenditures; and approval of benefit payments and related transactions;

2. Chief Management Analyst of Administration Division (AD) – for the approval of contracts in compliance with the contracting limitations established in the LACC; for the approval of service purchase contracts, certifications of service, and related transactions, and approval of expenditures within the authorized AD budget and Performance Management Office. The Chief Management Analyst may delegate to the Senior Management Analysts I and II in the Administrative Services Office the approval of expenditures within the established thresholds specified in the memorandum submitted to the Chief Accounting Employee of LACERS.

3. Chief Benefits Analyst of Health, Wellness, and Buyback Division (HWABD) – for the approval of benefit payments and related transactions; and approval of expenditures within the authorized HWABD budget. The Chief Benefits Analyst may delegate to the Senior Benefits Analysts I and II in the Health, Wellness, and Buyback Division's the approval of expenditures within the established thresholds specified in the memorandum submitted to the Chief Accounting Employee of LACERS. The Chief Benefits Analyst may further delegate to the Senior Benefits Analysts I and II in the Service Purchase Section the approval and execution of service purchase contracts, certifications of service, and related transactions.

4. Chief Benefits Analyst of Retirement Services Division (RSD) – for the approval of benefit payments and related transactions; and approval of expenditures within the authorized RSD budget. The Chief Benefits Analyst may delegate to the Senior Benefits Analyst IIs in the Retirement Services Division's the approval of expenditures within the established thresholds specified in the memorandum submitted to the Chief Accounting Employee of LACERS.

5. Information Systems Manager – for the approval of expenditures within the authorized Systems Division budget.

6. Chief Investment Officer or Investment Officer III – for the approval of investment transactions required within the scope of the contracts approved by the Board; and approval of expenditures within the authorized Investment Division budget.

7. Member Services Manager – for the approval of expenditures within the authorized Member Services Section budget.

8. Departmental Personnel Director – for the approval of expenditures within the authorized Human Resources budget.

9. Departmental Audit Manager – for the approval of expenditures within the authorized Internal Audit budget.

10. Active Member Accounts & Member Stewardship Unit Manager (AMA-MSU) – for the approval of expenditures within the authorized AMA-MSU budget and the Actuarial program budget.

11. Systems Operations Support Manager (SOS) – for the approval of expenditures within the authorized SOS budget.

Endorsed: ____________________________________

Todd Bouey
Assistant General Manager

Endorsed: ____________________________________

Dale Wong-Nguyen
Assistant General Manager

Endorsed: ____________________________________

Isaias Cantú
Chief Management Analyst of Administration Division

Endorsed: ____
Ferralyn Sneed
Chief Benefits Analyst of Retirement Services Division

Endorsed: ____
Karen Freire
Chief Benefits Analyst of Health, Wellness, and Buyback Division

Endorsed: ____
Rodney June
Chief Investment Officer

Endorsed: ____
Thomas Ma
Information System Manager II

Endorsed: ____
Bryan Fujita
Investment Officer III

Endorsed: ____
Wilkin Ly
Investment Officer III

Endorsed: ____
John Koontz
Senior Management Analyst II

Endorsed: ____
Edeliza Fang
Senior Benefits Analyst II

Endorsed: ____
Ann Seales
Senior Benefits Analyst II

Endorsed: ____
Delia Hernandez
Senior Benefits Analyst II

Endorsed: ____
Taneda Larios
Senior Benefits Analyst II

Endorsed: ____
Lin Lin
Departmental Personnel Director

Endorsed: ______________________________
Melanie Rejuso
Departmental Audit Manager

Endorsed: ______________________________
Edwin Avanessian
Senior Benefits Analyst II

Endorsed: ______________________________
Lauren McCall
Senior Benefits Analyst II

Endorsed: ______________________________
Heather Ramirez
Senior Benefits Analyst I

Endorsed: ______________________________
Horacio Arroyo
Senior Management Analyst I

Which motion was seconded by Commissioner Elizabeth Lee, and adopted by the following vote: Ayes, Commissioners Chao, Elizabeth Lee, Serrano, Wilkinson, Vice President Sohn, and President Ruiz -6; Nays, None.

B. COST-OF-LIVING ADJUSTMENT FOR JULY 2022 AND POSSIBLE BOARD ACTION – Rahoof "Wally" Oyewole, Department Chief Accountant IV, presented and discussed this item with the Board for 10 minutes. Commissioner Elizabeth Lee moved approval, seconded by Commissioner Serrano, and adopted by the following vote: Ayes, Commissioners Chao, Elizabeth Lee, Serrano, Wilkinson, Vice President Sohn, and President Ruiz -6; Nays, None.

VIII

LEGAL/LITIGATION

A. APPROVAL OF ONE-YEAR EXTENSIONS TO OUTSIDE COUNSEL CONTRACTS WITH POLSINELLI LLP AND FOLE & LARDNER LLP FOR HEALTH LAW, DATA PRIVACY, AND CYBERSECURITY AND POSSIBLE BOARD ACTION – Commissioner Wilkinson moved approval, seconded by Commissioner Serrano, and adopted by the following vote: Ayes, Commissioners Chao, Elizabeth Lee, Serrano, Wilkinson, Vice President Sohn, and President Ruiz -6; Nays, None.

IX

INVESTMENTS

A. CHIEF INVESTMENT OFFICER VERBAL REPORT – Rod June, Chief Investment Officer, reported on the portfolio value of $22.97 billion as of February 21, 2022. Mr. June discussed the following items:

- Private Equity actual target has risen to the policy target of 16% because of the drop in total fund value; staff will monitor this situation
- Sonic update: As of November, 58% of the Sonic restaurants have added the tip functionality
- Securities and Exchange Commission is proposing rules to provide improved transparency and accountability of private fund advisers
- Upcoming Agenda Items: Notification of a real estate opportunity

B. INVESTMENT MANAGER CONTRACT WITH MFS INSTITUTIONAL ADVISORS, INC. REGARDING THE MANAGEMENT OF AN ACTIVE NON-U.S. EQUITIES DEVELOPED MARKETS GROWTH PORTFOLIO AND POSSIBLE BOARD ACTION – Commissioner Elizabeth Lee moved approval of the following Resolution:

CONTRACT RENEWAL
MFS INSTITUTIONAL ADVISORS, INC.
ACTIVE NON-U.S. EQUITIES DEVELOPED MARKETS GROWTH
PORTFOLIO MANAGEMENT

<u>RESOLUTION 220222-B</u>

WHEREAS, LACERS' current three-year contract term with MFS Institutional Advisors, Inc. (MFS) for active non-U.S. equities developed markets growth portfolio management expires on September 30, 2022; and,

WHEREAS, MFS is in compliance with the LACERS Manager Monitoring Policy; and,

WHEREAS, a three-year contract renewal with MFS will allow the fund to maintain a diversified exposure to the non-U.S. equities developed markets; and,

WHEREAS, on February 22, 2022, the Board approved the Investment Committee's recommendation to approve a three-year contract renewal.

NOW, THEREFORE, BE IT RESOLVED, that the General Manager is hereby authorized to approve and execute a contract subject to satisfactory business and legal terms and consistent with the following services and terms:

<u>Company Name</u>:	MFS Institutional Advisors, Inc.
<u>Service Provided</u>:	Active Non-U.S. Equities Developed Markets Growth Portfolio Management
<u>Effective Dates</u>:	October 1, 2022 through September 30, 2025
<u>Duration</u>:	Three years
<u>Benchmark</u>:	MSCI World ex-U.S. Growth Index
<u>Allocation as of February 1, 2022</u>:	$590 million

Which motion was seconded by Commissioner Serrano, and adopted by the following vote: Ayes, Commissioners Chao, Elizabeth Lee, Serrano, Wilkinson, Vice President Sohn, and President Ruiz -6; Nays, None.

C. REAL ESTATE CONSULTING CONTRACT WITH TOWNSEND HOLDINGS LLC AND POSSIBLE BOARD ACTION – Commissioner Wilkinson moved approval of the following Resolution:

CONTRACT EXTENSION
TOWNSEND HOLDINGS LLC
REAL ESTATE CONSULTING SERVICES

RESOLUTION 220222-C

WHEREAS, LACERS' current five-year contract with Townsend Holdings LLC (Townsend) for real estate consulting services expires on March 31, 2022; and,

WHEREAS, on August 24, 2021, the Board authorized a request for proposal (RFP) for real estate consulting services in order to test the marketplace; and,

WHEREAS, a one-year contract extension with Townsend will allow for continued consultant oversight of LACERS' real estate portfolio during the RFP process; and,

WHEREAS, on February 22, 2022, the Board approved the Investment Committee's recommendation for a one-year contract extension with Townsend.

NOW, THEREFORE, BE IT RESOLVED, that the General Manager is hereby authorized to approve and execute a contract subject to satisfactory business and legal terms and consistent with the following services and terms:

Company Name:	Townsend Holdings LLC
Services Provided:	Real Estate Consulting Services
Effective Dates:	April 1, 2022 through March 31, 2023
Duration:	One year
Fee:	$215,000

Which motion was seconded by Vice President Sohn, and adopted by the following vote: Ayes, Commissioners Chao, Elizabeth Lee, Serrano, Wilkinson, Vice President Sohn, and President Ruiz - 6; Nays, None.

D. NOTIFICATION OF COMMITMENT OF UP TO $20 MILLION IN BIOSPRING PARTNERS FUND, L.P. – This report was received by the Board and filed.

E. NOTIFICATION OF COMMITMENT OF UP TO $13 MILLION IN GENERAL CATALYST GROUP XI - CREATION, L.P. – This report was received by the Board and filed.

F. NOTIFICATION OF COMMITMENT OF UP TO $18 MILLION IN GENERAL CATALYST GROUP XI - IGNITION, L.P. – This report was received by the Board and filed.

G. NOTIFICATION OF COMMITMENT OF UP TO $44 MILLION IN GENERAL CATALYST GROUP XI - ENDURANCE, L.P. – This report was received by the Board and filed.

H. NOTIFICATION OF COMMITMENT OF UP TO $16.660 MILLION IN SPARK CAPITAL VII, L.P. – This report was received by the Board and filed.

I. NOTIFICATION OF COMMITMENT OF UP TO $33.340 MILLION IN SPARK CAPITAL GROWTH FUND IV, L.P. – This report was received by the Board and filed.

J. NOTIFICATION OF COMMITMENT OF UP TO $20 MILLION IN DEFY PARTNERS III, L.P. – This report was received by the Board and filed.

K. NOTIFICATION OF COMMITMENT OF UP TO $50 MILLION IN HARVEST PARTNERS IX, L.P. – This report was received by the Board and filed.

L. NOTIFICATION OF COMMITMENT OF UP TO $50 MILLION IN REVERENCE CAPITAL PARTNERS OPPORTUNITIES FUND V (PE FUND III), L.P. – This report was received by the Board and filed.

M. NOTIFICATION OF COMMITMENT OF UP TO $50 MILLION IN ARSENAL CAPITAL PARTNERS VI LP – This report was received by the Board and filed.

N. NOTIFICATION OF COMMITMENT OF UP TO $40 MILLION IN NEW ENTERPRISE ASSOCIATES 18, L.P. – This report was received by the Board and filed.

O. NOTIFICATION OF COMMITMENT OF UP TO $35 MILLION IN NEA 18 VENTURE GROWTH EQUITY, L.P. – This report was received by the Board and filed.

President Ruiz recessed the Regular Meeting at 10:54 a.m. to convene in Closed Session.

P. CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54956.81 TO CONSIDER A COMMITMENT TO TPG REAL ESTATE PARTNERS IV, L.P. AND POSSIBLE BOARD ACTION

President Ruiz reconvened the Regular Meeting at 11:03 a.m.

X

OTHER BUSINESS – There was no other business.

XI

NEXT MEETING: The next Regular meeting of the Board is scheduled for Tuesday, March 8, 2022, at 10:00 a.m. at LACERS, 202 W. 1st Street, Suite 500, Los Angeles, CA 90012, and/or via telephone and/or videoconferencing. Please continue to view the LACERS website for updated information on public access to Board meetings while response to public health concerns relating to the novel coronavirus continue.

XII

ADJOURNMENT – There being no further business before the Board, President Ruiz adjourned the Meeting at 11:04 a.m.

Cynthia M. Ruiz
President

Neil M. Guglielmo
Manager-Secretary

Agenda of:	MAR. 22, 2022
Item No:	V-A

MONTHLY REPORT ON SEMINARS AND CONFERENCES ATTENDED BY BOARD MEMBERS ON BEHALF OF LACERS (FOR THE MONTH OF FEBRUARY 2022)

In accordance with Section V.H.2 of the approved Board Education and Travel Policy, Board Members are required to report to the Board, on a monthly basis at the last Board meeting of each month, seminars and conferences they attended as a LACERS representative or in the capacity of a LACERS Board Member which are either complimentary (no cost involved) or with expenses fully covered by the Board Member. This monthly report shall include all seminars and conferences attended during the 4-week period preceding the Board meeting wherein the report is to be presented.

BOARD MEMBER:

Commissioner Michael R. Wilkinson

DATE(S) OF EVENT	SEMINAR / CONFERENCE TITLE	EVENT SPONSOR (ORGANIZATION)	LOCATION (CITY, STATE)
February 15, 2022	**NCPERS – 2021 Public Retirement Systems Study & Its Dashboard**	NCPERS	Virtual
February 17, 2022	**MSCI/PREA U.S. Quarterly Property Fund Index Q4, 2021**	MSCI/PREA	Virtual

LACERS
LA CITY EMPLOYEES'
RETIREMENT SYSTEM

REPORT TO BOARD OF ADMINISTRATION | **MEETING: MARCH 22, 2022**
From: Neil M. Guglielmo, General Manager | **ITEM: VII-A**

SUBJECT: **FINDINGS TO CONTINUE TELECONFERENCE MEETINGS AND DETERMINATION THAT COVID-19 STATE OF EMERGENCY CONTINUES TO DIRECTLY IMPACT THE ABILITY OF MEMBERS TO MEET SAFELY IN PERSON AND POSSIBLE BOARD ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Board approve continuing to hold LACERS Board and Committee meetings via teleconference and/or videoconference, under Government Code Sections 54953(e)(1)(B)-(C) and 54953(e)(3)(A) and (B)(i).

Discussion

LACERS is committed to preserving public access and participation in meetings of the Board of Administration. All LACERS Board and Committee meetings are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend and participate as the LACERS Board and Committees conduct their business. The Brown Act, Government Code Section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, subject to the existence of certain conditions. The COVID-19 State of Emergency proclaimed by the Governor on March 4, 2020 remains active: COVID-19 remains a public health concern in Los Angeles, with substantial levels of community transmission.

The Board met via teleconference on October 12, 2021, and determined by majority vote, pursuant to Government Code Section 54953(e)(1)(B)-(C), that due to the COVID-19 State of Emergency, meeting in person would present imminent risks to the health or safety of attendees.

Strategic Plan Impact Statement

The Board's action on this item aligns with the LACERS Strategic Plan Goal to uphold good governance practices which affirm transparency, accountability, and fiduciary duty.

Prepared By: Ani Ghoukassian, Commission Executive Assistant II

Attachment: Proposed Resolution

Board Meeting: 03/22/22
Item: VII-A
Attachment

CONTINUE HOLDING LACERS BOARD AND COMMITTEE MEETINGS
VIA TELECONFERENCE AND/OR VIDEOCONFERENCE

PROPOSED RESOLUTION

WHEREAS, LACERS is committed to preserving public access and participation in meetings of the Board of Administration; and

WHEREAS, all LACERS Board and Committee meetings are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend and participate as the LACERS Board and Committees conduct their business; and

WHEREAS, the Brown Act, Government Code Section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, subject to the existence of certain conditions; and

WHEREAS, the COVID-19 State of Emergency proclaimed by the Governor on March 4, 2020 remains active; and

WHEREAS, on October 12, 2021, the Board met via teleconference and determined by majority vote, pursuant to Government Code Section 54953(e)(1)(B)-(C), that due to the COVID-19 State of Emergency, meeting in person would present imminent risks to the health or safety of attendees; and

WHEREAS, the Board has reconsidered the circumstances of the State of Emergency; and

WHEREAS, COVID-19 remains a public health concern in Los Angeles, with substantial levels of community transmission;

NOW THEREFORE, BE IT RESOLVED that pursuant to Government Code Section 54953(e)(1)(B)-(C), the Board finds that holding Board and Committee meetings in person would present imminent risks to the health or safety of attendees.

BE IT FURTHER RESOLVED that pursuant to Government Code Section 54953(e)(3)(A) and (B)(i), the Board finds that the COVID-19 State of Emergency continues to directly impact the ability of Board and Committee members to meet safely in person.

REPORT TO BOARD OF ADMINISTRATION **MEETING: MARCH 22, 2022**
From: Neil M. Guglielmo, General Manager **ITEM: VII - B**

SUBJECT: **ACTUARIAL RISK ASSESSMENT AND REVIEW OF FUNDED STATUS OF THE RETIREMENT AND HEALTH PLANS AS OF JUNE 30, 2021**

ACTION: ☐ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☒

Recommendation

That the Board receive and file this report.

Executive Summary

LACERS' consulting actuary, Segal, prepared and is presenting to the Board of Administration (Board) the LACERS Risk Assessment and Review of Funded Status of the Retirement and Health Plans as of June 30, 2021 (Actuarial Risk Assessment Report). The purpose of the Actuarial Risk Assessment Report is to assist the Board, the City Employer, Members, and other stakeholders to better understand and assess the risk profile of the Retirement System, as well as the particular risks inherent in using a fixed set of actuarial assumptions in preparing the results of the June 30, 2021 Actuarial Funding Valuations.

This is the third year that Segal is assessing and disclosing risk associated with measuring pension obligations and determining pension plan contributions pursuant to Actuarial Standard of Practice (ASOP) No. 51, inclusive of both the Retirement and the Health Plans. This Actuarial Risk Assessment Report expands upon the Risk Assessment section reported in the June 30, 2021 Actuarial Valuation. Although ASOP 51 does not apply to Other Post-Employment Benefits, the same types of information and analysis are applicable and thus LACERS' Management has requested inclusion of the Health Plan in this report.

This report illustrates how favorable and unfavorable economic and demographic experience have impacted the funded status, Unfunded Actuarial Accrued Liabilities, and the employer contribution rates over the past ten years, as well as provides deterministic projections of these factors based on hypothetical investment experience (i.e., 14.00%, 0.00%, and the assumed 7.00%) on June 30, 2021. The Board's decisions on the Actuarial assumptions and the Actuarial Funding Policy affect these factors. Segal has also included a stochastic projection of future market returns to show the range of possible changes in funded status and contribution rates for the next 20 years.

Andy Yeung and Todd Tauzer of Segal will be presenting the Actuarial Risk Assessment Report to the Board.

Strategic Plan Impact Statement

LACERS Actuarial Risk Assessment report and review of the funded status of the Retirement and Health Plans will help the Board, our Members, and other stakeholders gain a better understanding of the risk profile of the System. This report and review conform to LACERS' Strategic Plan Goal 5, Governance, to uphold good governance practices which affirm transparency, accountability, and fiduciary duty.

Prepared By: Alexander Lombardo, Benefits Analyst

TB/EA/AL

Attachments: LACERS Risk Assessment Including Review of Funded Status of the Retirement and Health Plans as of June 30, 2021

Board Meeting: 3/22/2022
Item: VII-B
ATTACHMENT

Los Angeles City Employees' Retirement System

Risk Assessment

Including Review of Funded Status of the Retirement and Health Plans as of June 30, 2021

March 3, 2022

Paul Angelo, FSA, MAAA, FCA, EA
Andy Yeung, ASA, MAAA, FCA, EA
Todd Tauzer, FSA, MAAA, FCA, CERA

Segal

Table of Contents

Section 1: Introduction and Executive Summary

Introduction

The purpose of this report is to assist the Board of Administration,[1] participating employers and members and other stakeholders to better understand and assess the risk profile of the Los Angeles City Employees' Retirement System (LACERS), as well as the particular risks inherent in using a fixed set of actuarial assumptions in preparing the results in our June 30, 2021 funding valuations for LACERS.

The results included in our June 30, 2021 funding valuation reports for the Retirement and Health Plans were prepared based on a fixed set of economic and non-economic actuarial assumptions under the premise that future experience of LACERS would be consistent with those assumptions. While those assumptions are generally reviewed every three years (with the assumptions from the last triennial experience study adopted by the Board of Administration for use starting with the June 30, 2020 valuation), there is a risk that emerging results may differ significantly as actual experience is fluid and will not completely track current assumptions.

It is important to note that this risk assessment is based on plan assets as of June 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the Plan Year. Moreover, this risk assessment does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2021. While it is impossible to determine how the pandemic will affect market conditions and other demographic experience of the plan in future valuations, the single year investment return scenario test included within this report provides an illustration of the impact of short-term market fluctuations on the plan. In addition to the stochastic projections prepared for the next 20 years, Segal is available to prepare other projections of selected potential outcome scenarios upon request.

Actuarial Standard of Practice on Risk Assessment

The Actuarial Standards Board approved the Actuarial Standard of Practice No. 51 (ASOP 51) regarding risk assessment when performing a funding valuation and it was effective with LACERS' June 30, 2019 actuarial valuation for benefits

1 This risk report has been prepared at the request of the Board of Administration to assist in administering the Fund. This risk report may not otherwise be copied or reproduced in any form without the consent of the Board of Administration and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this risk report may not be applicable for other purposes.

provided by the Retirement Plan.[2] ASOP 51 requires actuaries to identify and assess risks that "may reasonably be anticipated to significantly affect the plan's future financial condition." Examples of key risks listed that are particularly relevant to LACERS are asset/liability mismatch risk, investment risk, and longevity and other demographic risks. The Standard also requires an actuary to consider if there is any ongoing contribution risk to the plan; however, it does not require the actuary to evaluate the particular ability or willingness of contributing entities to make contributions when due, nor does it require the actuary to assess the likelihood or consequences of future changes in applicable law.

The actuary's initial assessment can be strictly a qualitative discussion about potential adverse experience and the possible effect on future results, but it may also include quantitative numerical demonstrations where informative. The actuary is also encouraged to consider a recommendation as to whether a more detailed risk assessment would be significantly beneficial for the intended user in order to examine particular financial risks. When making that recommendation, the actuary will take into account such factors as the plan's design, risk profile, maturity, size, funded status, asset allocation, cash flow, possible insolvency and current market conditions. This report incorporates a more detailed risk assessment as agreed upon with LACERS.

Plan Risk Assessment

In Section 2, we start by discussing some of the historical factors that have caused changes in LACERS' funded status and employer contribution rates. It is important to understand how the combination of decisions and experience has led to the current financial status of the plan.

We follow this with a discussion of the most significant risk factors going forward. Even though we have not included a numerical analysis of all the risk factors, based on our discussions with LACERS we have illustrated the impact on the funded status and employer contribution rates using relevant economic scenario tests. These tests illustrate the effect of future investment returns on the System's portfolio coming in differently from the current 7.00% annual investment return assumption used in the June 30, 2021 valuations. We have also included a projection of future results based on a stochastic modeling of future investment returns for 2021/2022 and thereafter. The stochastic modeling is useful for assessing the distribution of future results based on random variations in actual investment returns each year, and introduces a relative likelihood for the range of potential outcomes.

The Standard also requires disclosure of plan maturity measures and other historical information that are significant to understanding the risks associated with the Retirement and Health Plans and this information is included in this report.

[2] ASOP 51 does not actually apply to actuaries performing services related to other post-employment benefits; however, as the same kind of information is useful for the administration of the Health Plan, after discussions with LACERS the System has requested Segal to include information on the Health Plan in this risk report.

Executive Summary

Historical Funded Status and Employer Contribution Rates

The following table provides a summary of financial changes to the Retirement and Health Plans over the last 10 valuations by showing the beginning and ending year results over that period. The full set of results for each of the 10 years is provided in *Appendix D*.

The unfunded actuarial accrued liability (UAAL)[3] and contribution rates[4] increased primarily as a result of the strengthening of the actuarial assumptions used in preparing the valuations and unfavorable investment experience that were offset to some degree by favorable non-investment experience.

	Market Value Basis		Valuation Value Basis		Total (Aggregate) Employer Contribution Rate (% of Payroll – Contributions Received on July 15)
Valuation Date	**Funded Status**	**UAAL**	**Funded Status**	**UAAL**	
June 30, 2012	63.3%	$6.1B	69.4%	$5.1B	25.33%
June 30, 2021	84.7%	$4.1B	74.6%	$6.8B	33.31%

Future Funded Status and Employer Contribution Rates

In this report, we highlight key factors that may affect the financial profile of the Plans going forward. As investment experience in the past 10 years has had a significant impact on the funded status and employer contribution rates, we have also provided deterministic projections (using select scenarios for illustration) under hypothetical unfavorable and favorable future market experience so that the impact of market performance can be better understood.

The total (aggregate) employer contribution rate is 33.31% of total payroll in the June 30, 2021 valuations. Using a deterministic projection, this report shows the effect of either unfavorable (0.00%) or favorable (14.00%) hypothetical market returns for 2021/2022 on key valuation results. In particular, the changes in the total employer contribution rate (relative to the June 30, 2021 valuation aggregate employer contribution rate of 33.31%) in the June 30, 2022 valuation

[3] For example, the UAAL increased by $920.7 million in the June 30, 2014 valuations, $461.9 million in the June 30, 2017 valuations, $593.6 million in the June 30, 2018 valuations, and $626.6 million in the June 30, 2020 valuations (for a total of $2.6B), as a result of the assumptions adopted by the Board following the economic assumptions study and the experience studies over the last ten years.

[4] For example, the increase in the employer's total rate (normal cost plus UAAL) was 3.20% in the June 30, 2014 valuations, 2.03% in the June 30, 2017 valuations, 2.09% in the June 30, 2018 valuations, and 3.94% in the June 30, 2020 valuations (for a total of 11.26%), as a result of the assumptions adopted by the Board following the economic assumptions study and the experience studies over the last ten years.

and in the June 30, 2028 valuation (when all the investment gains or losses are fully recognized at the end of the seven-year asset smoothing period) are as shown in the following table:[5]

	2021/2022 Single Plan-Year Investment Return		
Contribution Rate Change	**0.00%**	**7.00% (Baseline)**	**14.00%**
June 30, 2022	-1.2% of payroll	-2.0% of payroll	-2.9% of payroll
June 30, 2028	-7.9% of payroll	-14.4% of payroll	-20.9% of payroll

Under the hypothetical market return scenarios we have studied, the Retirement Plan is projected to reach full funding by around 2042 or 2043, and the Health Plan is projected to reach full funding before the Retirement Plan Note that under each of the hypothetical market return scenarios for 2021/2022, the total employer normal cost contribution rate would be expected to approach about 9.50% of payroll when both of the Retirement and Health Plans reach full funding.

Using a stochastic projection that models market return over the next 20 years by using expected return, standard deviation and other information about LACERS' asset portfolio,[6] there is a 50% chance that the employer contribution rates would be between 0% and 38% of payroll at the end of 10 years and between 0% and 39% of payroll at the end of 20 years. Furthermore, there is a 46% chance LACERS would be fully funded at the end of 10 years and 60% chance LACERS would be fully funded at the end of 20 years.

Plan Maturity Measures

During the past 10 valuations, the Plans have become more mature as evidenced by an increase in the ratio of members in pay status (retirees and beneficiaries) to active members (as shown in *Section 2, Charts 12a and 12b* on pages 31 and 32) and by an increase in the ratios of plan assets and liabilities to active member payroll (as shown in *Section 2, Charts 13a and 13b* on pages 33 and 34). We expect these trends to continue going forward. This is significant for understanding the volatility of both historical and future employer contribution rates because any increase in UAAL due to unfavorable investment and non-investment experience for the relatively larger group of non-active and active members would have to be amortized and funded over the payroll of the relatively smaller group of only active members. Put another way, as a plan grows more mature, its contribution rate becomes more sensitive to investment volatility and liability changes. As the Plans continue to mature with time, its risk profile will continue to evolve in this way and contributions will grow more sensitive to plan experience.

5 Assuming no further assumption changes, method changes or experience that differs significantly from assumptions.

6 For the stochastic modeling, we have used LACERS' target asset allocation that we used in developing the 7.00% expected investment return assumption we recommended to the Board for the June 30, 2020 valuations together with updated expected return, standard deviation and other information as outlined in the Appendix. This modeling assumes no further assumption changes, method changes or non-investment experience that differs significantly from assumptions. For a detailed discussion regarding the target asset allocation used in the stochastic projections, see Appendix A, pages 37-38

Section 2: Key Plan Risks on Funded Status, Unfunded Actuarial Accrued Liabilities, and Employer Contribution Rates

Evaluation of Historical Trends – Retirement and Health Plans

Funded Status and UAAL

One common measure of LACERS' financial status is the funded ratio. This ratio compares the valuation[7] and market value of assets to the actuarial accrued liabilities (AAL)[8] of LACERS. After accounting for contributions made at the Actuarially Determined Contribution (ADC) amount, the overall level of funding of LACERS has remained relatively level as a result of favorable non-investment experience, offset by the change in actuarial funding method, the strengthening of the actuarial assumptions, and unfavorable investment experience. The funded ratios and UAAL are provided separately for the Retirement and Health Plans for the past 10 valuations from June 30, 2012 to 2021 measured using both valuation and market value of assets in *Charts 1a* and *1b*, respectively.

The factors that caused the changes in the UAAL for the past 10 valuations from June 30, 2012 to 2021 are provided separately for the Retirement and Health Plans in *Charts 2a* and *2b,* respectively.[9] The results in *Charts 2a* and *2b* show that the reductions in the investment return assumption in the June 30, 2014, 2017, and 2020[10] valuations, together with the changes in the mortality tables and other assumptions from the three triennial experience studies recommending assumptions used in the June 30, 2014, 2018, and 2020[10] valuations, have had the most impact on the UAAL for LACERS,[11] followed by the investment experience, especially during 2009 to 2013.

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[7] The valuation value of assets is the portion of the total actuarial value of assets allocated for the Retirement and Health Plans. The actuarial value of assets is equal to the market value of assets less unrecognized returns in each of the last seven years. Unrecognized return is equal to the difference between the actual market return and the expected return on the market value, and is recognized over a seven-year period.

[8] For the actives, the actuarial accrued liability is the value of the accumulated normal costs allocated to the years before the valuation date. For the pensioners, beneficiaries and inactive vested members, the actuarial accrued liability is the single-sum present value of the lifetime benefit expected to be paid to those members.

[9] For the Health Plan, *Chart 2b* shows changes only for the past eight valuations, from June 30, 2014 to 2021, because detailed information regarding the change in UAAL is not readily available in Segal's valuation reports for June 30, 2012 and 2013.

[10] The Board has a practice of reviewing the investment return and other actuarial assumptions at the same time in the triennial experience study. However, the full (economic and demographic) 2017 experience study was delayed one year to 2018 to allow more time for Segal to study and the Board to discuss and approve the assumptions, and a 2017 study of only the economic assumptions was completed as part of the June 30, 2017 valuations.

[11] For example, for the Retirement and Health Plans combined, the UAAL increased \$920.7 million in the June 30, 2014 valuations, \$461.9 million in the June 30, 2017 valuations, \$593.6 million in the June 30, 2018 valuations, and \$626.6 million in the June 30, 2020 valuations (for a total of \$2.6B), as a result of the assumptions adopted by the Board following the economic assumptions study and the experience studies over the last ten years.

Charts 2a and *2b* also show that the unfavorable investment experience was offset to some extent by favorable non-investment experience. The non-investment experience included lower than expected COLAs granted to retirees and beneficiaries, and lower than expected salary increases for continuing actives. The non-investment experience also included the scheduled 12-month delay in implementing the contribution rates determined in the annual valuation.

Finally, *Charts 2a and 2b* show some "negative amortization" due to the initial 30-year amortization of the combined base established June 30, 2012. The negative amortization <u>from the combined base</u> for the Pension Plan is not expected to continue after June 30, 2021. The negative amortization for the Health Plan will cease to appear in any year where that Plan is projected to become fully funded. (For instance, assuming a 7.00% market return for 2021/2022, the Health Plan is projected to become fully funded in the June 30, 2023 valuation.) Current assumptions and amortization policy generally will not entail negative amortization for any new UAAL identified in the future.

It is important to note that LACERS has strengthened the assumptions over time, particularly lowering the expected investment rate of return, utilizing a generational mortality assumption, and adopting a funding policy that controls future negative amortization. These changes may result in higher contributions in the short term, but in the medium to longer term <u>avoid</u> both deferring contributions and allowing unmanaged growth in the UAAL. We believe these actions are essential for LACERS' fiscal health going forward.

RETIREMENT PLAN

Funded Ratio (Percentages) and Dollar UAAL ($ Billions) in June 30, 2012 to 2021 Valuations

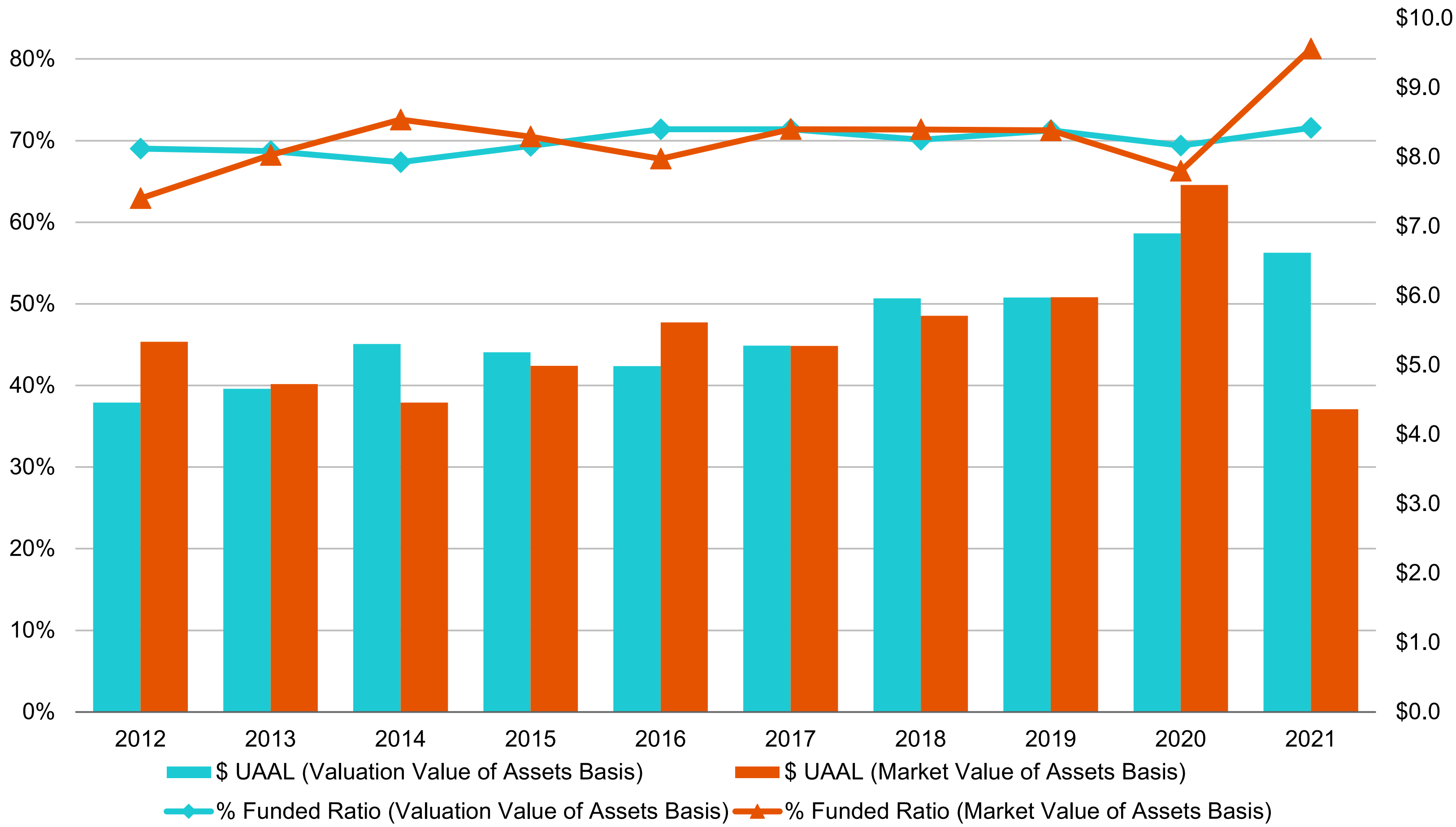
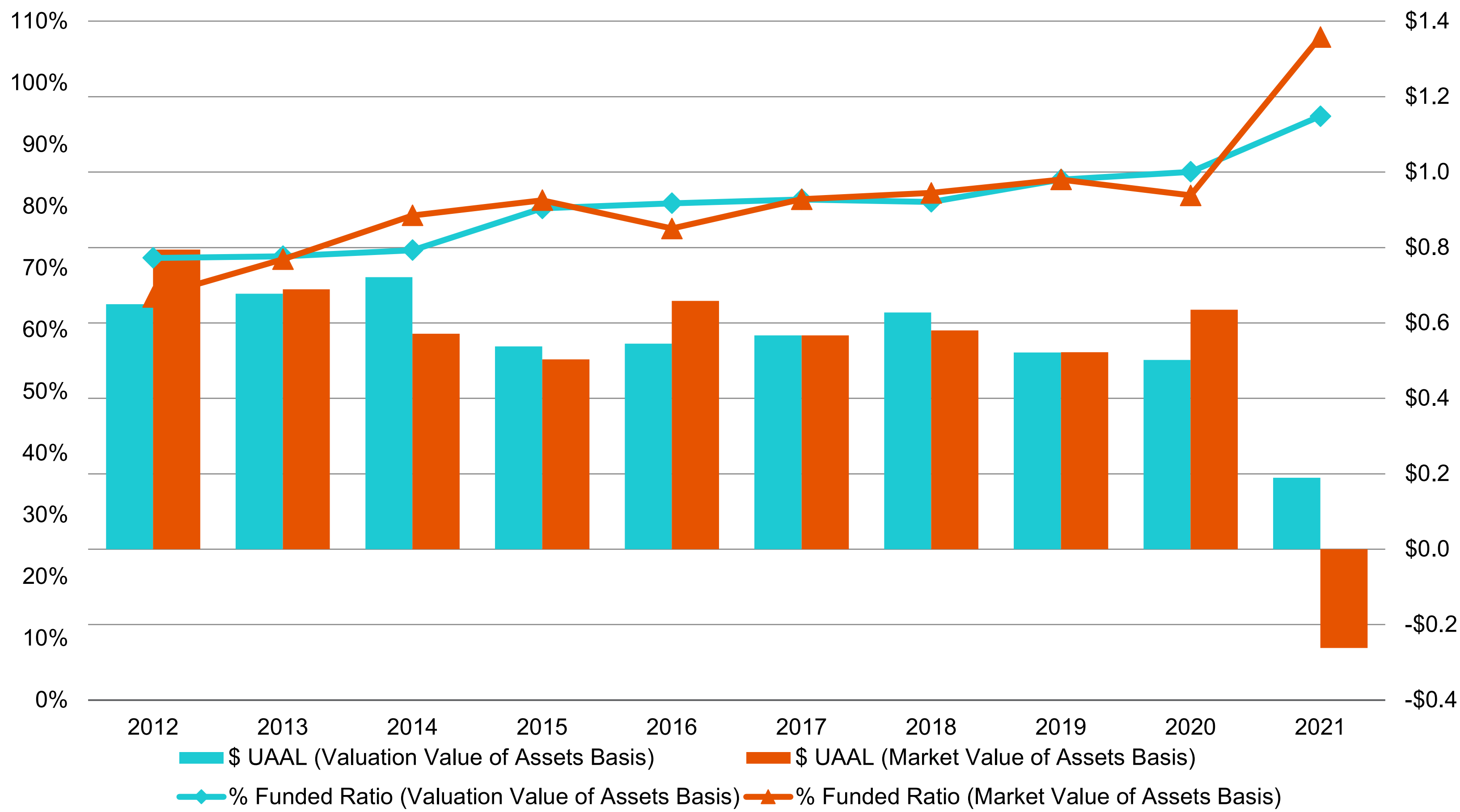


Chart 1b

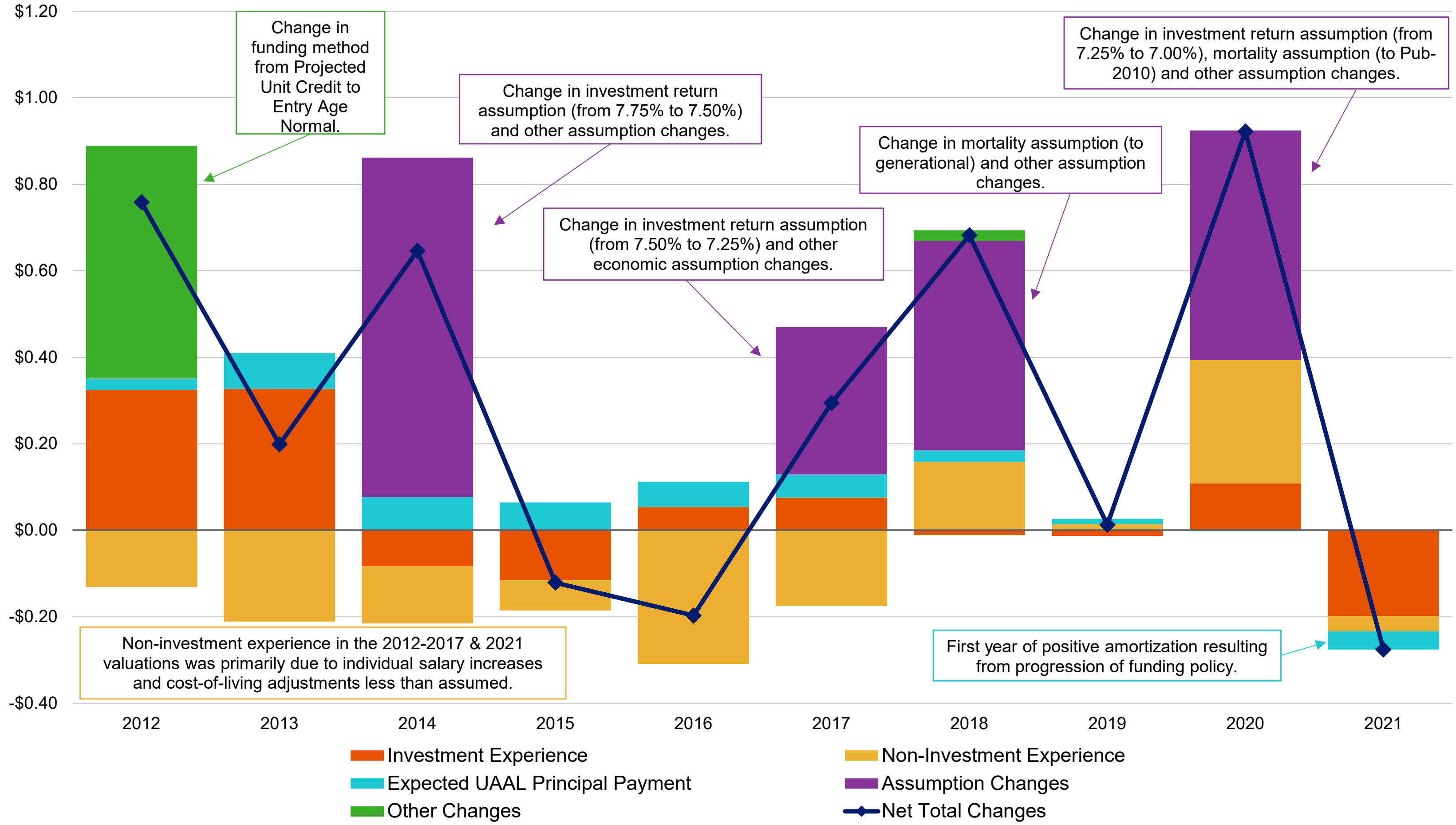
HEALTH PLAN

Funded Ratio (Percentages) and Dollar UAAL ($ Billions) in June 30, 2012 to 2021 Valuations



RETIREMENT PLAN

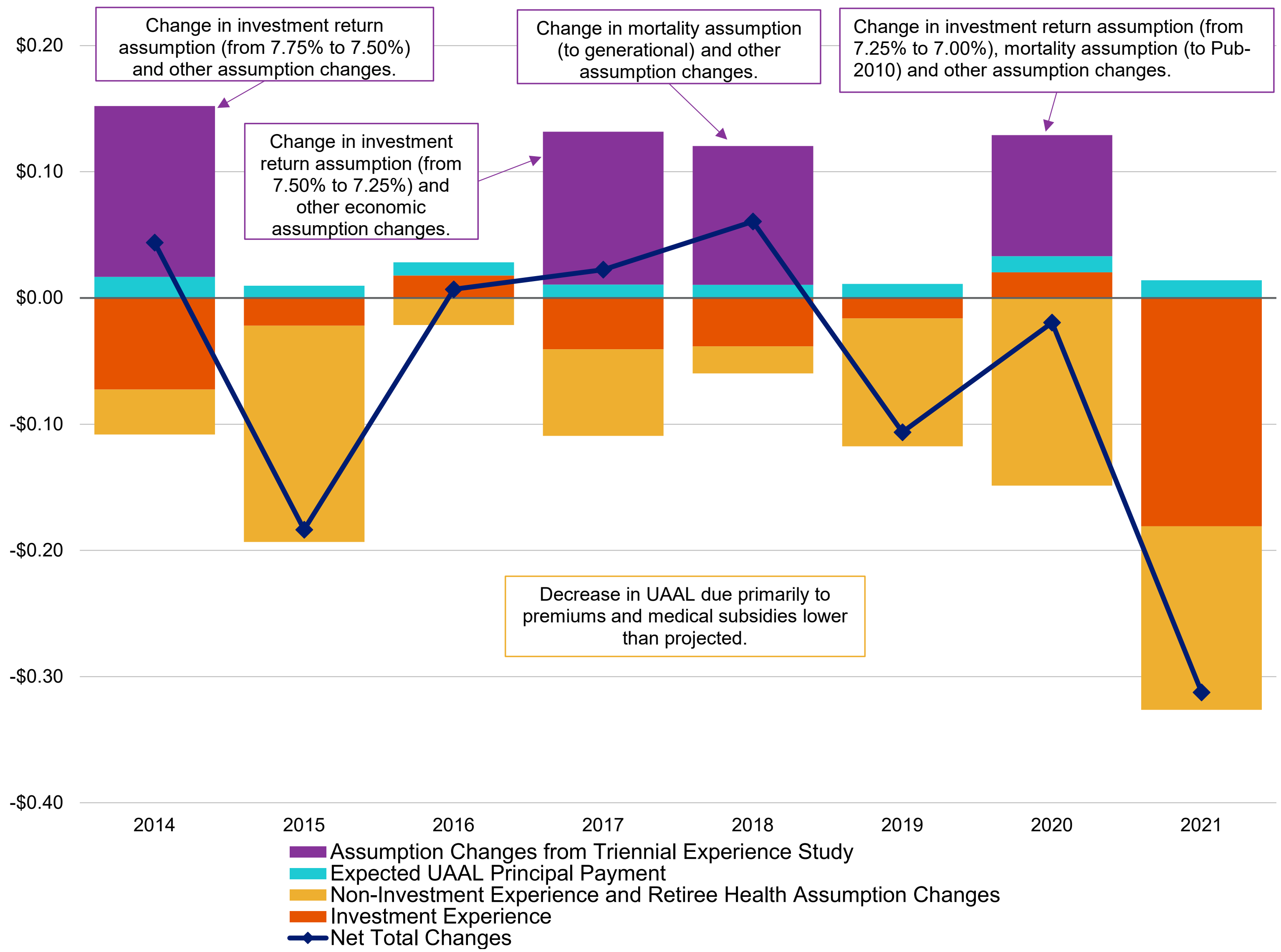
Factors that Changed UAAL in June 30, 2012 to 2021 Valuations ($ Billions)



Note: The primary source of investment losses starting in the June 30, 2009 valuation is the Great Recession, which was recognized in the valuation value of assets over several years.

HEALTH PLAN

Factors that Changed UAAL in June 30, 2014 to 2021 Valuations ($ Billions)



Employer Contribution Rates

The total (normal cost[12] plus UAAL payment) employer contribution rates determined in the June 30, 2012 to 2021 valuations for the Retirement and Health Plans are provided in *Charts 3a* and *3b*, respectively, and the factors that caused the changes in the total aggregate employer rates[13] for the Retirement and Health Plans are provided in *Charts 4a and 4b*, respectively.

The aggregate employer normal cost rates for the Retirement and Health Plans as shown in *Charts 3a* and *3b* have stayed relatively flat since the June 30, 2012 valuation. For the Retirement Plan, the UAAL rate generally increased between the June 30, 2012 and the June 30, 2021 valuations primarily due to unfavorable investment experience and changes in actuarial assumptions. While there have also been increases in the normal cost rates due to the changes in the actuarial assumptions, those increases were offset to some degree by the plan changes – with the introduction of Tier 3 – as new members have been enrolled in the lower cost benefit tier since February 21, 2016. Furthermore, beginning with the June 30, 2012 valuation, an additional employee contribution (either 2% or 4%, becoming 4% for all affected employees effective January 1, 2013) was implemented by the City for certain bargaining groups and for all non-represented employees.[14] For the Health Plan, the UAAL rate generally decreased between the June 30, 2012 and the June 30, 2021 valuations. The primary sources of the decrease include health related assumption changes and other actuarial experience (primarily medical premiums and subsidies lower than projected).

For the Retirement Plan, *Chart 4a* shows that the changes in the investment return, mortality table and other assumptions have had the most impact on increasing the UAAL contribution rates[15] for the City. The next greatest impact was from the investment experience during 2012 to 2021. Favorable non-investment experience and additional required member contributions have partially offset the contribution rate increases during 2012 to 2020.

For the Health Plan, *Chart 4b* shows that the non-investment experience[16] (primarily medical premiums and subsidies lower than projected) has had the most impact on decreasing the UAAL contribution rates[15] for the City, offset somewhat from changes in the investment return, mortality tables and other assumptions.

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[12] The normal cost is the amount of contributions required to fund the portion of the level cost of the member's projected retirement and health benefits that is allocated to the current year of service.

[13] There are separate contribution rates determined in the valuation for Tier 1 and Tier 3 (previously Tier 2, through the June 30, 2015 valuation). The aggregate contribution rates have been calculated based on an average of those rates weighted by the payrolls of the active members reported in those valuations.

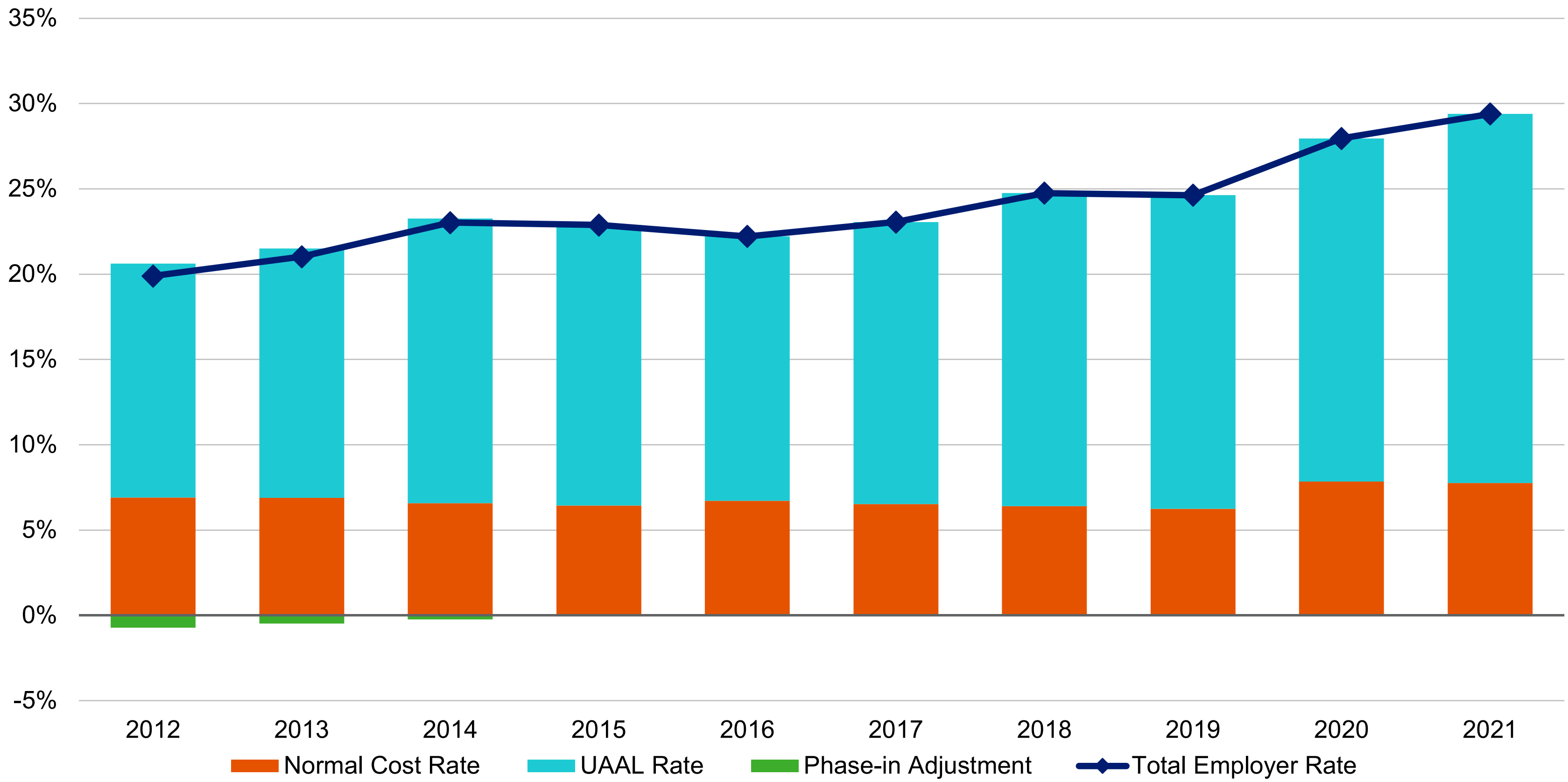
[14] As of the June 30, 2012 valuation, roughly 95% of active members were required to pay an additional member contribution rate. By the June 30, 2020 valuation, all active members were paying an additional member contribution rate (which was increased to 4.5% for less than 1% of active members).

[15] For example, for the Retirement and Health Plans combined, the increase in the employer's total rate (normal cost plus UAAL) was 3.20% in the June 30, 2014 valuations, 2.03% in the June 30, 2017 valuations, 2.09% in the June 30, 2018 valuations, and 3.94% in the June 30, 2020 valuations (for a total of 11.26%), as a result of the assumptions adopted by the Board following the economic assumptions study and the experience studies over the last ten years.

[16] Includes the impact of the annual review and adjustment of the medical trend assumptions.

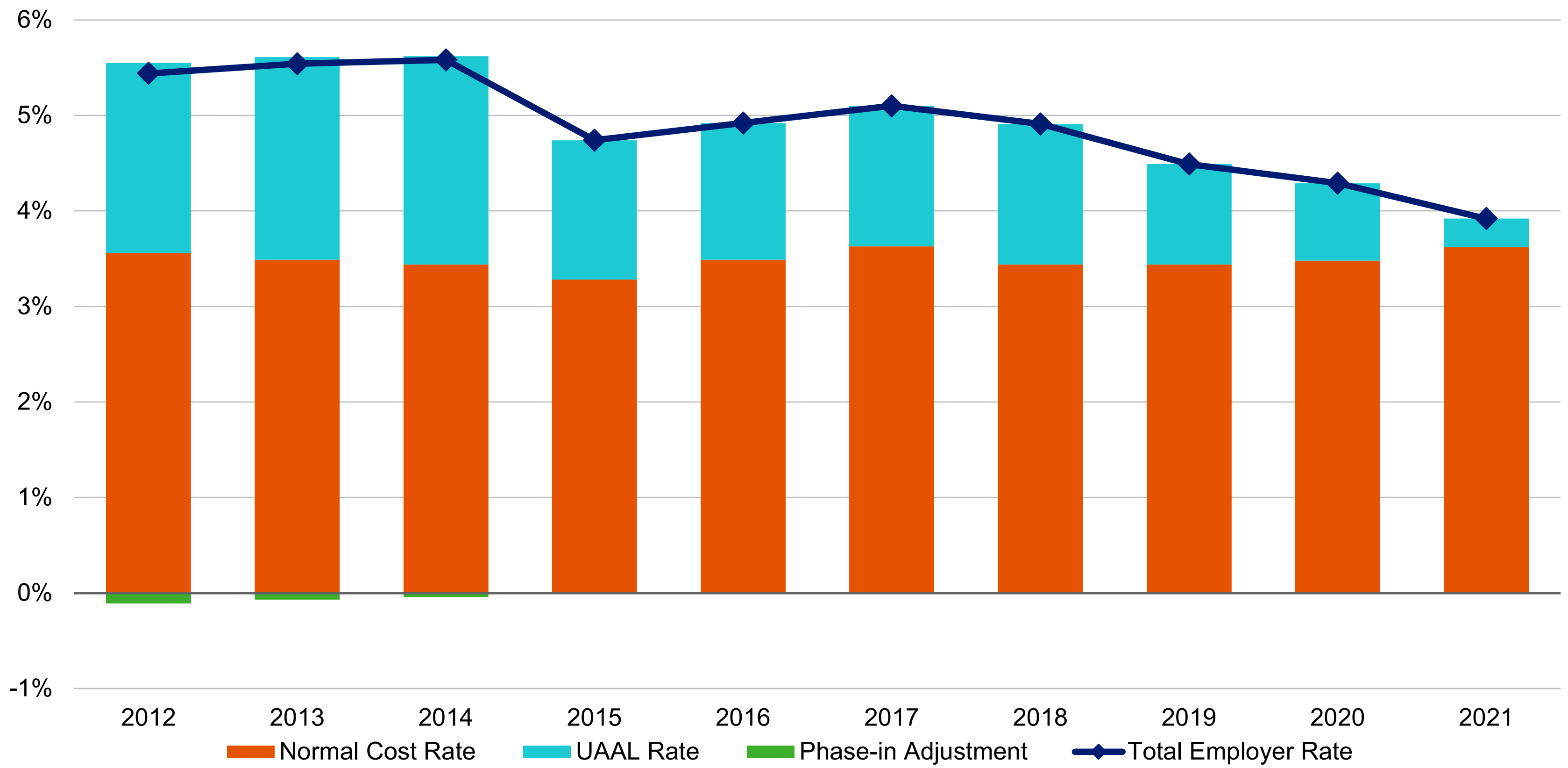
RETIREMENT PLAN

Employer Contribution Rates in June 30, 2012 to 2021 Valuations
(% of Payroll – Contributions Received on July 15)



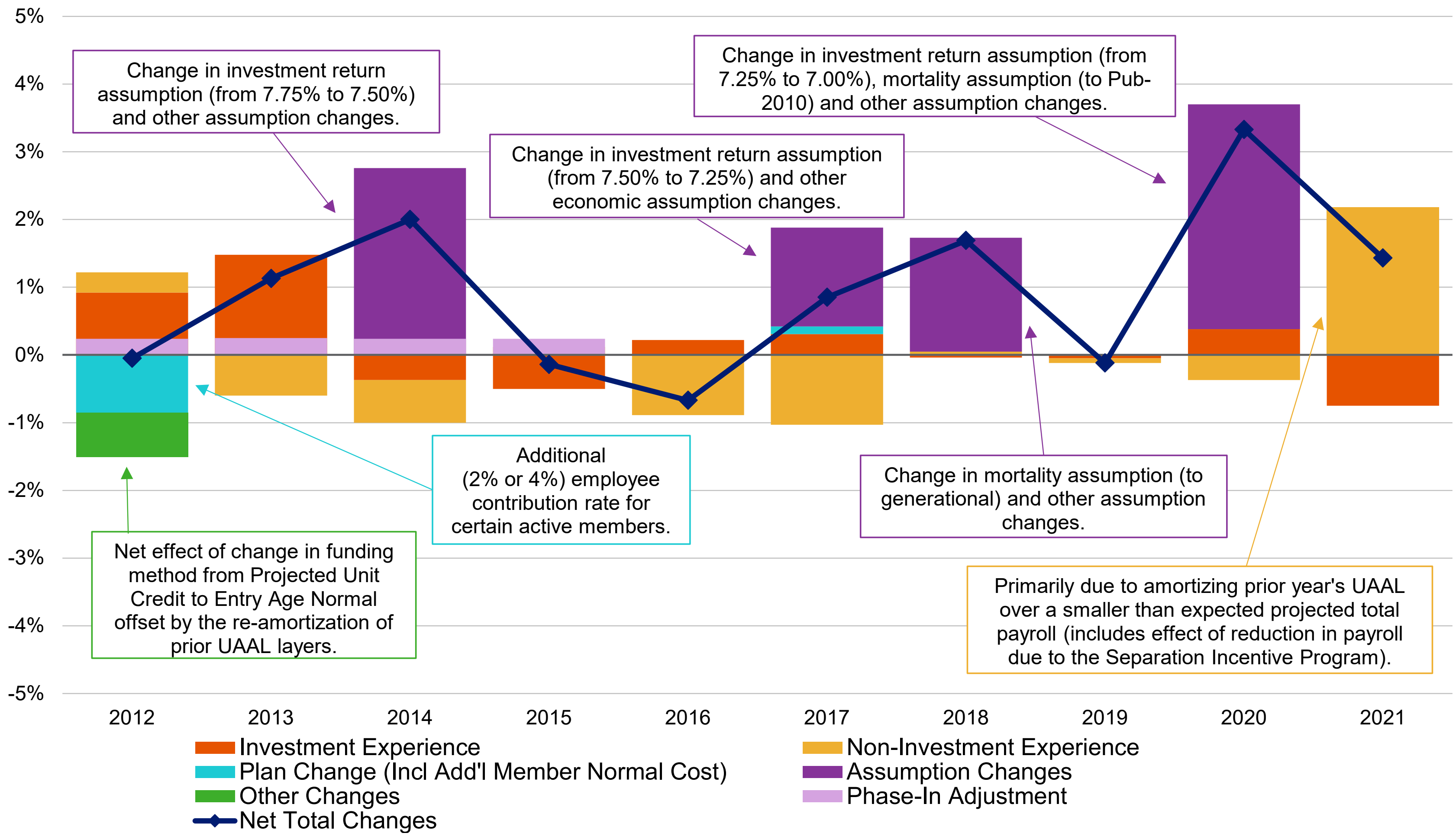
HEALTH PLAN

Employer Contribution Rates in June 30, 2012 to 2021 Valuations
(% of Payroll – Contributions Received on July 15)



RETIREMENT PLAN

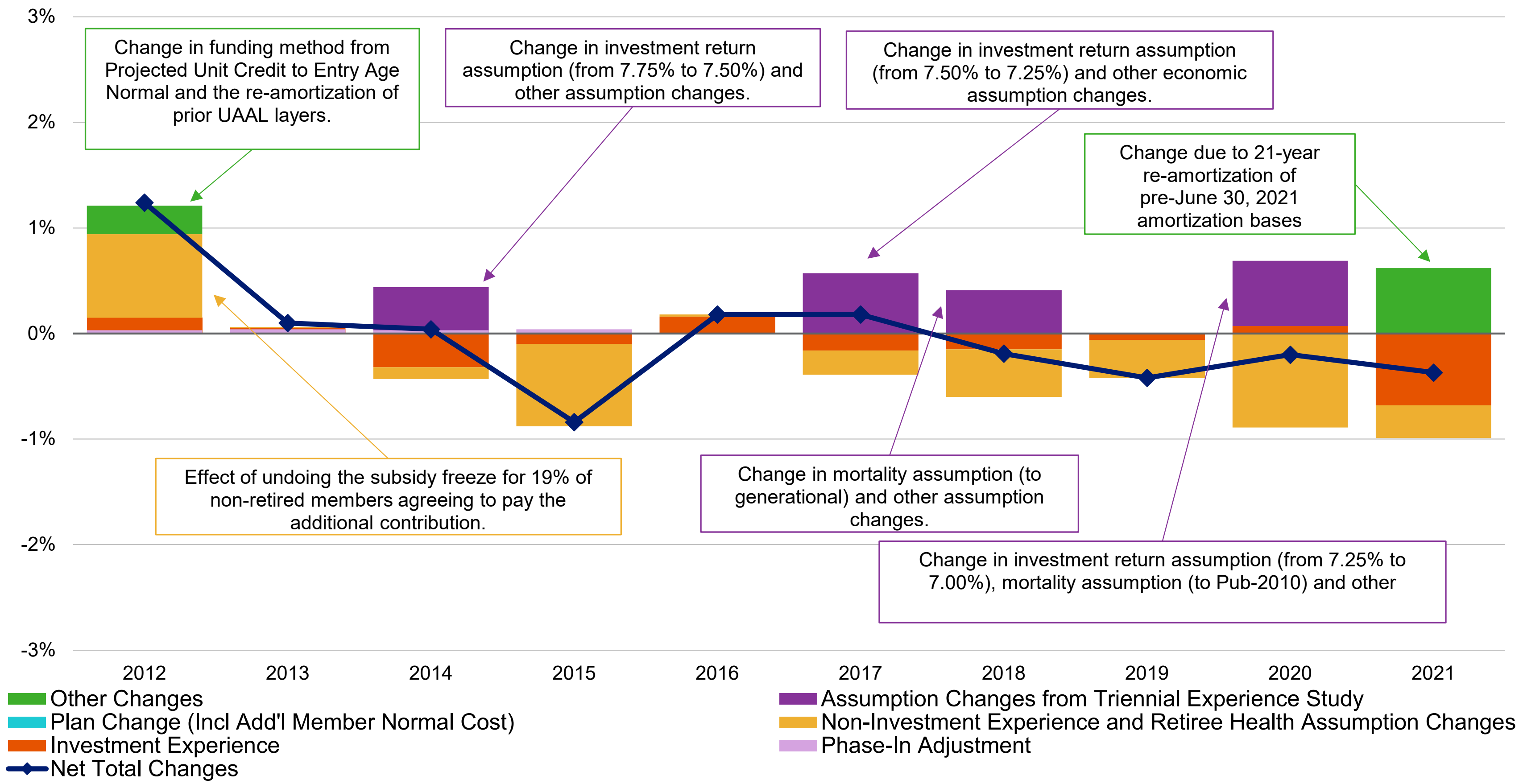
Factors that Affected Employer Contribution Rates in June 30, 2012 to 2021 Valuations (% of Payroll – Contributions Received on July 15)



Note: The primary source of investment losses starting in the June 30, 2009 valuation is the Great Recession, which was recognized in the valuation value of assets over several years.

HEALTH PLAN

Factors that Affected Employer Contribution Rates in June 30, 2012 to 2021 Valuations (% of Payroll – Contributions Received on July 15)



Assessment of Primary Risk Factors Going Forward

As discussed in the Evaluation of Historical Trends section, in the 2012 to 2021 valuations the funded ratios and the employer contribution rates have changed mainly as a result of changes in actuarial assumptions, investment experience, and non-investment experience.

In general, we anticipate the following risk factors to have an ongoing influence on those financial metrics in our future valuations:

- Asset/liability mismatch risk – the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge.

  The most significant asset/liability mismatch risk to LACERS is investment risk, as defined below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first mismatch is evident in annual valuations: when asset values deviate from assumptions, those changes are essentially independent from liability changes. The second mismatch can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from the experience of the asset values.

  Asset/liability mismatch can also be caused by longevity and other demographic assumption risks, which affect liabilities but have no impact on asset levels. These risks are also discussed below.

  It may be informative to use the asset volatility and liability volatility ratios and associated contribution rate impacts provided in the following Plan Maturity Measures section when discussing with the City the effect of unfavorable or favorable actuarial experience on the assets and the liabilities of LACERS.

- Investment risk – the potential that future market returns will be different from the current expected 7.00% annual return assumption.

  The investment return assumption is a long-term, deterministic assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. We have included deterministic scenario tests and stochastic projections later in this section so that LACERS can better understand the risk associated with earning either less or more than the assumed rate.

  The Board has a policy of reviewing the investment return and the other actuarial assumptions generally every three years, the next triennial experience study (recommending assumptions for the June 30, 2023 actuarial valuations) is scheduled to be performed in 2023.

- Longevity and other demographic risks – the potential that mortality or other demographic experience will be different than expected.

  For the Retirement Plan, the change in the merit and promotion salary increase assumption was the most significant change to the non-economic assumptions in the last experience study conducted before the June 30, 2020 valuation. As can be observed from *Charts 2a, 2b, 4a,* and *4b*, there had been relatively small unfavorable impact on the UAAL and employer contribution rates due to non-investment related experience relative to the assumptions used in the last 10 valuations.

- Contribution risk – the potential that actual future contributions will be different from expected future contributions.

  ASOP 51 does not require the actuary to evaluate the particular ability or willingness of the plan sponsor or other contributing entity to make contributions to the plan when due. However, it does require the actuary to consider the potential for and impact of actual contributions deviating from expected in the future. The City has a well-established practice of making the ADC determined in the annual actuarial valuations, based on the Board of Administration's Actuarial Funding Policy. As a result, in practice LACERS has essentially no contribution risk.

  Furthermore, when ADCs determined in accordance with the LACERS Actuarial Funding Policy are made in the future by the City (and contributions required by the Administrative Code are made by the employees), it is anticipated that the System would have enough assets to provide all future benefits promised to the current members enrolled in the System, if all of the actuarial assumptions used in the valuation are met.

The ASOP also lists interest rate risk as an example of a potential risk to consider. However, the valuations of your Plans' liabilities are not linked directly to market interest rates so the resulting interest rate risk exposure is minimal.

Note that other events that could affect costs going forward, such as future plan changes, are not included herein.

Scenario Tests: Deterministic Projections

Because the funded ratio, UAAL and the employer contribution rates have fluctuated as a result of deviation in investment experience in the last 10 valuations, we have examined the risk for LACERS associated with earning either lower or higher than the assumed rate of 7.00% in future valuations using projections under a deterministic approach.

To measure such risk, we have included scenario tests to study the change in the UAAL and contribution rates if LACERS were to earn a market return lower or higher than 7.00% in the next year following the June 30, 2021 valuations. In *Charts 5, 6* and *7*, we show the aggregate employer contribution rates, funded ratios, and UAAL respectively assuming that the System's portfolio market return in 2021/2022 will be as follows:

Scenario 1: 0.00%
Scenario 2: 7.00% (baseline)
Scenario 3: 14.00%.

In the past, LACERS allowed us to assist the City in their budgeting process by providing a 6-year illustration of the financial position of LACERS assuming the System was to earn the assumed rate of investment return in all future years. The detailed employer contribution rates, funded ratios and UAAL developed for each of the Retirement and Health Plans, and in total, under the baseline Scenario 2, are provided in *Appendix C* of this report for this reason. We note that for the Health Plan, the UAAL contribution rate is expected to be negative (a credit) in the 2022 valuation even though there would still be a positive UAAL amount in that year. This is primarily due to the pre-June 30, 2021 UAAL in the June 30, 2021 valuation being amortized over a period that is longer (i.e., 21 years) than the experience gains from June 30, 2021 and June 30, 2022.[17] For purposes of these projections, and consistent with the Plan's funding policy, we have amortized the entire UAAL as of June 30, 2022 over a 20-year period[18]. The Board could make an adjustment to its funding policy so that the amortization period for experience gains and losses is the greater of 15 years or the remaining period of the pre-6/30/2021 combined base from the June 30, 2021 valuation. We will bring this topic back for further discussion with the Board before the June 30, 2022 valuations once the market return for 2021/2022 becomes available.

The following table summarizes for the Retirement and Health Plans the resulting aggregate contribution changes (relative to the June 30, 2021 valuation aggregate employer contribution rate of 33.31%) in the immediately next valuation as well as in the June 30, 2028 valuations when all of the investment gains and losses are fully recognized in the (smoothed) actuarial value of assets.

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[17] This anomaly is also expected for the OPEB Plan Scenario 1 with a 0.00% return for 2021/2022 and we have amortized the entire UAAL over the remaining period of the combined pre-June 30, 2021 base (i.e., 20 years as of June 30, 2022) for the valuation years when the total UAAL contribution rate would have become negative (credit).

[18] 20 years matches the remaining duration of the "Total Pre-June 30, 2021 bases" as of June 30, 2022.

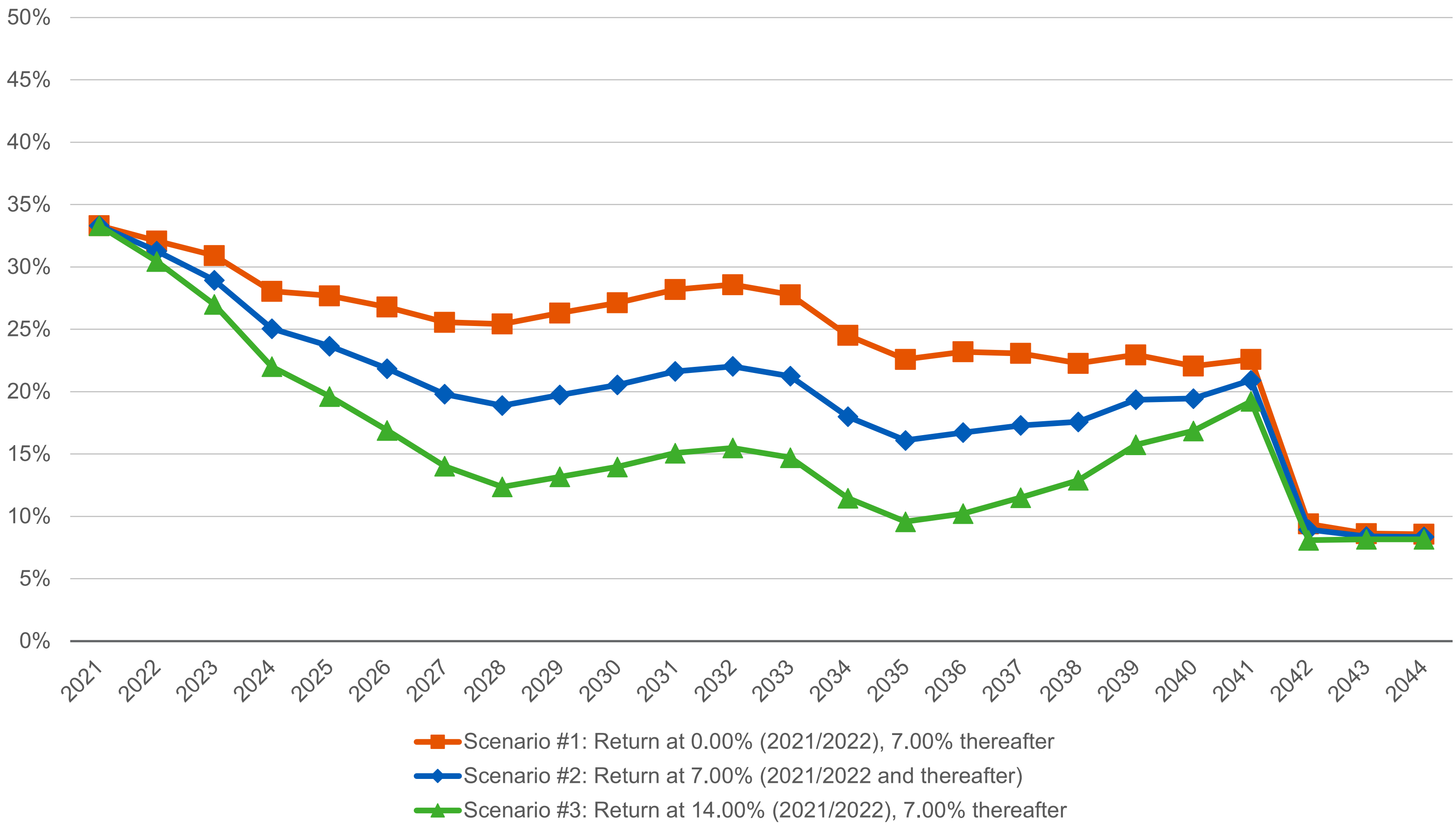
	2021/2022 Single Plan-Year Investment Return		
Contribution Rate Change	**0.00%**	**7.00% (Baseline)**	**14.00%**
June 30, 2022	-1.2% of payroll	-2.0% of payroll	-2.9% of payroll
June 30, 2028	-7.9% of payroll	-14.4% of payroll	-20.9% of payroll

Under the hypothetical market return scenarios we have studied, the Retirement Plan is projected to reach full funding by around 2042 or 2043, and the Health Plan is projected to reach full funding before the Retirement Plan. Note that under each of the hypothetical market return scenarios for 2021/2022, the total employer normal cost contribution rate would be expected to approach about 9.50% of payroll when both of the Retirement and Health Plans reach full funding.

While we have not assigned a probability on the 2021/2022 market return coming in at these rates, the Board and other stakeholders monitoring LACERS can interpolate between these scenarios to estimate the funded status and employer contribution rates for the June 30, 2022 and next several valuations as the actual investment experience for the 2021/2022 year becomes available throughout the year. Additionally, comparable experience in upcoming future years is likely to have a similar impact on the System absent any significant plan or assumption changes.

RETIREMENT AND HEALTH PLANS

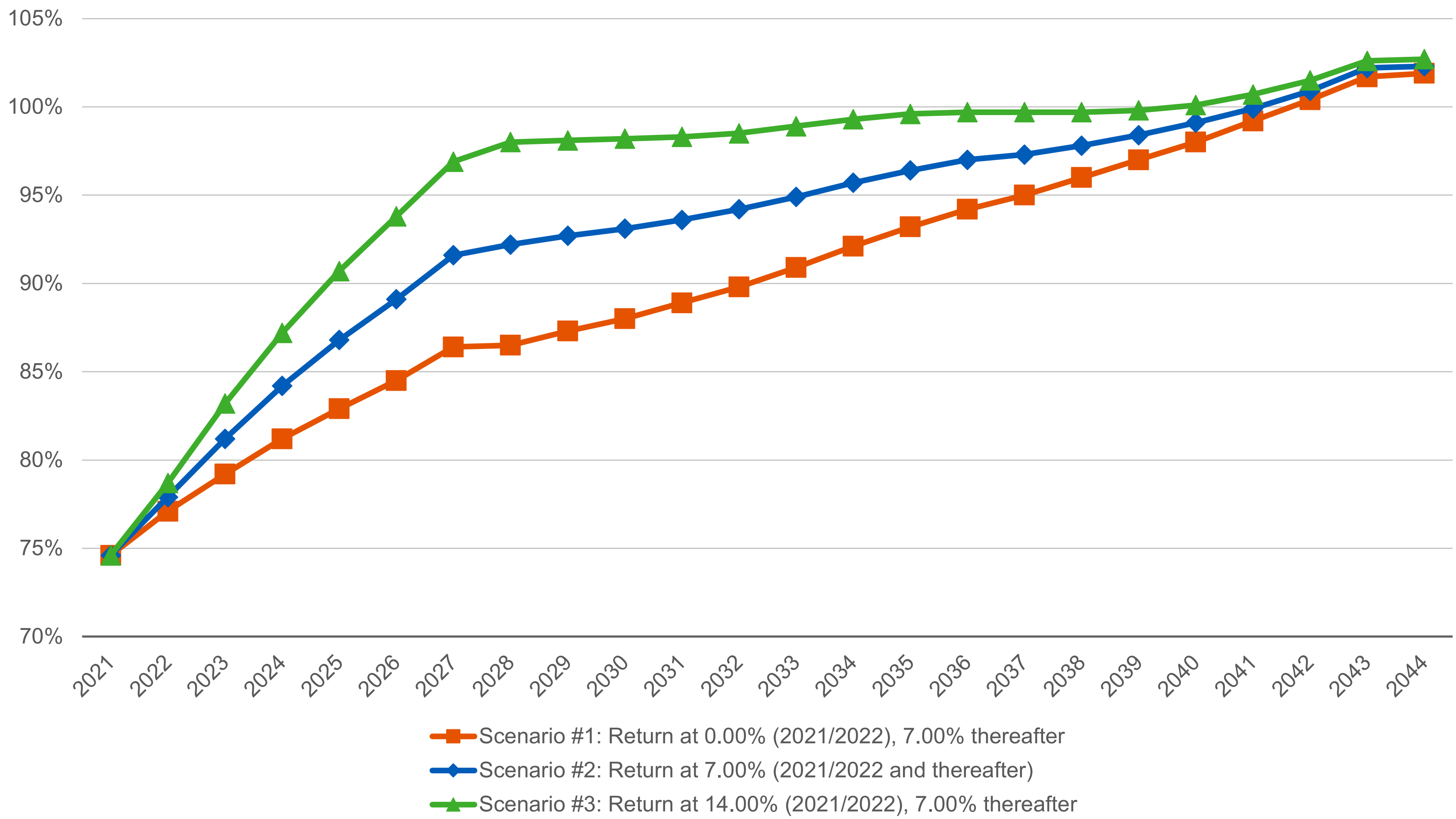
Projected Employer Contribution Rates
Under Three Hypothetical Market Return Scenarios for 2021/2022
for the June 30, 2021 to 2044 Valuations (% of Payroll – Contributions Received on July 15)



Note: The total employer normal cost contribution rate would be expected to approach about 9.50% of payroll when both of the Retirement and Health Plans reach full funding.

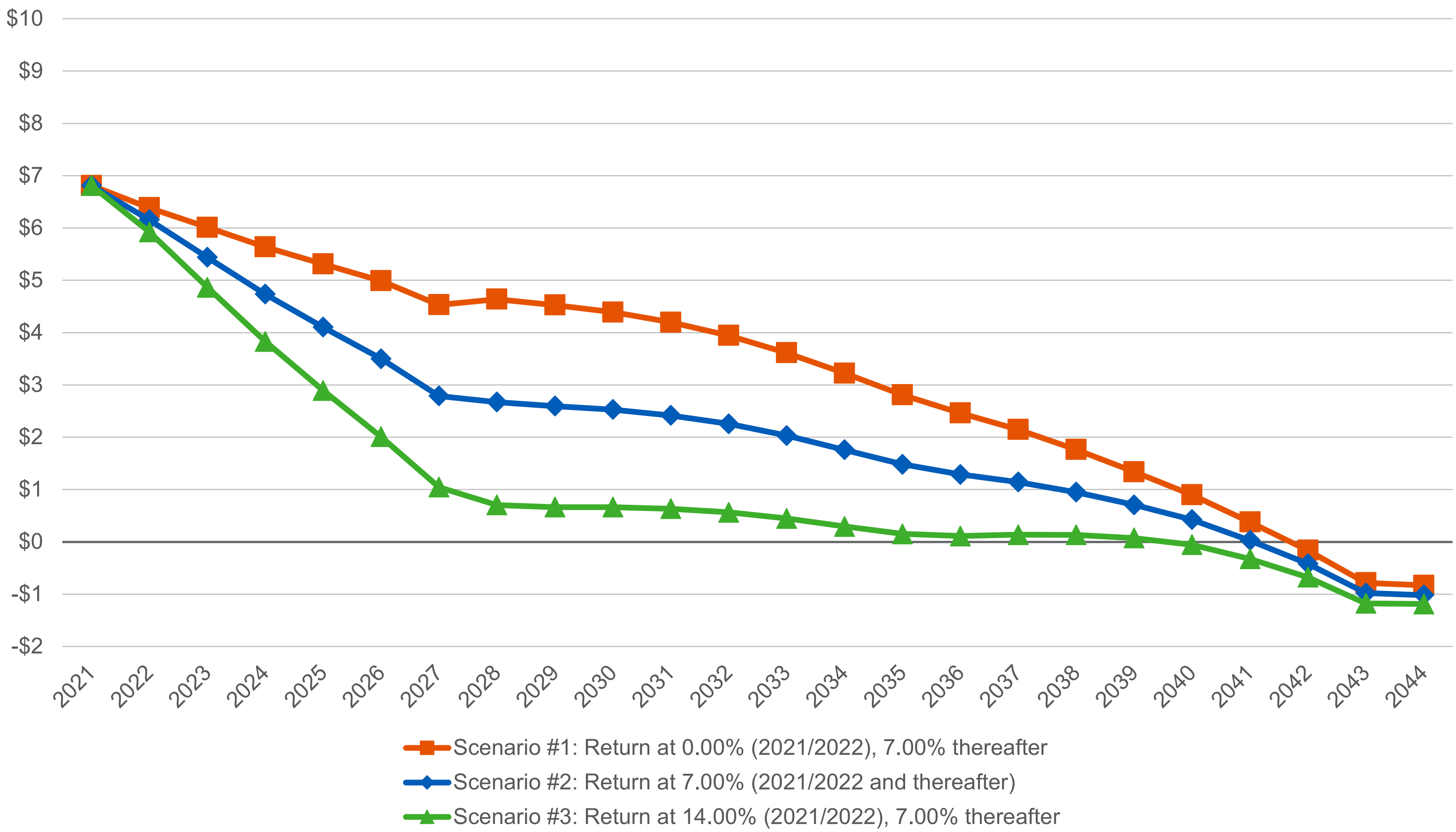
RETIREMENT AND HEALTH PLANS

Projected Funded Ratios (on Valuation Value of Assets) Under Three Hypothetical Market Return Scenarios for 2021/2022 for the June 30, 2021 to 2044 Valuations



RETIREMENT AND HEALTH PLANS

Projected UAAL (on Valuation Value of Assets) Under Three Hypothetical Market Return Scenarios for 2021/2022 for the June 30, 2021 to 2044 Valuations ($ Billions)



Stochastic Projection

Based on our discussions with LACERS, we have also been directed to supplement the deterministic scenario tests with a stochastic analysis that shows the range of possible changes in funded status and contribution rates under a statistical distribution of potential market returns for 20 years following the June 30, 2021 valuations. We have performed the stochastic modeling of future market returns using the expected return, standard deviation and other information about LACERS' asset portfolio[19] as provided in the Appendix of this report, assuming no future assumption or method changes to the plan.

In *Chart 8*, we summarize the cumulative compounded rate of return of LACERS' investment portfolio over the next 20 years based on performing 10,000 trial outcomes of future market returns. The projected funded ratios for those trials are provided in *Chart 9*. The UAAL and the resultant employer contribution rates are provided in *Charts 10* and *11*, respectively. The results in *Charts 9 – 11* are for the Retirement and Health Plans combined.

At the end of 20 years, there is a 50% chance[20] that the annual return of LACERS' investment portfolio would average between 5.5% and 9.4%, the funded ratio would be between 86% and 151% and the corresponding UAAL would be between $6.5 billion and a surplus (or a negative UAAL) of $22.9 billion.

On an Actuarial (smoothed) Value of Assets basis, the funded ratio for the Retirement and Health Plans combined is about 74.6% as of the June 30, 2021 valuation. There is a 46% chance LACERS would be fully funded at the end of 10 years and a 60% chance LACERS would be fully funded at the end of 20 years. The probabilities that the funded ratio would fall below 70%, 60% or 50% at any point in the next 20 years are as follows:

		Funded Ratio	
	Below 70%	**Below 60%**	**Below 50%**
Probability	27%	12%	3%

The total employer contribution rate is about 33% of payroll based on the June 30, 2021 valuations. Stochastic modeling can help assess the range and relative likelihood of potential future contribution rates. At the end of 10 years (i.e., the June 30, 2031 valuation), there is a 50% chance that the employer contribution rates would be between 0% and 38% of payroll. At the end of 20 years (i.e., the June 30, 2041 valuation), there is a 50% chance that the employer contribution

[19] For the stochastic modeling, we have used LACERS' target asset allocation that we used in developing the 7.00% expected investment return assumption we recommended to the Board for the June 30, 2020 valuations together with updated expected return, standard deviation and other information as outlined in the Appendix. This modeling assumes no further assumption changes, method changes or non-investment experience that differs significantly from assumptions. For a detailed discussion regarding the target asset allocation used in the stochastic projections, see Appendix A, pages 37-38.

[20] This is based on the 25th to the 75th percentile results.

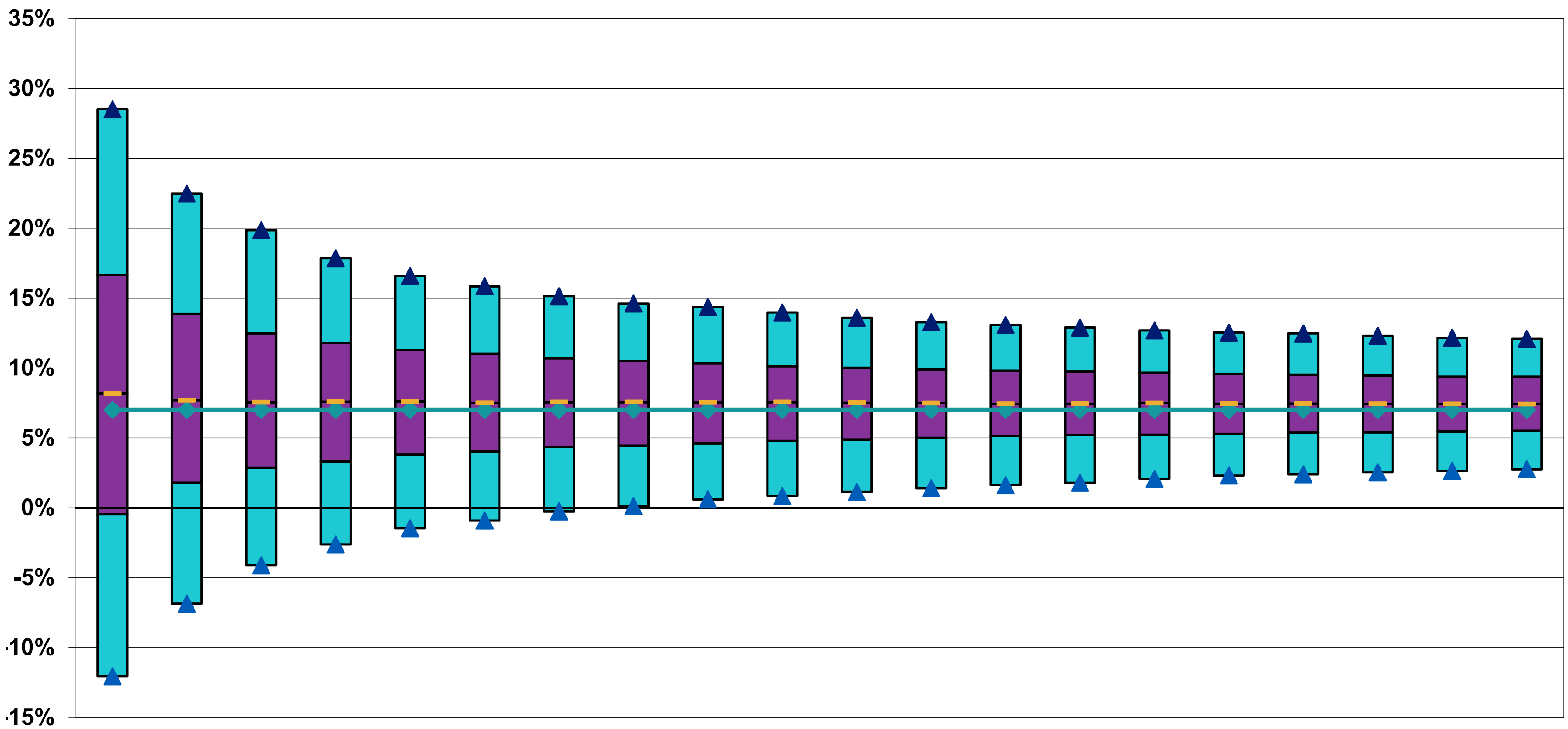
rates would be between 0% and 39% of payroll. The probabilities that the total employer contribution rate would increase at least by 5%, 10% or 15% of payroll at any point in the next 20 years are as follows:

	Total Employer Rate Increases by at least		
	5% of Payroll (to 38% of Payroll)	**10% of Payroll (to 43% of Payroll)**	**15% of Payroll (to 48% of Payroll)**
Probability	41%	35%	30%

Finally, stochastic modeling can help assess the potential impact of investment experience on contribution volatility in any given year. The probabilities that the total employer contribution rate would spike by 2%, 4% or 6% of payroll in any single year during the next 20 years are as follows:

	Total Employer Rate Spikes in a Single Year by		
	2% of Payroll	**4% of Payroll**	**6% of Payroll**
Probability	22%	11%	5%

Projected Cumulative Investment Return for Plan Years Ending June 30



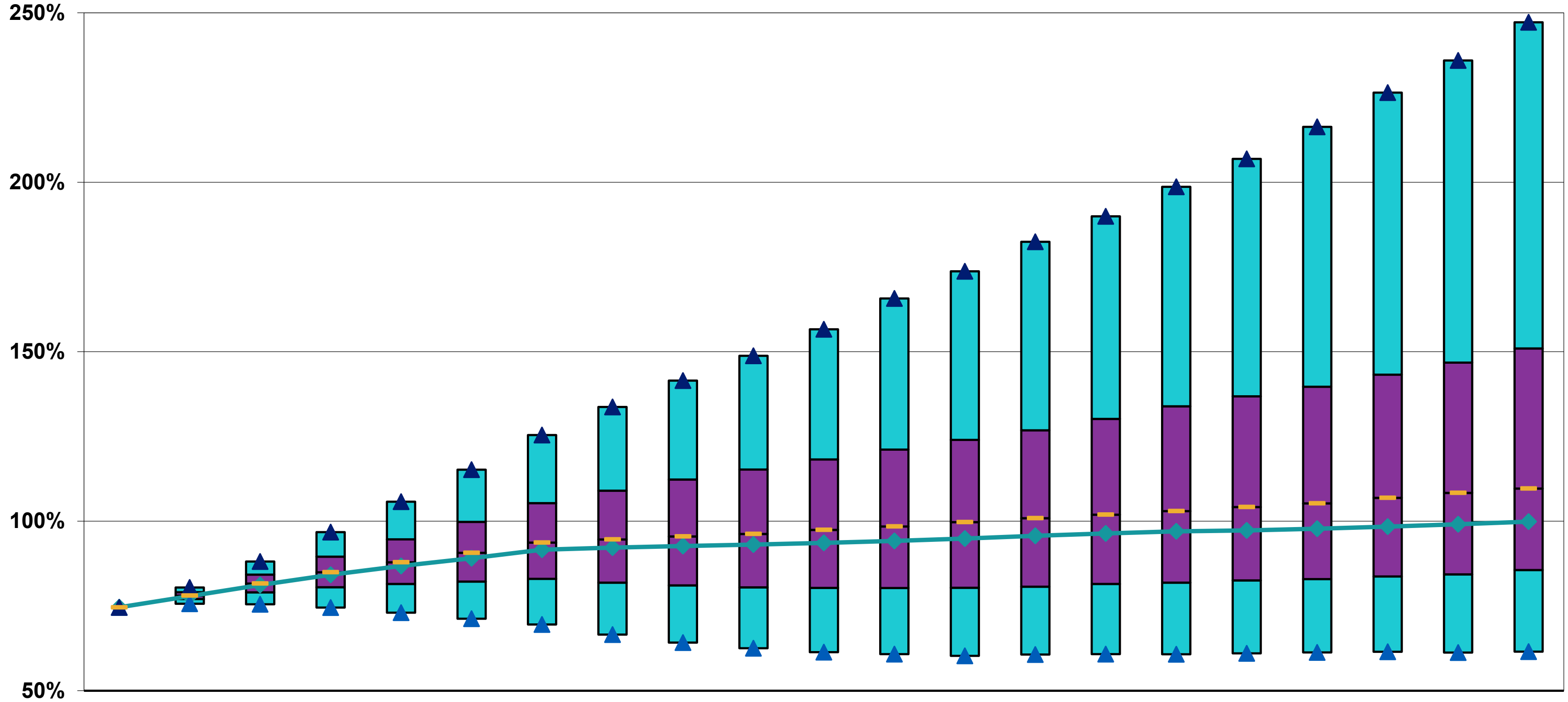
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
▲ 95th	28.5%	22.5%	19.9%	17.8%	16.6%	15.9%	15.1%	14.6%	14.4%	14.0%	13.6%	13.3%	13.1%	12.9%	12.7%	12.5%	12.5%	12.3%	12.2%	12.1%
— 75th	16.7%	13.9%	12.5%	11.8%	11.3%	11.0%	10.7%	10.5%	10.3%	10.1%	10.0%	9.9%	9.8%	9.7%	9.7%	9.6%	9.5%	9.5%	9.4%	9.4%
— 50th	8.2%	7.7%	7.5%	7.6%	7.6%	7.5%	7.6%	7.6%	7.5%	7.5%	7.5%	7.5%	7.4%	7.4%	7.5%	7.4%	7.4%	7.4%	7.4%	7.4%
— 25th	-0.5%	1.8%	2.9%	3.3%	3.8%	4.0%	4.3%	4.4%	4.6%	4.8%	4.9%	5.0%	5.1%	5.2%	5.2%	5.3%	5.4%	5.4%	5.5%	5.5%
▲ 5th	-12.1%	-6.9%	-4.1%	-2.6%	-1.5%	-0.9%	-0.3%	0.1%	0.6%	0.8%	1.1%	1.4%	1.6%	1.8%	2.1%	2.3%	2.4%	2.5%	2.6%	2.8%
◆	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%

◆ Current investment return assumption

Note: In our triennial experience study for the June 30, 2020 valuations, we estimated that over a 15-year period there would be a 59% likelihood that the future average geometric return would meet or exceed the 7.00% investment return assumption. Due to updated assumptions in Horizon's 2021 survey, the above results reflect a 56% likelihood that the future average geometric return would meet or exceed the 7.00% investment return assumption over a 15-year period.

Chart 9

Projected Funded Ratios (on Actuarial Value of Assets Basis)

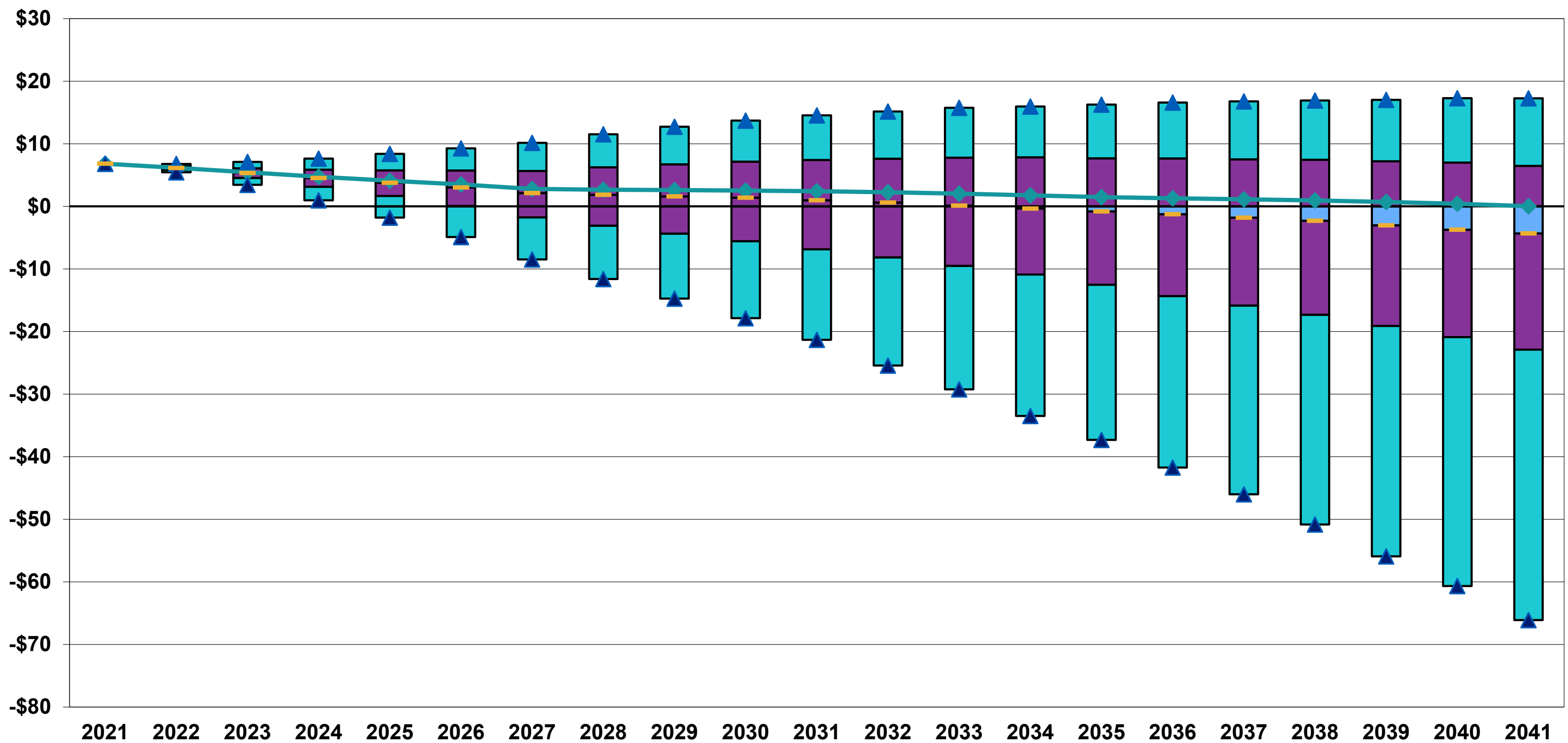


	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
▲ 95th	74.6%	80.4%	88.1%	96.8%	105.8%	115.2%	125.4%	133.7%	141.5%	148.8%	156.6%	165.7%	173.7%	182.4%	189.9%	198.6%	206.9%	216.3%	226.4%	235.9%	247.2%
— 75th	74.6%	79.0%	84.3%	89.5%	94.7%	99.8%	105.3%	109.0%	112.3%	115.2%	118.2%	121.1%	124.0%	126.8%	130.2%	133.9%	136.8%	139.7%	143.2%	146.8%	151.0%
— 50th	74.6%	78.0%	81.6%	84.9%	87.9%	90.7%	93.7%	94.6%	95.5%	96.2%	97.5%	98.4%	99.7%	100.9%	101.9%	103.0%	104.2%	105.3%	106.9%	108.3%	109.6%
— 25th	74.6%	77.0%	79.0%	80.5%	81.5%	82.2%	83.0%	81.9%	81.1%	80.5%	80.3%	80.3%	80.4%	80.7%	81.5%	81.9%	82.6%	82.9%	83.7%	84.3%	85.6%
▲ 5th	74.6%	75.7%	75.5%	74.6%	73.0%	71.2%	69.5%	66.5%	64.2%	62.5%	61.4%	60.8%	60.3%	60.7%	60.8%	60.8%	61.0%	61.3%	61.5%	61.3%	61.5%
◆	74.6%	77.9%	81.2%	84.2%	86.8%	89.1%	91.6%	92.2%	92.7%	93.1%	93.6%	94.2%	94.9%	95.7%	96.4%	97.0%	97.3%	97.8%	98.4%	99.1%	99.9%

◆ Baseline deterministic projection

Chart 10

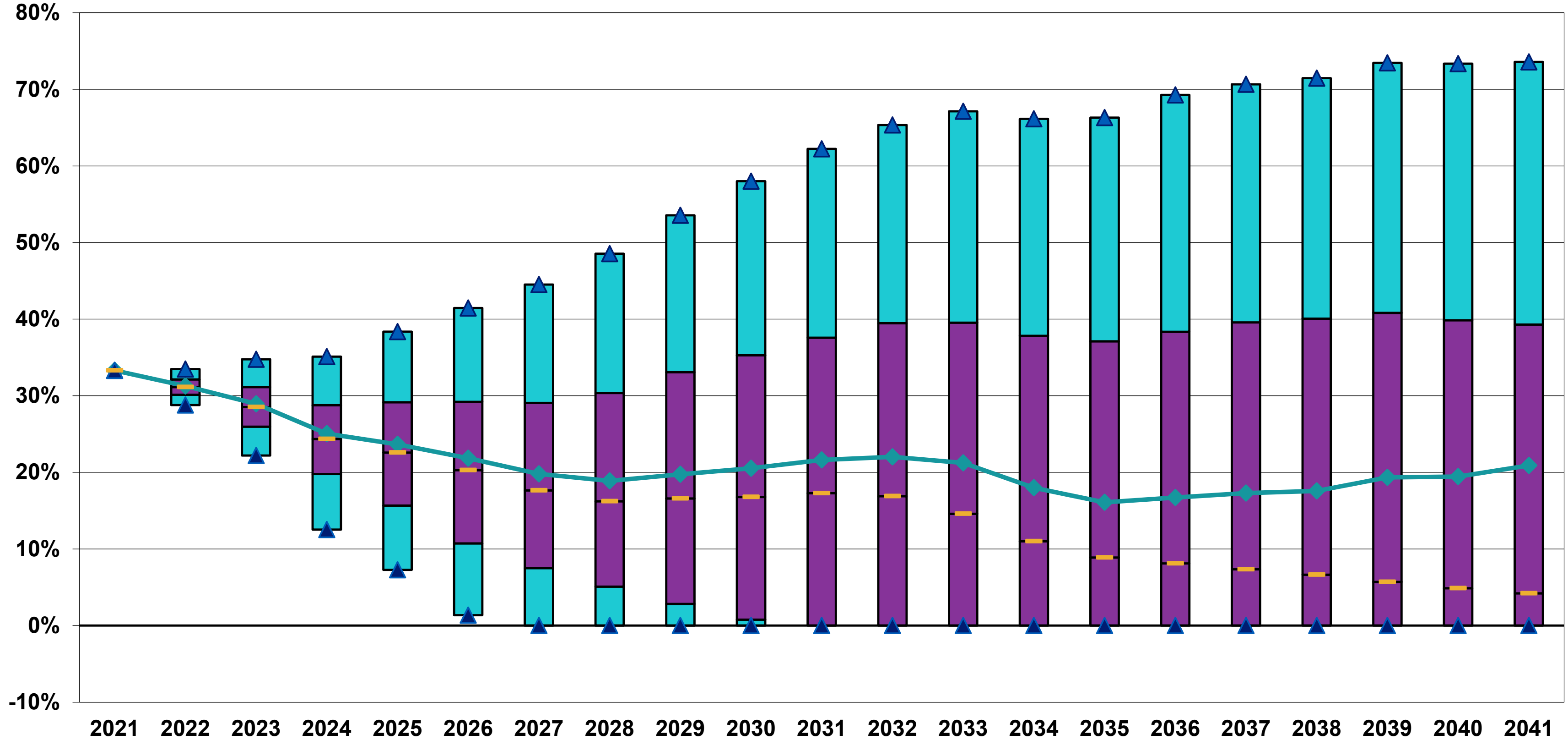
Projected UAAL (on Actuarial Value of Assets Basis)
$ in Billions



	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
▲ 95th	6.8	5.4	3.4	1.0	-1.8	-4.9	-8.5	-11.6	-14.7	-17.9	-21.3	-25.4	-29.2	-33.5	-37.3	-41.7	-46.0	-50.8	-55.9	-60.7	-66.1
— 75th	6.8	5.8	4.6	3.1	1.7	0.1	-1.8	-3.1	-4.4	-5.6	-6.9	-8.2	-9.5	-10.9	-12.5	-14.3	-15.9	-17.3	-19.1	-20.9	-22.9
— 50th	6.8	6.1	5.3	4.5	3.8	3.0	2.1	1.8	1.6	1.4	1.0	0.6	0.1	-0.4	-0.8	-1.3	-1.8	-2.3	-3.0	-3.7	-4.3
— 25th	6.8	6.4	6.1	5.8	5.8	5.7	5.7	6.2	6.7	7.1	7.4	7.6	7.8	7.8	7.7	7.7	7.5	7.5	7.2	7.0	6.5
▲ 5th	6.8	6.8	7.1	7.6	8.4	9.3	10.2	11.5	12.7	13.7	14.5	15.2	15.8	16.0	16.3	16.6	16.8	16.9	17.0	17.3	17.3
◆	6.8	6.2	5.4	4.7	4.1	3.5	2.8	2.7	2.6	2.5	2.4	2.3	2.0	1.8	1.5	1.3	1.1	0.9	0.7	0.4	0.0

◆ Baseline deterministic projection

Projected Employer Contribution Rates
Percent of Payroll



	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
95th	33.3%	28.8%	22.2%	12.5%	7.3%	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
75th	33.3%	30.1%	26.0%	19.8%	15.7%	10.7%	7.5%	5.1%	2.8%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
50th	33.3%	31.1%	28.5%	24.4%	22.6%	20.3%	17.7%	16.2%	16.6%	16.8%	17.3%	16.9%	14.6%	11.0%	8.9%	8.1%	7.3%	6.7%	5.7%	4.9%	4.2%
25th	33.3%	32.1%	31.1%	28.8%	29.2%	29.2%	29.1%	30.4%	33.1%	35.3%	37.6%	39.5%	39.6%	37.8%	37.1%	38.4%	39.6%	40.1%	40.8%	39.9%	39.3%
5th	33.3%	33.5%	34.8%	35.1%	38.4%	41.5%	44.5%	48.5%	53.6%	58.0%	62.2%	65.3%	67.1%	66.2%	66.3%	69.3%	70.7%	71.5%	73.5%	73.4%	73.6%
	33.3%	31.3%	28.9%	25.1%	23.7%	21.9%	19.8%	18.9%	19.7%	20.5%	21.6%	22.0%	21.2%	18.0%	16.1%	16.7%	17.3%	17.6%	19.4%	19.5%	20.9%

Baseline deterministic projection

Plan Maturity Measures that Affect Primary Risks

The annual actuarial valuations consider the number and demographic characteristics of covered members, including active members and non-active members (inactive vested, retirees and beneficiaries). In the past 10 valuations from June 30, 2012 to 2021, LACERS has become more mature, indicated by the continued increase in the ratio of non-active to active members covered by the Retirement and Health Plans as shown in *Charts 12a* and *12b*, respectively. The Charts also show the ratio of members in pay status (retirees and beneficiaries) to active members. This ratio excludes the inactive vested members who have relatively smaller liabilities. The increase in the ratios is significant because any increase in UAAL due to unfavorable future investment and non-investment experience for a relatively larger group of non-active members would have to be amortized and funded using the payroll of a relatively smaller group of active members.

Besides the ratio of members in pay status to active members, another indicator of a more mature plan is relatively large amounts of assets and/or liabilities compared to active member payroll, which leads to increasing volatility in the level of required contributions. The **Asset Volatility Ratio (AVR)**, which is equal to the market value of assets divided by total payroll, provides an indication of contribution sensitivity to changes in the current level of assets and is detailed for the Retirement and Health Plans in *Charts 13a* and *13b*, respectively. The **Liability Volatility Ratio (LVR)**, which is equal to the actuarial accrued liability divided by payroll, provides an indication of the contribution sensitivity to changes in the current level of liability and is also detailed for the Retirement and Health Plans in *Charts 13a* and *13b*, respectively. Over time, the AVR should approach the LVR because when a plan is fully funded the assets will equal the liabilities. As such, the LVR also indicates the long-term contribution sensitivity to the asset volatility, as the plan approaches full funding.

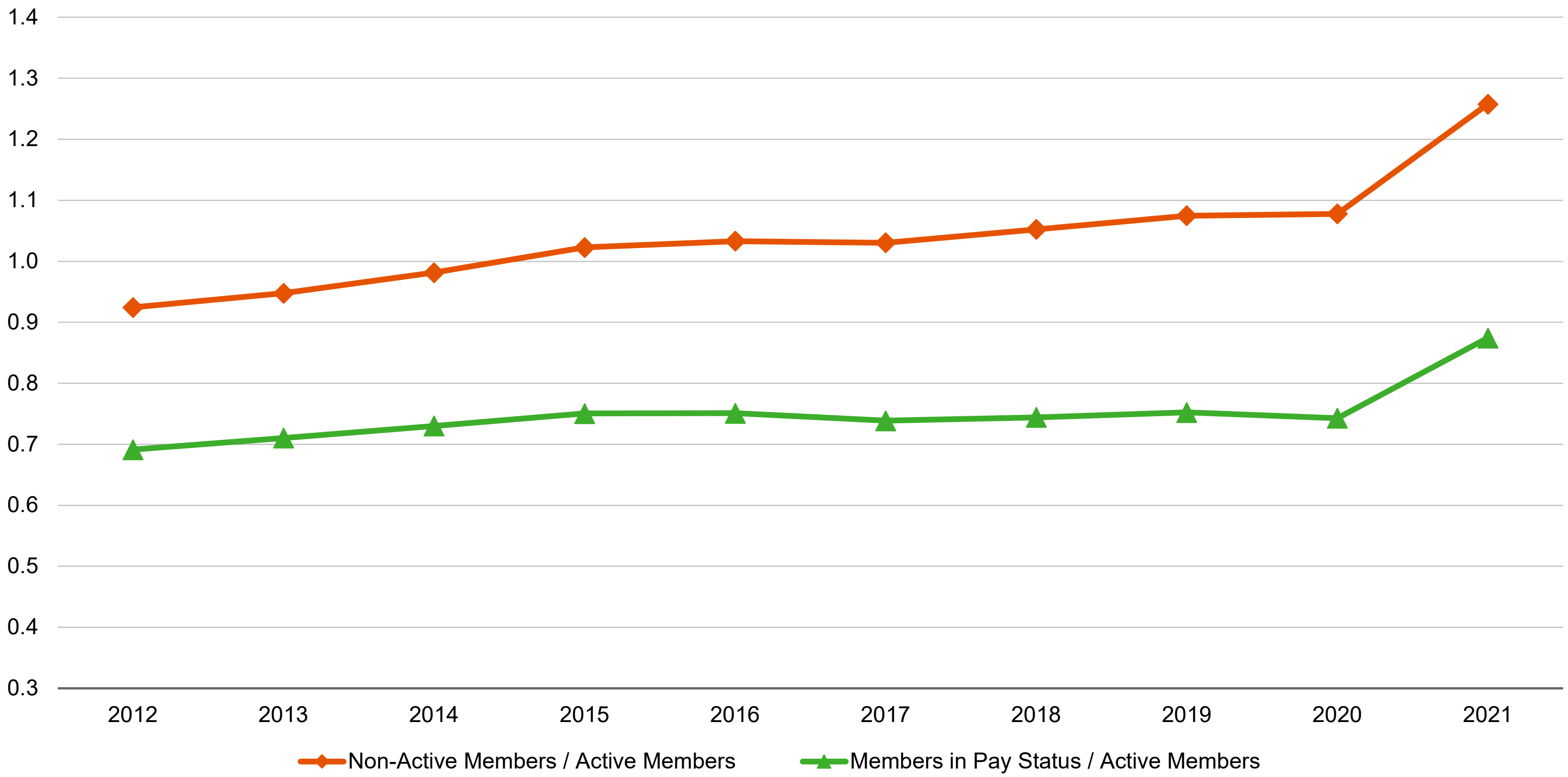
In particular, the Retirement Plan's AVR was 8.4 as of June 30, 2021. This means that a 1% asset gain or loss in 2021/2022 (relative to the assumed investment return) would amount to 8.4% of one year's payroll. Similarly, the Retirement Plan's LVR was 10.3 as of June 30, 2021, so a 1% liability gain or loss in 2021/2022 would amount to 10.3% of one year's payroll. Based on LACERS' policy to amortize actuarial experience over a period of 15 years, there would be a 0.7% of payroll decrease or increase in the required contribution rate for each 1% asset gain or loss, respectively, and a 0.9% of payroll decrease or increase in the required contribution rate for each 1% liability gain or loss, respectively, for the Retirement Plan.

It is also informative to note that the AVR and LVR for the Retirement Plan are significantly higher than for the Health Plan. This means that both investment volatility and assumption changes will have a greater impact on the contribution rates of the Retirement Plan than on the contribution rates of the Health Plan. This is illustrated in the following table:

	June 30, 2021			
Plan	**AVR**	**10% Investment Loss Compares to**	**LVR**	**10% Liability Change Compares to**
Retirement Plan	8.4	84% of payroll	10.3	103% of payroll
Health Plan	1.7	17% of payroll	1.6	16% of payroll
Combined	10.1	101% of payroll	11.9	119% of payroll

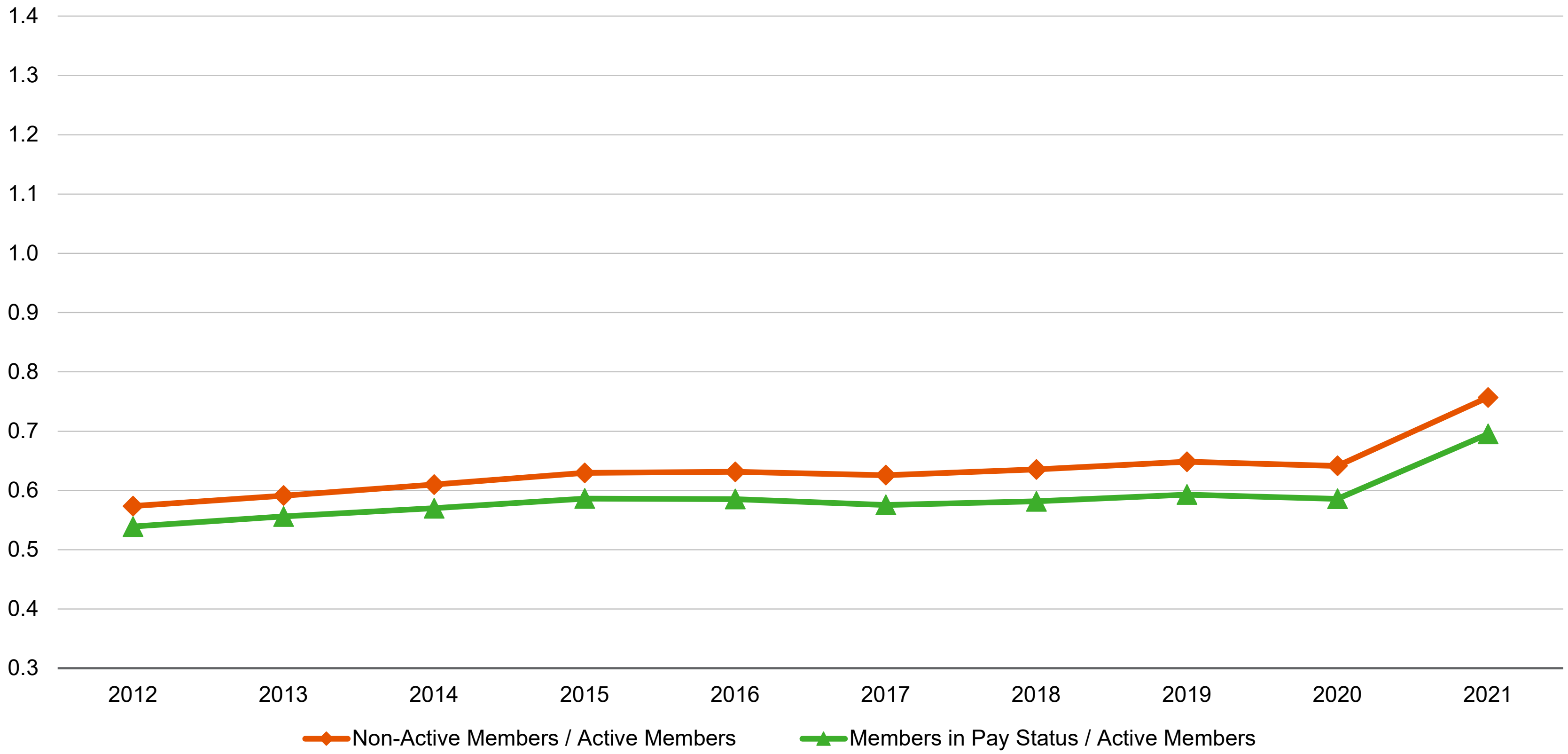
RETIREMENT PLAN

Ratios of Members in Pay-Status (Retirees and Beneficiaries) to Active Members & Non-Active Members (Inactive Vested, Retirees and Beneficiaries) to Active Members in June 30, 2012 to 2021 Valuations



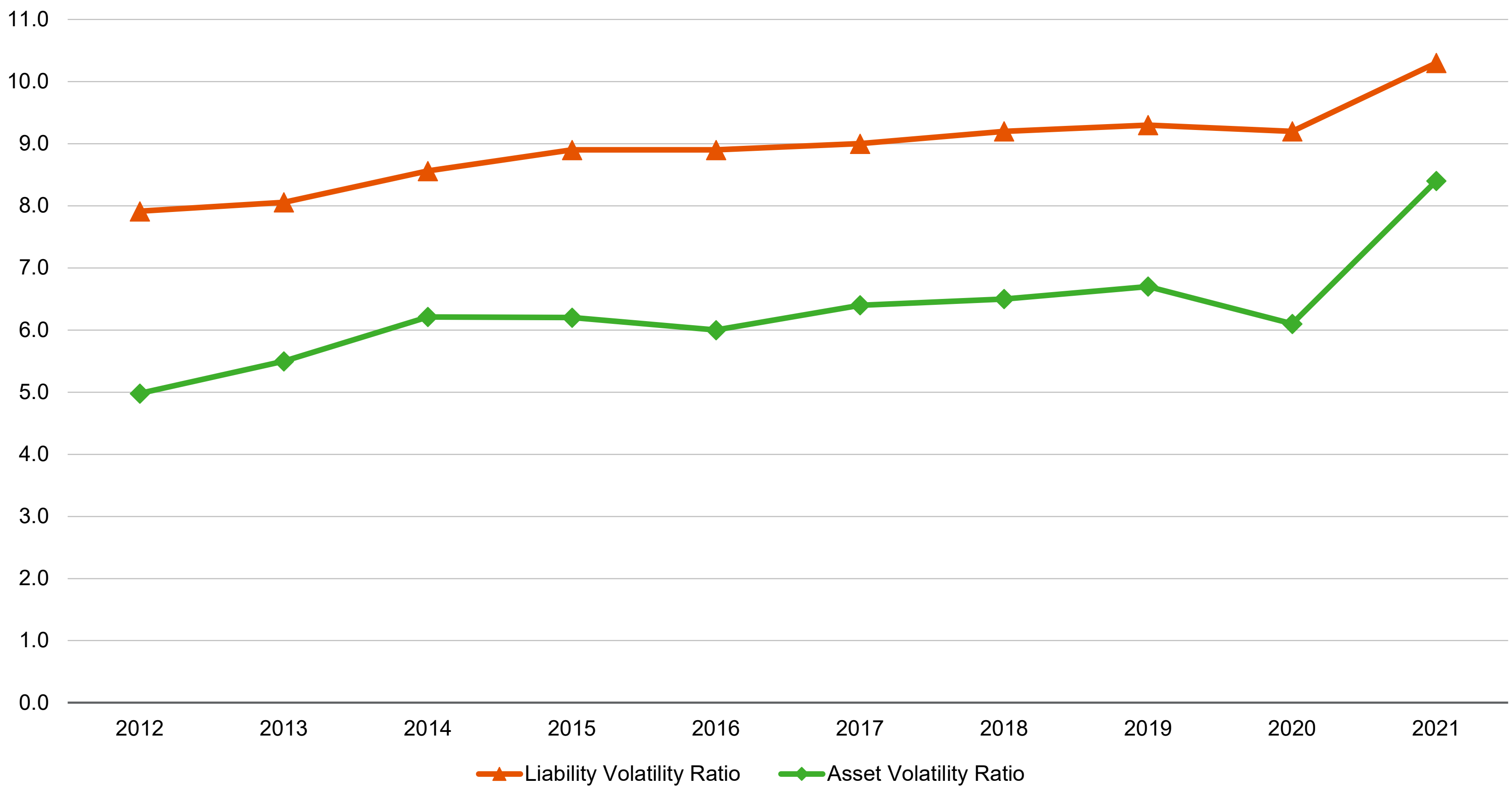
HEALTH PLAN

Ratios of Members in Pay-Status (Retirees and Beneficiaries) to Active Members & Non-Active Members (Inactive Vested, Retirees and Beneficiaries) to Active Members in June 30, 2012 to 2021 Valuations



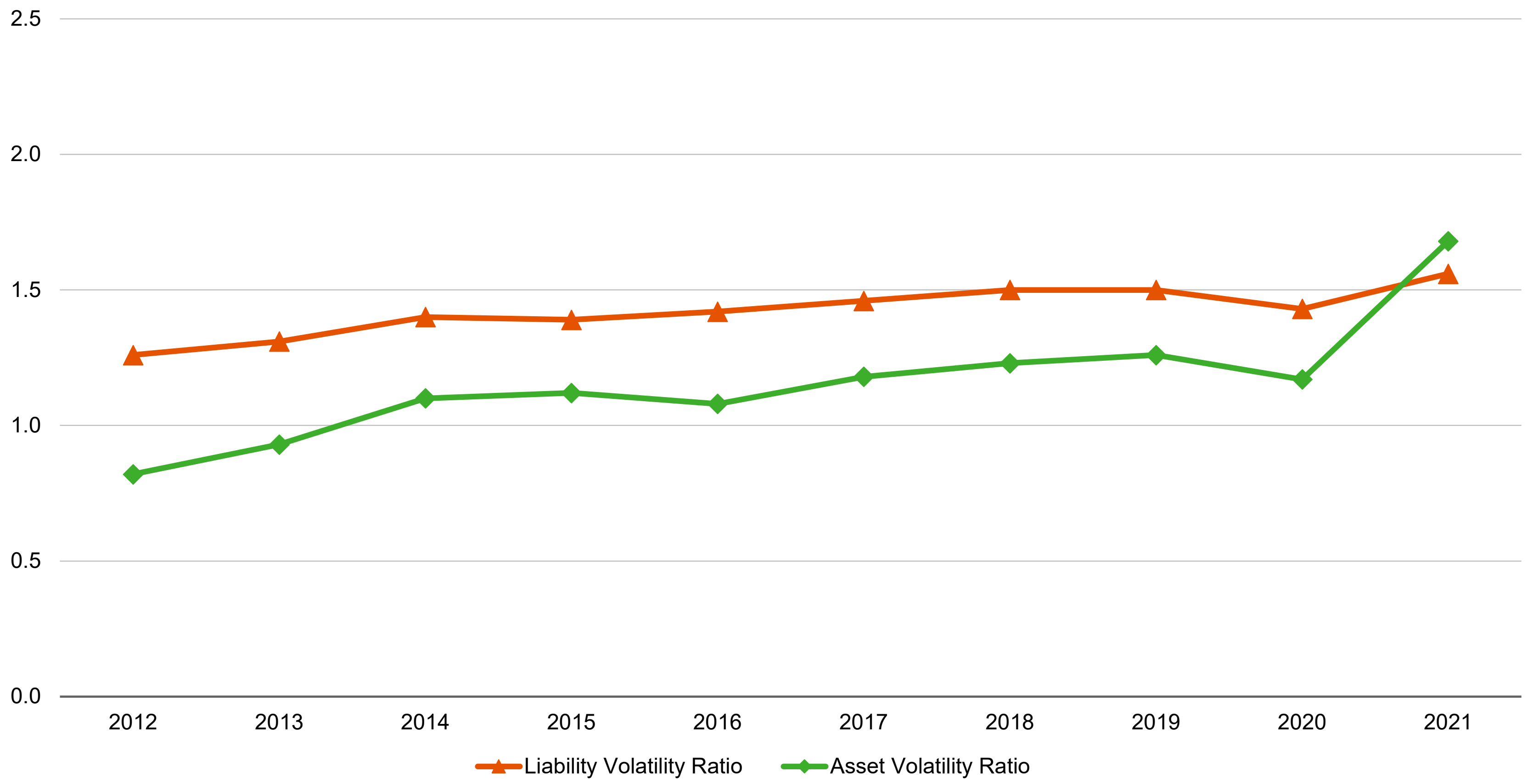
RETIREMENT PLAN

Volatility Ratios in June 30, 2012 to 2021 Valuations



HEALTH PLAN

Volatility Ratios in June 30, 2012 to 2021 Valuations



Appendix: Actuarial Assumptions & Methods, Actuarial Certification, and Detailed Scenario Test Results

Actuarial Assumptions & Methods

Unless otherwise noted, the results included in this report have been prepared based on the assumptions and methods used in preparing the June 30, 2021 valuations.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Deterministic Projection

In addition, we have prepared the deterministic projection using the following assumptions and methods applied in the June 30, 2021 actuarial valuation:

- Non-economic assumptions will remain unchanged.
- Retirement benefit formulas will remain unchanged.
- Los Angeles Charter and Administrative Code will remain unchanged.
- UAAL amortization method will remain unchanged (i.e., 15-year layers for actuarial gains/losses, 20-year layers for assumption or method changes, 30-year layers for actuarial surplus, and level percent of pay).
- Economic assumptions will remain unchanged, including the annual 7.00% investment earnings and 3.25% active payroll growth assumptions.
- Deferred investment gains and losses will be recognized over a seven-year period.

- In estimating the benefit payments for the open group, we have assumed that the annual payments will increase by 5.5% and 6.0% for the Retirement and Health Plans, respectively. These assumptions, which were unchanged from last year since we ignored the effect of the recent City Separation Incentive Program, were developed by analyzing the increase in the actual benefit payments over the five years ending June 30, 2020, combined with the increase in the projected benefit payments based on the actuarial assumptions described herein for the five years after July 1, 2020.
- All other actuarial assumptions used in the June 30, 2021 actuarial valuations will be realized.

Stochastic Projection

Besides the assumptions and methods discussed above for the deterministic projection, the following additional assumptions or parameters are used in projecting LACERS' investment portfolio over the next 20 years based on performing 10,000 trial outcomes of future market returns.

Target Asset Allocation

The target asset allocation is based on that provided by LACERS at the last triennial experience study and used by Segal to set the investment return assumption of 7.00% that was applied in the June 30, 2021 valuations. That target asset allocation is as follows:

Asset Class	Target Allocation
Large Cap U.S. Equity	15.01%
Small/Mid Cap U.S. Equity	3.99%
Developed International Large Cap Equity	17.01%
Developed International Small Cap Equity	2.97%
Emerging International Large Cap Equity	5.67%
Emerging International Small Cap Equity	1.35%
Core Bonds	13.75%
High Yield Bonds	2.00%
Bank Loans	2.00%
TIPS	4.00%
Emerging Market Debt (External)	2.25%
Emerging Market Debt (Local)	2.25%
Core Real Estate	4.20%
Non-Core Real Estate	2.80%
Cash	1.00%
Commodities	1.00%
Private Equity	14.00%
Private Credit/Debt	3.75%
REITS	1.00%
Total	100.00%

We understand that the Board adopted a new target asset allocation on May 11, 2021, however, we have not used the newly adopted target allocation to produce the stochastic projection results provided herein for the reasons discussed next.

Based on information provided by LACERS for the June 30, 2021 valuations, the implementation of the new target allocation for several asset categories is expected to take several years and LACERS' investment consultant, NEPC, has provided the System with interim policy targets for years 2021-2025. Furthermore, in NEPC's asset/liability study report that we found in the agenda for the May 11, 2021 Board meeting, it was noted that the proposed asset mix that was adopted by the Board is anticipated to provide higher expected returns, better diversification and favorable liquidation, along with lower projected contribution rates and improved funded status (under the 50^{th} percentile). This means that everything else being equal, the stochastic projection results in this report, prepared using the target allocation that was used to develop the 7.00% investment return assumption starting with the June 30, 2020 valuations, could be viewed as being somewhat more conservative. With all of this said, NEPC's report mentioned that none of their proposed asset mixes represent a major departure from the current target allocation (i.e., the allocation we used for the stochastic projections).

For these reasons, we have continued to use the target asset allocation that was provided by LACERS at the last triennial experience study and used by Segal to set the investment return assumption of 7.00% that was applied in the June 30, 2021 valuations, until we are scheduled to review that assumption at the time of the next experience study.

Simulation of Future Returns

In preparing the 10,000 trial outcomes of future market returns, we performed simulations using assumptions regarding the 20-year arithmetic returns, standard deviations and correlation matrix that were found in the 2021 survey prepared by Horizon Actuarial Services.[21] We used the assumptions that were closest to the asset classes found in LACERS' investment portfolio.

A summary of the 20-year arithmetic returns,[22,23] standard deviations and correlation matrix for each of the different asset classes used in the modeling is as follows:

		20-Year	Standard		Correlation Matrix												
	Asset Class	Arithmetic Return	Deviation		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Large Cap U.S. Equity	7.96%	16.42%	1	1.00												
2	Small/Mid Cap U.S. Equity	9.01%	20.17%	2	0.90	1.00											
3	Developed International Equity	8.79%	18.32%	3	0.82	0.77	1.00										
4	Emerging International Equity	10.78%	24.33%	4	0.72	0.70	0.80	1.00									
5	Core Bonds	3.38%	5.52%	5	0.19	0.15	0.20	0.18	1.00								
6	High Yield Bonds, Bank Loans	5.46%	9.88%	6	0.63	0.63	0.62	0.62	0.43	1.00							
7	Emerging Market Debt	5.99%	11.26%	7	0.48	0.45	0.52	0.61	0.49	0.60	1.00						
8	US Treasuries, Cash	1.91%	1.30%	8	(0.06)	(0.06)	(0.04)	(0.03)	0.12	(0.10)	0.01	1.00					
9	TIPS	2.56%	5.64%	9	0.05	0.02	0.07	0.12	0.66	0.27	0.35	0.13	1.00				
10	Real Estate, REITS	7.65%	17.62%	10	0.60	0.62	0.55	0.49	0.28	0.52	0.43	(0.01)	0.19	1.00			
11	Commodities	5.45%	17.31%	11	0.34	0.34	0.42	0.44	0.08	0.38	0.33	0.02	0.18	0.25	1.00		
12	Private Equity	12.27%	22.25%	12	0.74	0.74	0.69	0.61	0.10	0.51	0.38	(0.03)	0.01	0.50	0.33	1.00	
13	Private Credit/Private Debt	7.52%	11.42%	13	0.54	0.55	0.54	0.52	0.26	0.71	0.44	(0.04)	0.11	0.46	0.37	0.54	1.00

Other Considerations

The results presented in this report are intended to provide insight into key plan risks that can inform financial preparation and future decision making. However, we emphasize that deterministic and stochastic projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

[21] That survey included responses from 39 investment advisors, including LACERS' investment advisor at NEPC.

[22] Note that only 24 investment advisors provided long-term (e.g., 20-year) capital market assumptions in the survey.

[23] These returns are gross of inflation and before any adjustment for administrative expenses. The annual inflation assumption based on the Horizon Survey was 2.24%. The annual adjustment for administrative expenses was 0.15%.

Actuarial Certification

The actuarial calculations in this report were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary and Mary Kirby, FSA, MAAA, FCA.

The actuarial opinions expressed in this report were prepared by Paul Angelo, FSA, MAAA, FCA, Enrolled Actuary, Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary, and Todd Tauzer, FSA, MAAA, FCA, CERA. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Paul Angelo, FSA, MAAA, FCA, EA	Andy Yeung, ASA, MAAA, FCA, EA	Todd Tauzer, FSA, MAAA, FCA, CERA
Senior Vice President and Actuary	Vice President and Actuary	Vice President and Consulting Actuary

Detailed Scenario Test Results – Under Scenario 2 (Assuming 7.00% Market Return for 2021/2022)

RETIREMENT PLAN

Projection of UAAL, Funded Ratio and City Contributions
(Contributions Received on July 15)
($ In Thousands)

June 30 of Valuation Year					City Contributions (July 15)				
Valuation Year	UAAL	Funded Ratio	Fiscal Year End	Fiscal Year Pay	Normal Cost	UAAL Amortization	Total Rate	Contribution Amount	Incremental Increase
2020	$ 6,897,093	69.4%	2022	$ 2,254,165	7.85%	20.11%	27.96%	$ 630,265	
2021	$ 6,621,308	71.6%	2023	$ 2,327,425	7.75%	21.64%	29.39%	$ 684,030	$ 53,765
2022	$ 6,074,272	74.9%	2024	$ 2,403,067	7.49%	19.86%	27.35%	$ 657,239	$ (26,791)
2023	$ 5,456,966	78.2%	2025	$ 2,481,166	7.35%	17.91%	25.26%	$ 626,743	$ (30,496)
2024	$ 4,853,390	81.3%	2026	$ 2,561,804	7.21%	14.34%	21.55%	$ 552,069	$ (74,674)
2025	$ 4,309,449	84.0%	2027	$ 2,645,063	7.63%	12.67%	20.30%	$ 536,948	$ (15,121)
2026	$ 3,796,699	86.4%	2028	$ 2,731,027	7.46%	11.17%	18.63%	$ 508,790	$ (28,158)
2027	$ 3,194,394	88.9%	2029	$ 2,819,786	7.29%	9.46%	16.75%	$ 472,314	$ (36,476)
2028	$ 3,088,670	89.6%	2030	$ 2,911,429	7.11%	8.70%	15.81%	$ 460,297	$ (12,017)
2029	$ 3,015,832	90.1%	2031	$ 3,006,050	6.95%	9.67%	16.62%	$ 499,606	$ 39,309
2030	$ 2,952,800	90.6%	2032	$ 3,103,747	6.78%	10.60%	17.38%	$ 539,431	$ 39,825
2031	$ 2,844,925	91.2%	2033	$ 3,204,619	6.62%	11.81%	18.43%	$ 590,611	$ 51,180
2032	$ 2,688,722	91.9%	2034	$ 3,308,769	6.46%	12.34%	18.80%	$ 622,049	$ 31,438
2033	$ 2,468,545	92.7%	2035	$ 3,416,304	6.32%	11.65%	17.97%	$ 613,910	$ (8,139)
2034	$ 2,201,981	93.6%	2036	$ 3,527,334	6.19%	8.49%	14.68%	$ 517,813	$ (96,097)
2035	$ 1,927,336	94.5%	2037	$ 3,641,972	6.07%	6.68%	12.75%	$ 464,351	$ (53,462)
2036	$ 1,739,174	95.1%	2038	$ 3,760,336	5.96%	7.39%	13.35%	$ 502,005	$ 37,654
2037	$ 1,598,265	95.6%	2039	$ 3,882,547	5.86%	8.04%	13.90%	$ 539,674	$ 37,669
2038	$ 1,410,389	96.2%	2040	$ 4,008,730	5.77%	8.39%	14.16%	$ 567,636	$ 27,962
2039	$ 1,173,031	96.8%	2041	$ 4,139,014	5.68%	10.22%	15.90%	$ 658,103	$ 90,467
2040	$ 893,552	97.6%	2042	$ 4,273,532	5.61%	10.37%	15.98%	$ 682,910	$ 24,807
2041	$ 502,597	98.7%	2043	$ 4,412,421	5.55%	11.87%	17.42%	$ 768,644	$ 85,734
2042	$ 62,677	99.8%	2044	$ 4,555,825	5.50%	-0.07%	5.43%	$ 247,381	$ (521,263)
2043	$ (493,826)	101.3%	2045	$ 4,703,889	5.44%	-0.58%	4.86%	$ 228,609	$ (18,772)
2044	$ (526,932)	101.5%	2046	$ 4,856,766	5.41%	-0.60%	4.81%	$ 233,610	$ 5,001

Detailed Scenario Test Results – Under Scenario 2 (Assuming 7.00% Market Return for 2021/2022)

HEALTH PLAN

Projection of UAAL, Funded Ratio and City Contributions
(Contributions Received on July 15)
($ In Thousands)

	June 30 of Valuation Year				City Contributions (July 15)				
Valuation Year	UAAL	Funded Ratio	Fiscal Year End	Fiscal Year Pay	Normal Cost	UAAL Amortization	Total Rate	Contribution Amount	Incremental Increase
2020	$ 502,107	85.6%	2022	$ 2,254,165	3.48%	0.81%	4.29%	$ 96,704	
2021	$ 189,701	94.6%	2023	$ 2,327,425	3.62%	0.30%	3.92%	$ 91,235	$ (5,469)
2022	$ 82,014	97.8%	2024	$ 2,403,067	3.68%	0.24%	3.92%	$ 94,200	$ 2,965
2023	$ (17,978)	100.5%	2025	$ 2,481,166	3.72%	-0.04%	3.68%	$ 91,307	$ (2,893)
2024	$ (119,014)	102.9%	2026	$ 2,561,804	3.76%	-0.26%	3.50%	$ 89,663	$ (1,644)
2025	$ (206,576)	104.9%	2027	$ 2,645,063	3.78%	-0.43%	3.35%	$ 88,610	$ (1,053)
2026	$ (296,847)	106.7%	2028	$ 2,731,027	3.82%	-0.60%	3.22%	$ 87,939	$ (671)
2027	$ (405,811)	108.8%	2029	$ 2,819,786	3.84%	-0.79%	3.05%	$ 86,003	$ (1,936)
2028	$ (415,986)	108.6%	2030	$ 2,911,429	3.87%	-0.79%	3.08%	$ 89,672	$ 3,669
2029	$ (420,366)	108.3%	2031	$ 3,006,050	3.89%	-0.77%	3.12%	$ 93,789	$ 4,117
2030	$ (424,536)	108.1%	2032	$ 3,103,747	3.91%	-0.75%	3.16%	$ 98,078	$ 4,289
2031	$ (428,776)	107.8%	2033	$ 3,204,619	3.94%	-0.74%	3.20%	$ 102,548	$ 4,470
2032	$ (433,085)	107.6%	2034	$ 3,308,769	3.95%	-0.72%	3.23%	$ 106,873	$ 4,325
2033	$ (437,501)	107.4%	2035	$ 3,416,304	3.98%	-0.71%	3.27%	$ 111,713	$ 4,840
2034	$ (441,730)	107.2%	2036	$ 3,527,334	4.00%	-0.69%	3.31%	$ 116,755	$ 5,042
2035	$ (446,155)	107.0%	2037	$ 3,641,972	4.01%	-0.67%	3.34%	$ 121,642	$ 4,887
2036	$ (450,885)	106.8%	2038	$ 3,760,336	4.03%	-0.66%	3.37%	$ 126,723	$ 5,081
2037	$ (455,672)	106.7%	2039	$ 3,882,547	4.04%	-0.65%	3.39%	$ 131,618	$ 4,895
2038	$ (460,573)	106.5%	2040	$ 4,008,730	4.05%	-0.63%	3.42%	$ 137,099	$ 5,481
2039	$ (465,198)	106.4%	2041	$ 4,139,014	4.07%	-0.62%	3.45%	$ 142,796	$ 5,697
2040	$ (470,033)	106.3%	2042	$ 4,273,532	4.08%	-0.61%	3.47%	$ 148,292	$ 5,496
2041	$ (475,157)	106.2%	2043	$ 4,412,421	4.08%	-0.59%	3.49%	$ 153,994	$ 5,702
2042	$ (480,247)	106.1%	2044	$ 4,555,825	4.09%	-0.58%	3.51%	$ 159,909	$ 5,915
2043	$ (485,448)	106.0%	2045	$ 4,703,889	4.10%	-0.57%	3.53%	$ 166,047	$ 6,138
2044	$ (490,786)	106.0%	2046	$ 4,856,766	4.11%	-0.56%	3.55%	$ 172,415	$ 6,368

Note: For purposes of these projections, and consistent with the Plan's funding policy, we have amortized the UAAL as of June 30, 2022 over a 20-year period because the UAAL contribution rate is expected to be negative (a credit) in the June 30, 2022 valuation even though there would still be a positive UAAL amount in that year

Detailed Scenario Test Results – Under Scenario 2 (Assuming 7.00% Market Return for 2021/2022)

RETIREMENT AND HEALTH PLANS

Projection of UAAL, Funded Ratio and City Contributions
(Contributions Received on July 15)
($ In Thousands)

	June 30 of Valuation Year				City Contributions (July 15)				
Valuation Year	UAAL	Funded Ratio	Fiscal Year End	Fiscal Year Pay	Normal Cost	UAAL Amortization	Total Rate	Contribution Amount	Incremental Increase
2020	$ 7,399,200	71.6%	2022	$ 2,254,165	11.33%	20.92%	32.25%	$ 726,969	
2021	$ 6,811,009	74.6%	2023	$ 2,327,425	11.37%	21.94%	33.31%	$ 775,265	$ 48,296
2022	$ 6,156,285	77.9%	2024	$ 2,403,067	11.17%	20.10%	31.27%	$ 751,439	$ (23,826)
2023	$ 5,438,988	81.2%	2025	$ 2,481,166	11.07%	17.87%	28.94%	$ 718,050	$ (33,389)
2024	$ 4,734,376	84.2%	2026	$ 2,561,804	10.97%	14.08%	25.05%	$ 641,732	$ (76,318)
2025	$ 4,102,873	86.8%	2027	$ 2,645,063	11.41%	12.24%	23.65%	$ 625,558	$ (16,174)
2026	$ 3,499,852	89.1%	2028	$ 2,731,027	11.28%	10.57%	21.85%	$ 596,729	$ (28,829)
2027	$ 2,788,583	91.6%	2029	$ 2,819,786	11.13%	8.67%	19.80%	$ 558,317	$ (38,412)
2028	$ 2,672,685	92.2%	2030	$ 2,911,429	10.98%	7.91%	18.89%	$ 549,969	$ (8,348)
2029	$ 2,595,466	92.7%	2031	$ 3,006,050	10.84%	8.90%	19.74%	$ 593,395	$ 43,426
2030	$ 2,528,264	93.1%	2032	$ 3,103,747	10.69%	9.85%	20.54%	$ 637,509	$ 44,114
2031	$ 2,416,149	93.6%	2033	$ 3,204,619	10.56%	11.07%	21.63%	$ 693,159	$ 55,650
2032	$ 2,255,637	94.2%	2034	$ 3,308,769	10.41%	11.62%	22.03%	$ 728,922	$ 35,763
2033	$ 2,031,044	94.9%	2035	$ 3,416,304	10.30%	10.94%	21.24%	$ 725,623	$ (3,299)
2034	$ 1,760,251	95.7%	2036	$ 3,527,334	10.19%	7.80%	17.99%	$ 634,568	$ (91,055)
2035	$ 1,481,182	96.4%	2037	$ 3,641,972	10.08%	6.01%	16.09%	$ 585,993	$ (48,575)
2036	$ 1,288,289	97.0%	2038	$ 3,760,336	9.99%	6.73%	16.72%	$ 628,728	$ 42,735
2037	$ 1,142,593	97.3%	2039	$ 3,882,547	9.90%	7.39%	17.29%	$ 671,292	$ 42,564
2038	$ 949,815	97.8%	2040	$ 4,008,730	9.82%	7.76%	17.58%	$ 704,735	$ 33,443
2039	$ 707,833	98.4%	2041	$ 4,139,014	9.75%	9.60%	19.35%	$ 800,899	$ 96,164
2040	$ 423,518	99.1%	2042	$ 4,273,532	9.69%	9.76%	19.45%	$ 831,202	$ 30,303
2041	$ 27,440	99.9%	2043	$ 4,412,421	9.63%	11.28%	20.91%	$ 922,638	$ 91,436
2042	$ (417,570)	100.9%	2044	$ 4,555,825	9.59%	-0.65%	8.94%	$ 407,290	$ (515,348)
2043	$ (979,274)	102.2%	2045	$ 4,703,889	9.54%	-1.15%	8.39%	$ 394,656	$ (12,634)
2044	$ (1,017,717)	102.3%	2046	$ 4,856,766	9.52%	-1.16%	8.36%	$ 406,025	$ 11,369

Historical Funded Status, UAAL, and Employer Contribution Rates

RETIREMENT AND HEALTH PLANS

	Market Value Basis		Valuation Value Basis		Total (Aggregate) Employer Contribution Rate (% of Payroll – Contributions Received on July 15)[1]
Valuation Date	Funded Status	UAAL	Funded Status	UAAL	
June 30, 2012	63.3%	$6.1B	69.4%	$5.1B	25.33%
June 30, 2013	68.7%	$5.4B	69.1%	$5.3B	26.56%
June 30, 2014	73.4%	$5.0B	68.1%	$6.0B	28.60%
June 30, 2015	71.9%	$5.5B	70.7%	$5.7B	27.62%
June 30, 2016	69.0%	$6.3B	72.6%	$5.5B	27.13%
June 30, 2017	72.8%	$5.8B	72.8%	$5.8B	28.16%
June 30, 2018	72.9%	$6.3B	71.6%	$6.6B	29.66%
June 30, 2019	73.1%	$6.5B	73.1%	$6.5B	29.12%
June 30, 2020	68.4%	$8.2B	71.6%	$7.4B	32.25%
June 30, 2021	84.7%	$4.1B	74.6%	$6.8B	33.31%

(1) For the June 30, 2012 – 2014 valuation dates, the rates shown are with adjustment for the five-year phase-in of the increase in the employer contribution rates due to assumption changes from the 2011 experience study. The rates without adjustment for those years were 26.17%, 27.11%, and 28.88%, respectively.

REPORT TO BOARD OF ADMINISTRATION **MEETING: MARCH 22, 2022**
From: Neil M. Guglielmo, General Manager **ITEM: VII – C**

SUBJECT: **PRELIMINARY PROPOSED BUDGET, PERSONNEL, AND ANNUAL RESOLUTIONS FOR FISCAL YEAR 2021-22 AND POSSIBLE BOARD ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Board provide input to the Preliminary Proposed Budget for Fiscal Year 2022-23 (FY23); and accordingly, instruct staff to submit the Proposed Budget schedules to the City Administrative Officer and the Mayor's Office for inclusion in the Mayor's 2022-23 Proposed Budget.

Executive Summary

The Department's Preliminary Budget is provided each March to the Board for discussion of the annual business plan for the coming fiscal year and the resources requested to maintain operations and carry out these projects. Input from the Board is incorporated into the final Proposed Budget, presented to the Board for adoption in May.

In the May budget proposal, an updated Headquarters (HQ) operating budget will be incorporated for Board approval as it is currently in development with the Property Manager and a placeholder figure of $1.5 million is currently reflected. The HQ proposed Year 1 Capital Improvements, of a 10-Year Capital Improvement Plan, totaling $462,000 for FY23 is incorporated in the Proposed Budget. Anticipated moving expenses budgeted in the current fiscal year are being reappropriated to next fiscal year in alignment with the updated HQ tenant improvements timeline. Ongoing HQ-related insurance costs totaling $128,500 are also reflected in the Administrative Expense budget for FY23.

Also transmitted herein are the budget schedules that will be submitted for incorporation in the Mayor's Proposed Budget, and the FY23 Performance Budget Report. The Budget Schedules include LACERS' Statement of Receipts and Expenditures; and schedules detailing the City Contribution, Investment Management Fee Expense, Administrative Expense, 115 Trust Expense, and Regular Position Authorities for FY23. A summary of changes in these budget areas are reflected in the following table:

	FY23	FY22	$ change	% change
City Contribution	$ 711,080,847 (estimate)	$ 715,507,022	$ -4,426,175	-0.6
Investment Management Fee & Expense	107,027,414	95,652,261	11,375,153	11.9
Administrative Expense	39,786,791	33,392,154	6,394,637	19.2
Regular Position Authorities	187	177	10	5.7

Discussion

Detailed discussion of the proposed budget is provided in the attached report. The key highlights of the report are:

City Contribution

The FY23 City Contribution is estimated at $711 million. Last year's City Contribution after the true-up credit was $715.5 million.

Further discussion of the City contribution is found on pages 38 through 40 of Attachment 1 and is summarized below:

- The Board adopted the FY23 City contributions rates as recommended by the Actuary.
- The Tier 1 contribution of $607 million is 33.93% of $1,787,408,108 total pensionable salary of Tier 1 members based on FY22 City payroll.
- The Tier 3 contribution of $178 million is 31.35% of $568,974,908 total pensionable salary of Tier 3 members based on FY22 City payroll.
- A true-up credit of $75 million will be applied to the employer contribution. This represents the difference in the employer contribution based on the projected payroll versus the actual payroll of FY22.
- The City is expected to adopt a final covered payroll prior to the May presentation of the final LACERS' budget. The City contribution for Tier 1 and Tier 3 Members will be adjusted accordingly.
- The employer cost for the Family Death Benefit Plan is $47,000.
- The employer cost for the Excess Benefit Plan is $1,332,000.
- The employer cost for the Limited Term Retirement Plan is $55,000.

Administrative Expense Budget

The Administrative Expense Budget of $39.8 million is $6.4 million, or 19.2% higher than the Fiscal Year 2021-22 (FY22) Adopted Budget. The Proposed Budget provides $36.8 million to maintain core services, and $3.0 million toward funding new and ongoing initiatives. Obligatory changes to salaries and benefits account for $3.3 million of the increase. This is proposed to be offset in part by a 5% salary savings of $1.0 million. The Proposed Budget includes significant investment in human resources comprised of 10 regular positions, including 3 substitute positions converted to regular positions, and 12 continuing substitute authority positions. The total positions from FY23 are reduced by one due in part to a reduction in substitute authority positions from FY22. The increase in the regular position requests is a function of the need for continuity and employee retention in the various Divisions to maintain service levels as workload complexity increases.

Further discussion of the Administrative Expense Budget is found on pages 9 through 15 of Attachment 1 and is summarized below:

- The proposed salaries of $20 million includes a proposed 5% salary savings providing an offset of -$1.0 million.

- New Position Requests: Seven new regular positions and three regularized substitute authority positions (“subs”) are requested for FY23 increasing the personnel authority from 177 to 187 positions.
  - 1 new regular position in Human Resources Unit
  - 2 new regular positions in Investments
  - 1 new regular position in Administration Division
  - 3 new regular positions in Retirement Services Division
  - 3 regularized substitute authority positions in Health, Wellness, and Buyback Division

- Continuing Substitute Authority Position Requests: 12 substitute authority positions are requested to continue for FY23.
  - 8 substitute authority positions in Health, Wellness, and Buyback Division
  - 1 substitute authority position in Member Services
  - 3 substitute authority positions in Retirement Services Division

- New Headquarters operating expenses estimated at $1.6 million are brought onto the Administrative Expense Budget as the project moves from capital improvement to occupancy in FY23. The operating budget is preliminary as it is still in development by the Property Manager and will be updated for the May Revised Budget Proposal. Due to the anticipated move date in FY23, approximately $233,000 in one-time move related expenses are being re-budgeted from the current year.

- The Business Plan for FY23 includes continuing and new Business Plan Initiatives for the Headquarters Move Project, Governance with a focus on strategic planning and cybersecurity, City Separation Incentive Program Closeout, Environmental, Social, and Governance Investing, and High Performing Workforce including the Diversity, Equity and Inclusion program.

Investment Management Fees and Expenses

The FY23 Investment Management Fees and Expenses are estimated at $107 million, up $11.4 million from the FY22 Adopted Budget.

Further discussion of the Investment Management Fees and Expenses is found on page 41 and 42 of Attachment 1 and is summarized below:

- The Investment Management Fees are estimated for FY23 by projecting the future market value of portfolio assets and applying the management fee rates reflected in the contracts with individual managers.

- The Investment Management Fee and Expenses schedule reflects adjustments for timing of the investment.

Strategic Plan Impact Statement

This budget includes funding for FY23 initiatives to meet LACERS seven strategic goals.

Prepared By: Todd Bouey, Assistant General Manager, Dale Wong-Nguyen, Assistant General Manager, the Administration Division and Budget Team: Isaias Cantú, Andy Chiu, Vikram Jadhav, John Koontz, Chhintana Kurimoto, Lisa Li, Lin Lin, Wally Oyewole, JoAnn Peralta, Kristen Szanto. In collaboration, and with special thanks to Department senior managers for the thought and leadership that went into this budget.

NMG/TB/CK

Attachments: 1. LACERS Performance Budget Report for Fiscal Year 2022-23
2. Proposed Budget, Personnel, and Annual Resolutions

LACERS PERFORMANCE BUDGET

FY 2022-23
BOARD PRESENTATION OF MARCH 22, 2022

TABLE OF CONTENTS

INTRODUCTION

The LACERS Fiscal Year 2022-23 (FY23) Budget continues to meet challenges as we navigate the ongoing effects of the COVID-19 pandemic, but is met with great hope as we prepare to begin occupancy of our new headquarters building and look to resume some normal operations. As such, this budget restores much of what had been previously reduced, including reflecting our intent to return to work and resume travel, but without letting go of the many new developments and tools that came out of response to the pandemic, which are now an ongoing part of LACERS' business operations, such as utilization of the cloud and other mobile workforce tools. In many ways this is a rebuilding budget wherein LACERS is emerging as a post-pandemic organization and is further making needed investments in staff that will pay dividends into the future. Addressing long standing staffing needs, recognizing changing working circumstances and increasing workload, prioritizing staff development and communication, and striving for a more inclusive and equitable workplace are key fundamentals that will translate into improved business continuity, staff knowledge and retention, and ultimately improved Member services.

This year's budget outlines proposals to continue improving areas in:

- Workforce development
- Staff hybrid remote and in-office working capability
- Our Members' Experience

The FY23 Business Plan will continue to focus on several key initiatives including the move to the new headquarters as we anticipate occupying the new building, as well as growth of internal Diversity, Equity and Inclusion efforts and investment in staff development and internal communication, information security efforts, and the continued integration of Environmental, Social and Governance investing principles.

	FY23	FY22	$ CHANGE	% CHANGE
City Contribution	$ 711,080,847	$ 715,507,022	$ -4,426,175	-0.6
Investment Management Fees & Expenses	107,027,414	95,652,261	11,375,153	11.9
Administrative Expense	39,786,791	33,392,154	6,394,637	19.2
Health Care Fund Administrative Expense	1,013,000	934,000	79,000	8.5
Regular Position Authorities	187	177	10	5.7

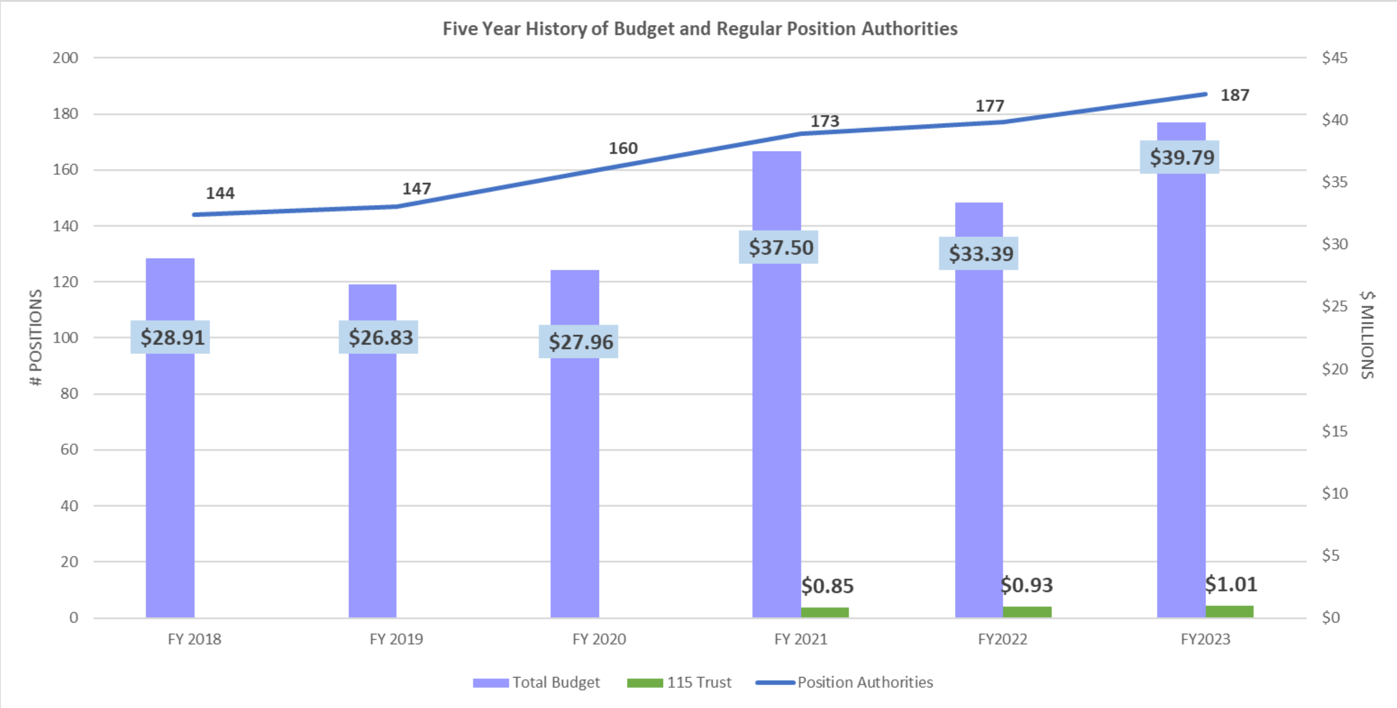
BUDGET OVERVIEW

The LACERS Board approves an annual budget which estimates the cost of maintaining the Retirement System. LACERS' budget is transmitted to the Mayor for inclusion in the City's proposed budget, which is due to City Council by April 20, and finalized in June for the fiscal year beginning July 1st. The Board's approval of the Administrative and Investment Expense budget establishes the General Manager's expenditure authority for the fiscal year.
LACERS' budget is comprised of the Administrative Expense Budget, the Health Care Fund Budget ("115 Trust"), the Investment Management Fees and Expenses Budget, and the City's contribution to the LACERS Retirement Trust Fund and 115 Trust Fund. Key decisions made by the Board throughout the year will determine certain aspects of the budget. This includes the adoption of the actuarial valuation in November which sets the annual contribution rate (a percentage of City payroll) that the City will provide to LACERS to fund the retirement benefits for City employees. The Board approves investment contracts throughout the year which set fee rates used to establish the Investment Management Fee Budget. In March and May of each year, the Board considers programs and annual business plan initiatives to fund for the coming fiscal years reflected in the Administrative Expense Budget.

An overview of the components of the LACERS' budget, with the Board's discretionary decisions is reflected as follows:

CITY CONTRIBUTION	=	CONTRIBUTION RATE Adopted in LACERS Valuation	x	CITY'S COVERED PAYROLL As Adopted by City Council
INVESTMENT MANAGEMENT FEES	=	ASSET MANAGEMENT FEES Established in LACERS-Approved Investment Contracts	x	ASSUMED MARKET VALUE OF ASSETS Based on Capital Market Assumptions
ADMINISTRATIVE EXPENSE	=	OBLIGATORY CHANGES Salary Increases, Cost-of-Living Increases, Retirement & Benefit Costs, Lease Cost, Legal Fees	+	APPROVED DISCRETIONARY CHANGES New Positions, Programs & Initiatives; Service Enhancements, Salary Savings Rate
HEALTH CARE FUND ADMINSTRATIVE EXPENSE	=	OBLIGATORY CHANGES Approved Third-Party Administrator, Audit Contract Fees		APPROVED DISCRETIONARY CHANGES Program Enhancements

ADMINISTRATIVE EXPENSE BUDGET



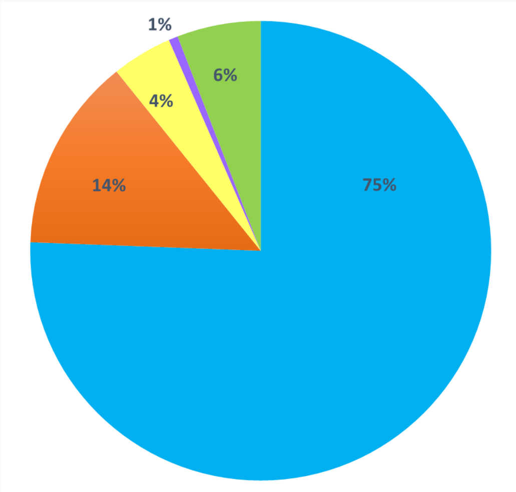
The Administrative Expense Budget of $39.79 million reflects a net increase of $6.39 million, or 19.2% over the Fiscal Year 2021-22 (FY22) base budget. Obligatory changes to the budget account for $4.8 million in increases over the FY22 adopted budget. This includes $1.2 million in Employee benefit and pension costs, $1.25 million for salary adjustments, and $0.9 million to fully-fund positions partially funded in FY22 (See Summary of Changes table, page 4). Obligatory costs are offset by the adoption of a 5% salary savings rate equivalent to $1.0 million, and $0.3 million in one-time and various expense reductions. The Budget invests $1.8 million in core services (excludes personnel costs), and $3.0 million to fund two on-going Business Plan Initiatives (BPI): Headquarters Move and City Separation Incentive Program Closeout, as well as three new BPIs: Governance Initiative, High Performing Workforce Initiative, and Investment's Environmental, Social and Governance efforts. (See 2022-23 Business Plan, pages 22, 24, 26, 31)

SUMMARY OF CHANGES

Category	Item		Dollars	Positions Regular	Positions Substitute
21-22 Adopted Budget		**$**	**33,392,154**	**177**	**23**
Obligatory Changes			**4,838,097**	-	-
	Full funding of Partially Funded Positions		893,269	-	-
	Restoration of Salary Savings		1,513,365		
	Cost-of-Living Adjustment		157,510	-	-
	Salary Rate Increases, Turnover, Excess Sick Pay		1,096,606	-	-
	Part-Time Salaries		(38,733)	-	-
	LACERS' Employer Share of Retirement Contributions		818,500	-	-
	LACERS' Share of Employee Benefits		370,090	-	-
	LACERS' Share of City Attorney and Outside Legal Counsel		27,490	-	-
Deletion of One-Time Funding			**(2,008,608)**	-	
	Deletion of Funding for Substitute Authorities		(1,779,561)	-	(23)
	Deletion of Funding for One-Time Services, Expenses, & Equipment		(229,047)	-	-
Efficiencies to Services			**(1,125,905)**	-	-
	Salary Savings Rate Adjustment [5%]		(1,013,909)	-	-
	Expense Account Savings		(111,996)	-	-
Continuation of Services			**1,703,183**		
	Investment Program Expenses		38,760	-	-
	Benefits Administration Expenses		1,529,252	6	12
	General Administration & Support Expenses		135,171		-
New/Enhanced Services			**2,987,870**		
	CSIP Closeout		60,000		
	Governance and Cybersecurity		172,302	1	
	High Performance Workforce Initiative		307,805	1	-
	Investment Private Equity Staffing		208,489	2	
	Headquarters Move Initiative		2,239,274	-	-
	Total Changes	$	6,394,637	10	(11)
	2022-23 Proposed Budget	**$**	**39,786,791**	**187**	**12**

ADMINISTRATIVE EXPENSE BUDGET CONT.

FY23 ALLOCATION OF EXPENSES



This budget year invests heavily in Personnel resources, while completing the Headquarters and several Information Technology projects. In the five major categories of expense, Personnel Services expenses account for 75% of the FY23 budget, and 59.7% of the budget increase. Professional Services expense make up 14% of the budget and 38.1% of the increase, followed by Office Expense at 6% of the budget, -0.8% decrease; Technology at 4% of the budget, 1.7% of the increase, and finally Education/Training and Travel at less than 1% of the budget allocation and change in 1.3% of the budget.

The Administrative Budget Detail includes the following notable items:

- Salaries increases by 15.3%, or $2.6M and Employee Benefits increases by 14.2%, or $1.2M. The increase in the Employee Benefits coincide with the increase in requested positions and reduced salary savings (from 9% to 5 %).
- Overtime decreases by -4.2%, or $21,404 in part due to additional position requests.
- Training and Related Travel increases by 36.2%, or $31,925 for Employee Development and 60.9%, or $52,850 for Conferences and Travel as in-person training and conferences are being re-established. This includes due-diligence travel by the Investment Division.
- Actuarial Services increases by 20.3%, or $76,468 primarily due to the Triennial Experience Study to be conducted in FY23.
- Other Consulting Services increases significantly by 847.7%, or $2.2M, primarily attributed to the Headquarters Move Business Plan Initiative budget which brings onto budget the move and the building's ongoing operating expenses. The Headquarters budget details are referenced on page 26, though a detailed operating budget is still in development by the Property Manager.
- Computer Software expenses increases by 63.5%, or $218,398. The expense covers various areas in strengthening information security and Business Plan Initiatives including the Headquarters Move Initiative and the High Performing Workforce Initiative.
- Board Member Election expense of $48,600 is a one-time expense for preparation and funding of the election in FY23.

ADMINISTRATIVE EXPENSE BUDGET CONT.

Additional items to note include:

- The Office Lease has a reduction of $256,000 due to the LA Times lease term through the end of March 2023.
- The budget for the LACERS Health Care Fund ("115 Trust") Administrative Expense is shown in the table following the Administrative Expense Budget. These expenses are paid by the Administrative Expense Budget and reimbursed by the 115 Trust. The 115 Trust Fund was established in 2018 to better manage the future costs and decrease the future tax liability of the LACERS health and welfare benefits. The 115 Trust Budget pays for administrative expenses including third party fees charged for the administration of Self-Funded Dental benefit claims, audit fee, legal counsel cost and the Fund's share in the overall administrative expenses of LACERS. The Proposed 115 Trust Budget of $1,013,000 is an increase of $79,000 or 8.5% over last fiscal year.
- This budget invests in the continuation of 12 substitute authority positions, regularization of 3 substitute authority positions, and 7 new regular positions. The purpose of these positions is detailed beginning on page 13.
- The Budget funds current programs underway including the core programs in Benefit Administration, Investment Administration, and General Administration and Support, as well as four initiatives in the FY23 Business Plan including the Headquarters Move Initiative; the High Performing Workforce Initiative; Environmental, Social, and Governance Investing, and Board Governance centered on strategic planning.

DETAIL OF ADMINISTRATIVE EXPENSES

		City Account Number	FY2022-23 Proposed Budget	FY2021-22 Adopted Budget	Budget $ Change	Budget % Change
FUND 800: ADMINISTRATIVE EXPENSE BUDGET						
Personnel Services						
601	Salaries	101	$ 20,025,137	$ 17,374,559	$ 2,650,578	15.3%
602	Overtime	109	486,854	508,258	$ (21,404)	-4.2%
605	Employee Benefits	175	9,551,390	8,362,800	$ 1,188,590	14.2%
	Personnel Services Total		**$ 30,063,381**	**$ 26,245,617**	**$ 3,817,764**	**14.5%**
Professional Services						
611	Actuarial Service	304	$ 452,750	$ 376,282	$ 76,468	20.3%
612	Audit Services	304	231,500	200,000	$ 31,500	15.8%
613	Legal Services	304	1,153,617	1,117,122	$ 36,495	3.3%
614	Disability Services	304	200,000	200,000	$ -	0.0%
615	Other Consulting	304	2,433,250	256,750	$ 2,176,500	847.7%
616	Benefit Payroll Processing Servs.	304	260,000	247,200	$ 12,800	5.2%
617	Retiree Health Adm. Consultant	304	700,000	600,000	$ 100,000	16.7%
	Professional Services Total		**$ 5,431,117**	**$ 2,997,354**	**$ 2,433,763**	**81.2%**
Information Technology						
622	Pension Adm. System Vendor	304	$ 470,068	$ 470,497	$ (429)	-0.1%
623	Computer Hardware	730	222,100	305,297	$ (83,197)	-27.3%
624	Computer Software	601	562,297	343,899	$ 218,398	63.5%
625	Computer Maint. & Support	601	344,399	330,646	$ 13,753	4.2%
626	Other Computer Consulting	304	87,000	124,400	$ (37,400)	-30.1%
	Information Technology Total		**$ 1,685,864**	**$ 1,574,739**	**$ 111,125**	**7.1%**
Training & Related Travel						
604	Employee Development	601	$ 119,995	$ 88,070	$ 31,925	36.2%
634	Conferences & Travel	213	139,665	86,815	$ 52,850	60.9%
	Training & Related Travel Total		**$ 259,660**	**$ 174,885**	**$ 84,775**	**48.5%**
Office Expenses						
606	Transportation Expenses	331	$ 11,000	$ 9,500	$ 1,500	15.8%
631	Printing and Binding	212	190,500	163,500	$ 27,000	16.5%
632	Postage	601	185,200	180,900	$ 4,300	2.4%
633	Telephone and Utilities	601	60,600	61,200	$ (600)	-1.0%
635	Office Lease	304	1,197,750	1,453,750	$ (256,000)	-17.6%
636	Office Equipment Services	304	85,000	64,725	$ 20,275	31.3%
651	Petty Cash	601	12,000	8,000	$ 4,000	50.0%
652	Board Member Election Expense	601	48,600	-	$ 48,600	0.0%
653	Furniture and Other Equipment	730	25,000	20,800	$ 4,200	20.2%
655	Other Office Expense	601	136,510	162,360	$ (25,850)	-15.9%
656	Membership Dues & Subscriptions	601	140,109	130,824	$ 9,285	7.1%
658	Promotional Supplies	601	5,000	4,000	$ 1,000	25.0%
659	Insurance Expense	304	249,500	140,000	$ 109,500	78.2%
	Office Expenses Total		**$ 2,346,769**	**$ 2,399,559**	**$ (52,790)**	**-2.2%**
TOTAL ADMINISTRATIVE EXPENSE BUDGET			**$ 39,786,791**	**$ 33,392,154**	**$ 6,394,637**	**19.2%**
FUND 871: 115 TRUST EXPENSE BUDGET						
612	Audit and Consulting CPA	304	10,000	10,000	-	0.0%
613	Legal	304	30,000	60,000	(30,000)	-50.0%
660	Self-Funded Insurance Admin Fee	304	973,000	864,000	$ 109,000	12.6%
TOTAL 115 TRUST EXPENSE BUDGET			**$ 1,013,000**	**$ 934,000**	**$ 79,000**	**8.5%**

SUMMARY OF CHANGES IN PERSONNEL

This table provides a look at the distribution and movement of personnel in the department among its business units.

DIVISION/SECTION	2021-22 Adopted Budget	Proposed Changes				2022-23 Proposed Budget	2022-23 Proposed Substitute Authorities		
	Regular Authorities	Reallocate	Transfers	Regularize Substitute Authorities	New	Regular Authorities	Cont.	New	Total
Executive	7					7			
Investments	12				+2	14			
Human Resources	5				+1	6			
Internal Audit	3					3			
Retirement Services	48		-6		+3	45	+3		3
Health, Wellness, and Buyback	22		+12	+3		37	+8		8
Member Services	17					17	+1		1
Member Stewardship Section	8		+6			14			
Administration	26		-12		+1	15			
Fiscal Management	15					15			
Systems	11					11			
Systems Operations Support	3					3			
TOTAL	**177**	0	0	3	7	**187**	12	0	**12**

Note two organizational transfers to better align resources:

- Service Purchase Section to Health, Wellness and Buyback from Administration Division
    - Additional Administration position reflects one new position to support cybersecurity
- Member Processing Unit to Member Stewardship Section from Retirement Services Division

ANNUAL BUSINESS PLAN FOR FY 2022-23

Department Programs	Annual Work Plan and Business Plan Initiatives for FY23
INVESTMENTS ADMINISTRATION Positions: 14 Regular Admin Budget: $2,211,715	• Environmental, Social, and Governance Investment Policy Implementation • Broadening Emerging Managers program • Conduct peer benchmarking of the Investment Program
BENEFITS ADMINISTRATION Positions: 99 Regular | 12 Substitute Authorities Admin Budget: $11,533,587	• Separation Incentive Program - Year 3 (Audit and Evaluation) • Employee Development - Succession Planning • Expansion of Retirement Application Portal • Health Carrier Contracts Requests for Proposals • Assessment of Self-Funding for Medical Plan • Medicare Operational Compliance Review

GENERAL ADMINISTRATION AND SUPPORT
 	
Positions: 74 Regular
 	
Admin Budget: $16,490,099
	• Headquarters Move Initiative - Year 3
	• Governance and Cybersecurity
	  ○ Strategic Planning
	  ○ LACERS Symposium
	  ○ Strengthening Cybersecurity
	• High Performing Workforce Initiative
	  ○ Learning Management
	  ○ Diversity, Equity and Inclusion
	  ○ Employee Intranet

FY23 BUSINESS PLAN-BENEFITS ADMINISTRATION

BENEFITS OPERATIONS OPTIMIZATION

Introduction to Multi-Year Service Level Enhancements for Retirement Services Division and Health, Wellness, & Buyback Division

The Proposed Fiscal Year 2022-23 Business Plan for Benefits Administration continues the multi-year effort to optimize Benefits Operations to meet the strategic goals of outstanding customer service and timely and accurate delivery of benefits. This effort began with the launch of a modern Pension Administration System (PAS) in March 2018, followed by process reengineering to align business functions efficiently with the new system. A year-long review of benefit operations resulted in an organizational restructuring in Fiscal Year 2019-20. In March 2020, two years since the new system replacement, efficiency gains from the PAS and reorganization were fully realized. Retirement Services Division, and Health Benefits & Wellness Division proceeded to identify additional strategies to strengthen Benefits Operations for the long-term. A review of workload indicators showed a consistent increase in retirement caseload, survivorship caseload, covered lives, call volume and various key data points which outpaced increases in staffing. The past approach of doing more with less, was exhausted and no longer sustainable. LACERS initiated a plan to incrementally add staff to meet current service levels, incorporating seven new regular positions in the Fiscal Year 2020-21 budget, just before the Global Public Health Emergency. In the following fiscal year, resources were focused on completing the City Separation Incentive Program with 19 temporary positions activated for that effort. Still, some progress was made to augment on-going benefits work with three additional regular positions in Fiscal Year 2021-22.

We resume this effort in Fiscal Year 2022-23 in a work environment significantly changed from what we had known. Aside from the external public health, political, social and financial issues which may have further impacts to LACERS, we will be operating in a new office space, under a hybrid telecommute plan, and working with a “new” team consisting of many benefits staff in new roles resulting from the cascade effect of senior managers who have retired. The Benefits Operations staffing plan will need to remain flexible and continue to be assessed annually. Our hope is to achieve some normalcy in FY23, and to have a sound basis to set new standards for staffing levels to meet future needs.

Based on our experience of the past two years, in addition to workload indicators, there is justification to support the continued effort to expand staffing in the coming fiscal year with six new regular positions and twelve substitute authority positions; then in the following fiscal year, regularizing some of the substitute authority positions and adding one position to reduce call wait times, and another position to support in-person Wellness events. The proposed staffing increases will address the following risks.

FY23 BUSINESS PLAN-BENEFITS ADMINISTRATION

Recent and Future Retirements of LACERS' Benefits Operations Staff

In the current fiscal year, six experienced personnel retired from LACERS, all with expertise in Benefit Operations, including an Assistant General Manager, Division Chief, and Assistant Division Chief. In Fiscal Year 2022-23 sixteen benefits personnel are eligible to retire, increasing to 23 in Fiscal Year 2023-24. In the next five years, most of the key senior staff in Retirement Services, will be eligible to retire, as well as individuals in critical positions in the Health, Wellness and Buyback Division. Benefits knowledge takes 1-2 years to develop, therefore building in sufficient time for knowledge transfer to help newer staff develop the skills and knowledge they will need as future supervisors and managers is imperative and time sensitive.

Care, Retention, and Recruitment of Knowledge Workers

Benefits operations is reliant on knowledge workers. The pandemic has prompted people to reassess their priorities and purpose. To retain our greatest asset, institutional knowledge, requires that employees have a balanced workload, including dedicated time for knowledge transfer; that they are performing at their classification and challenged with projects that give them new experience and skills; and employees can engage in activities that allow them to strengthen and shape their bond with the culture of the organization.

Our multi-year staffing plan will improve on several challenges including: retention, recruitment, staff burnout/morale issues due to high workload; and classifications performing lower-level assignments, working continuous overtime, and an inability to take time off due to staffing shortages. The plan also moves toward replacing temporary help with regular positions to create staff longevity, minimize retraining costs, and mitigate loss of experience.

Benefit Complexity and Overlapping Special Projects

Since 2009, benefits administration has been complicated by changes in plan design, increased legal and regulatory requirements, and the challenges that come along with system implementations and new technology. Subject matter experts participate in discussions, and preparation for implementation of such changes as well as on-going implementation. Often externally initiated, these projects were not properly resourced, reliant on resources being shifted away from core benefits processing work and oversight. Multiple, successive, and overlapping projects have simply added to the workload and complexity of benefits administration.

FY23 BUSINESS PLAN-BENEFITS ADMINISTRATION

YEAR(S)	LIST OF PROJECTS
2009-2015	IRS Voluntary Compliance Program Plan Determination Letters & Tax Compliance Project
2009-2010	Early Retirement Incentive Program (ERIP) retiring over 3,000 in a six-month period
2010-2011	Citywide Layoff Project
2011	Tier 1 members' Health Subsidy Increase Vesting Rights Benefits Change
2011	Alive and Well Project
2011-2018	Pension Administration Project (PAS) Requirements Gathering and Implementation
2013	Defense of Marriage Act overturned by Supreme Court. Implement change to non-imputable health subsidy dollars for cost of same sex marriage
2011-2014	Tier 2 Discussions & Adoption (was later converted to Tier 1) - Benefits Change
2013-2015	GSD Office of Public Safety Transfer to LAPD
2014	Suspension of reciprocity with Water and Power Employees Retirement Plan (WPERP) Benefits Change
2015	Affordable Care Act for children under the age of 26. Implementation of eligible dependents
2015-2017	Tier 3 Discussions & Adoption - Benefits Change
2016	Alive and Well Project
2016-2018	Tier 1 Enhanced for Airport Peace Officers, Discussion & Adoption – Benefits Change
2016-2017	Ontario Airport Transfer
2018	Personnel Flex Benefit Refund Project
2018	Establishment of the Post Employment Health Care Fund, also known as the 115 Trust Fund. The establishment of this new fund created an additional complexity in administering benefits.
2019	Self-funding of Delta Dental HMO/PPO and Blue View Vision transitioned from a Full Insurance Program
2020-2022	City, Airport & Harbor Separation Incentive Programs to retire close to 1,800 members

FY23 BUSINESS PLAN|BENEFITS ADMINSTRATION

SERVICE LEVEL ENHANCEMENT | RETIREMENT SERVICES

FY23 NEW POSITIONS/CONT. SUBAUTHORITIES	PERFORMANCE OBJECTIVES
• 1 Administrative Clerk (New Regular), Service Retirement Unit • 1 Benefits Analyst (Continue Substitute Authority), Service Retirement Unit • 2 Benefit Specialists (Continue Substitute Authority), Service Retirement Unit • 1 Senior Benefits Analyst 1 (New Regular), Survivor Benefits Unit • 1 Accounting Clerk (New Regular), Legal Processing Unit	These additional staff will augment existing staff to achieve the RSD FY23 goals to: Service Retirement Unit • Process 100% of the retirement applications on time | Baseline: 1,100; Target: 1,100 • Complete retirements for 100% of valid applicants | Baseline: 985; Target: 985 • Complete 1,000 SIP Audits • Complete 600 Case Audit Reviews Survivor Benefits Unit • Process up to 1,000 death cases • Audit 50% of the death case • Oversee implementation of the new Tier 1 Enhanced benefits Legal Processing Unit • Process up to 250 legal authority documents • Process up to 50 wage assignments • Handle up to 900 correspondence

SERVICE RETIREMENT UNIT

The Administrative Clerk position in the Service Retirement Unit will allow for restructuring additional clerical functions to support the new Retirement Application Portal to improve efficiencies. The proposed Benefits Analyst will act in the capacity of expeditor/troubleshooter to assist and resolve complex or problematic cases, identify potential problem cases, monitor aging reports, identify workflow challenges and assist with supervisory and training duties.

Three Benefit Specialist positions were provided in the FY2021-22 budget to complete audits of the Separation Incentive Program retirements. Due to funding constraints, the Benefits Specialist positions were left unfilled. Two Benefit Specialist subauthority positions will complete the outstanding SIP Audits, other case audits, and assist with workload associated with the increase in retirements, case complexity and additional tasks created in moving to a primarily electronic processing format.

FY23 BUSINESS PLAN | BENEFITS ADMINSTRATION

SERVICE LEVEL ENHANCEMENT | RETIREMENT SERVICES

Survivor Benefits Unit Caseload

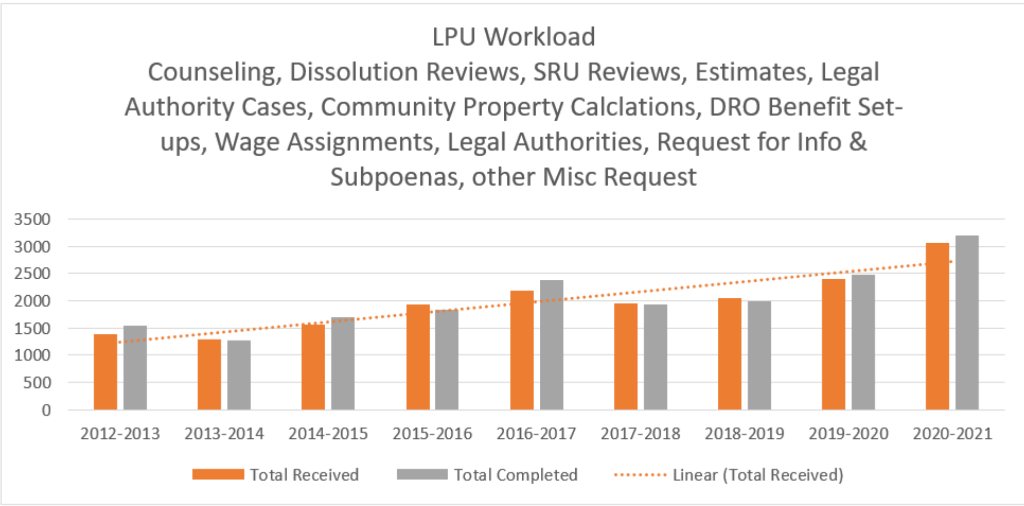
	Total Staff	Active Death Cases	Retired Death Cases	Survivor Death Cases	Total Caseload	% Changes	Average 3 Beneficiaries	Average 2 Benefits Payable
2016	7	88	481	202	771		2313	4626
2017	9	73	481	230	784	2%	2352	4704
2018	6	95	517	237	849	8%	2547	5094
2019	7	80	489	198	767	(-10%)	2301	4602
2020	8	107	574	240	921	20%	2763	5529
2021	6	116	635	252	1003	9%	3009	6018

SURVIVOR BENEFITS UNIT

The complexity of survivor benefits warrants a Senior Benefits Analyst I dedicated to the unit to perform high-level case review, case auditing, and provide training, guidance, and direction to staff on survivorship issues. The position will improve overall unit processing efficiency, increase case closure performance, and reduce case backlogs.

LEGAL PROCESSING UNIT

The Accounting Clerk Trainee is a full-time permanent position that will replace the need for several part-time staff supporting the unit. The position is part of City of Los Angeles Bridge program, which provides an alternate means of entry to civil service through a training position.

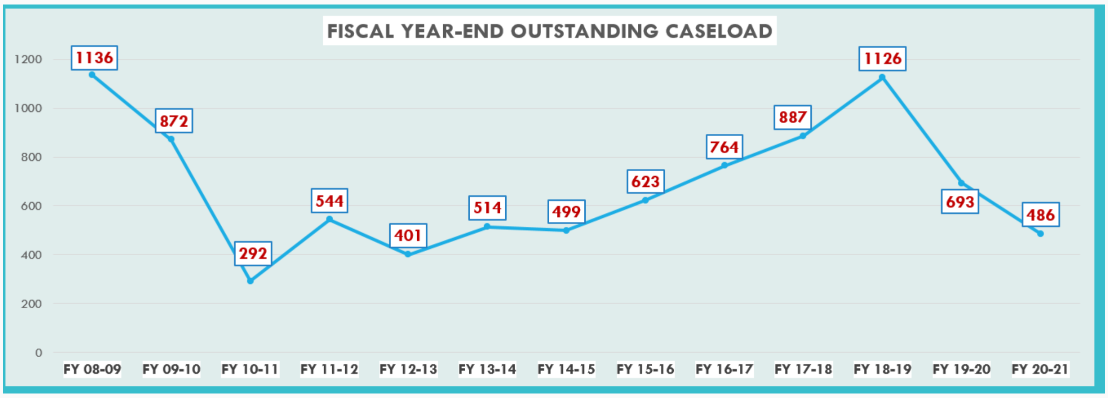


FY23 BUSINESS PLAN | BUYBACK SERVICES

SERVICE LEVEL ENHANCEMENT | SERVICE PROCESSING SECTION

FY23 NEW POSITIONS/CONT. SUBAUTHORITIES	PERFORMANCE OBJECTIVES
• 1 Benefits Analyst, (Regularize Substitute Authority) • 1 Benefits Specialists, (Regularize Substitute Authority) • 1 Benefits Specialists, (Continue Substitute Authority) • 1 Accounting Clerk, (Continue Substitute Authority)	These additional staff will: • Reduce Member wait time from 8 months to 5 months at the end of the FY • Reduce the Outstanding Caseload from 424 to 99

In July 2020, the Service Processing Section (SPS) had a caseload count of 1,146 causing Members to wait over 12 months to complete their service purchases. In anticipation of additional service purchase requests generated from the Separation Incentive Programs, five limited appointment positions were added to SPS. By July 2021, the total case count was reduced to 471, with 188 of those being aged cases (six months or more in the queue). As of December 2021, the total case count was reduced further to 324, with 15 aged cases, and average wait times of six months. Continuing four of the five positions in the coming year will ensure proper staffing levels to meet the incoming service purchase applications and further reduce the long-standing backlog.



FY23 BUSINESS PLAN | HEALTH BENEFITS & WELLNESS

SERVICE LEVEL ENHANCEMENT | HEALTH BENEFITS & WELLNESS

FY23 NEW POSITIONS/CONT. SUBAUTHORITIES

- 1 Benefits Specialist, (Regularize Substitute Authority), Health Advocacy
- 1 Benefits Specialist, (Continue Substitute Authority), Health Advocacy
- 1 Benefits Specialist, (Continue Substitute Authority), Health Plan Enrollment Unit
- 1 Senior Benefits Analyst, (Continue Substitute Authority), Health Administration
- 1 Management Assistant, (Continue Substitute Authority), Account Reconciliation
- 1 Sr. Project Coordinator, (Continue Substitute Authority), Wellness
- 1 Administrative Clerk, (Continue Substitute Authority), Wellness

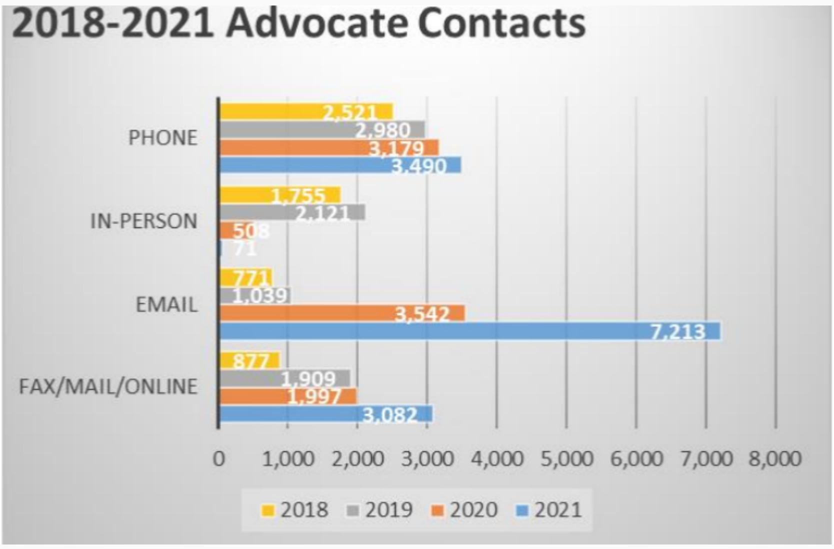
PERFORMANCE OBJECTIVES

These additional staff will:

- Process health benefit enrollments for up to 1,000 new retirees
- Process up to 8,000 health benefit enrollments of retirees and dependents
- Process up to 11,000 Medicare enrollments
- Handle up to 14,000 Member calls related to retiree health benefits
- Administer medical, dental, and vision benefit subsidies and claims for up to 23,000 covered lives

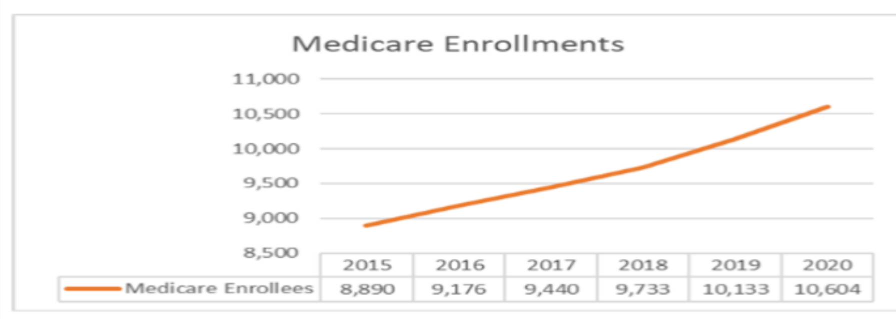
HEALTH ADVOCACY UNIT

The Advocacy Unit provides counseling to retiring members and processes required retirement paperwork to ensure members are placed on payroll timely. The unit of five, including two substitute authority positions, provide support with answering daily inquiries to retired members and investigating claims issues. The Advocacy Unit is experiencing a high volume of requests for services. Continuation of two Benefit Specialist positions (one regular authority, one substitute authority) are needed to meet the current workload.



FY23 BUSINESS PLAN | HEALTH BENEFITS & WELLNESS

SERVICE LEVEL ENHANCEMENT | HEALTH BENEFITS & WELLNESS



	2015	2016	2017	2018	2019	2020
Medicare Enrollees	8,890	9,176	9,440	9,733	10,133	10,604

HEALTH ENROLLMENT UNIT

Continuation of the Benefits Specialist substitute authority position is needed to support the increase in medical plan covered lives. The Annual Open Enrollment invites approximately 23,000 Retired Members, survivors, and dependents to review and consider changing their health plans for the coming calendar year. Open Enrollment activities rally the entire health division staff toward completion of this time sensitive activity, as all changes must be entered in time for the December retiree payroll, when the first premium payment for January plan coverage is made. There can be no delay or backlogs in this work of the Health Division as a lapse in health plan coverage can create a serious impact on Member's ability to access health care, and any lack of diligence on our part creates a risk for LACERS should the lack of access result in serious harm to the Member.

HEALTH ADMINISTRATION

This Senior Benefits Analyst I was approved in Fiscal Year 2021-2022 to assist with succession planning in the Health Division. Recently the Division Manager retired with over 15 years of institutional knowledge in the administration of health benefits, followed shortly by the Assistant Division Manager. The most experienced Senior Manager on the team with more than 20 years of experience is retirement eligible. The loss of institutional knowledge from these high-level positions is detrimental in the administration of health benefits. By continuing the sub-authority, Health Division will have an additional Senior Analyst to gain institutional knowledge and assist with management tasks.

ACCOUNTS RECONCILIATION UNIT

Continuation of the existing Management Assistant sub authority is needed to meet the on-going workload in Account Reconciliation Unit to analyze and confirm health carrier billings, calculate health benefit premiums and rates, process Medicare subsidies, and process Medical Premium Reimbursement applications and claims.

WELLNESS

The Wellness Program promotes retiree well being through socialization and participation in Wellness events. The program's current staffing allows for the continuation of current virtual offerings. Given the uncertainty of whether in-person events can be held, expansion of the program offering is deferred. However it is a goal of the program to resume in person socialization and connection when it is safe to do so and to serve as a seasoned, data-driven “best practice” in retiree wellness, which ultimately improves Member health outcomes. The Wellness Program also seeks to expand into a nationally recognized retirement wellness program by partnering with other retirement systems for knowledge-sharing, and senior community influencers for promotions and business sponsorships. In Fiscal Year 2023-24, or sooner if there is sufficient funding, it is recommended to add another Benefits Analyst to build the program for excellence in retiree wellness programming and extend the LACERS brand.

FY23 BUSINESS PLAN| MEMBER SERVICES

SERVICE LEVEL ENHANCEMENT | MEMBER SERVICES

FY23 CONTINUE SUBAUTHORITY POSITION	PERFORMANCE OBJECTIVES
• 1 Benefits Analyst, (Continue Substitute Authority)	This additional staff will augment existing staff to achieve the Member Services Team FY23 goals to: • Reach 1,300 YouTube Subscribers • Post 25 additional YouTube videos

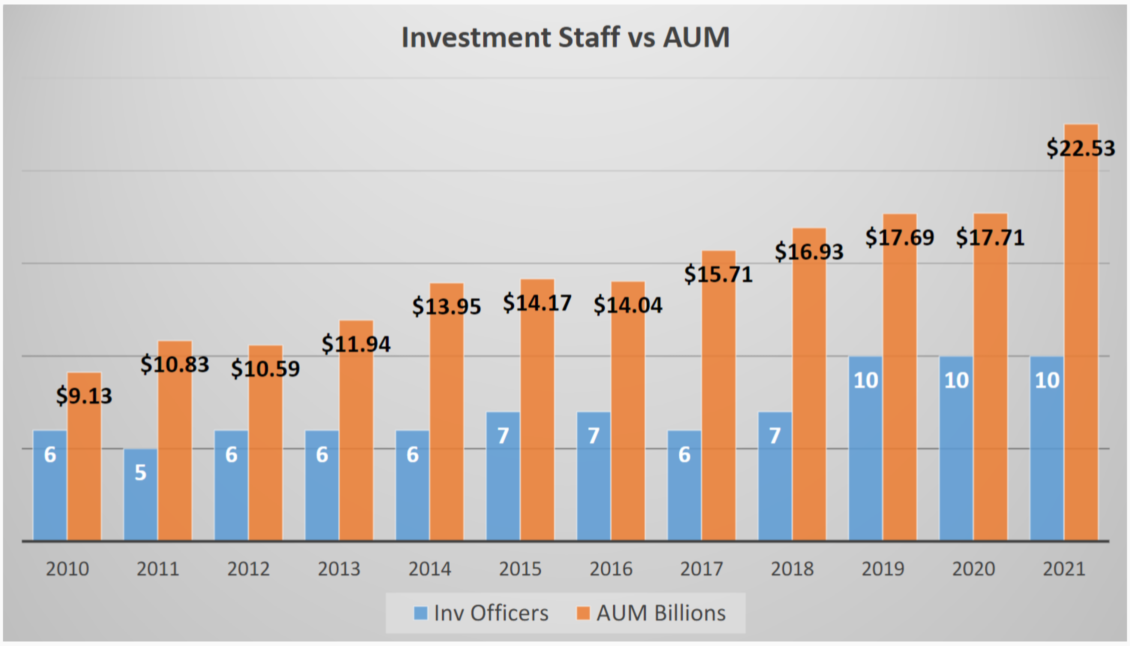
This Benefits Analyst position is an integral part of the Member Engagement Team which has expanded its offerings through scripting, editing, and recording videos for the LACERS YouTube channel (27 videos posted to date FY22 and 94 in total). The Benefit Analyst conducts virtual seminars and represents LACERS at in-person special events (conducted 37 to date and on pace to exceed last year by 10%); serves as the lead on the Retirement Application Portal design, build, implementation, and Phase 2 enhancements; and provides continuous service to our internal partners on technology and other necessary support.

FY23 BUSINESS PLAN-ENHANCEMENTS SUBAUTHORITY POSITIONS

SERVICE LEVEL ENHANCEMENT | INVESTMENT

FY23 NEW POSITIONS	PERFORMANCE OBJECTIVES
• 1 Investment Officer II (New Regular), Private Markets Unit • 1 Administrative Clerk (New Regular), Private Markets Unit	These additional staff in the Private Markets Unit will: ○ Support increasing Private Equity allocation workload ○ Coordinate Investment Internship and Fellowship Programs ○ Support new Investment Program objectives in: ▪ Environmental, Social, Governance Program ▪ Emerging Manager Program

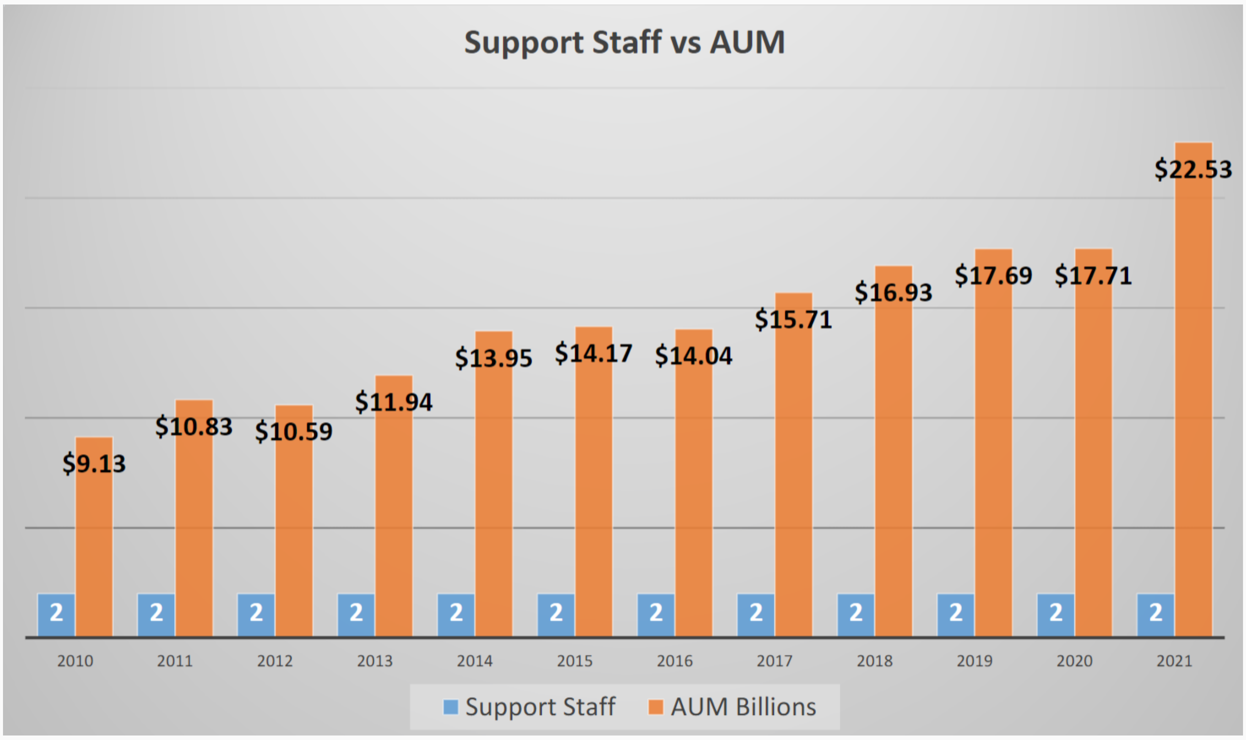
The Investment Officer II will manage the Environmental, Social, Governance (ESG) and Emerging Manager (EM) Programs, including investment Diversity, Equity, Inclusion (DEI) efforts, and coordination of the Girls Who Invest (GWI) internship and Investment Management Fellowship Program (IMFP). Due to the dynamic and complex investment initiatives and programs that this position would oversee, an Investment Officer II is requested in order to recognize the caliber of investment professional and long-term program consistency needed for this unique and specialized position.



FY23 BUSINESS PLAN-ENHANCEMENTS SUBAUTHORITY POSITIONS

SERVICE LEVEL ENHANCEMENT | INVESTMENT

An Administrative Clerk will support the entire division with an emphasis and priority to support the clerical needs of Private Markets Unit, support of the ESG Risk Officer (including the ESG Program, DEI Initiatives, and EM Program), and serve as a back up to the Senior Administrative Clerk. The presence and emphasis on ESG has increased since becoming a PRI signatory plus the increase of the Private Equity policy target rising to 16% from 14%. This has led to a greater number of capital calls, stock distributions, setting up new accounts with the bank custodian, registering LACERS on the general partner's data portal to download documents and notices, and assisting Investment Officers in processing consents and partnership amendments, and contracting processing. This position would also assist in processing time-sensitive CPRA requests and updates on the LACERS website, and support the Division's succession plan.



FY23 BUSINESS PLAN-ENHANCEMENTS NEW REGULAR POSITIONS

SERVICE LEVEL ENHANCEMENT | GENERAL ADMINISTRATION

FY23 NEW POSITIONS	PERFORMANCE OBJECTIVES

• Personnel Director I (New Regular), Human Resources Unit
 	
• Cybersecurity Analyst (New Regular), Administration Division
	• Personnel Director will meet the hiring and human resource needs of LACERS including:
	  ◦ Overseeing an ongoing Diversity, Equity and Inclusion Initiative
	• Cybersecurity Analyst will manage LACERS Cybersecurity Program including:
	  ◦ Cybersecurity Strategic Roadmap implementation
	  ◦ Ongoing event monitoring

The Personnel Director will report to the General Manager and oversee the Human Resources Unit (HRU) comprised of five staff. This position will provide greater oversight and more sufficient staffing levels to meet the needs of a growing department and more complex operating environment spurred by COVID and remote work. Adding a position to HRU will also free up a Senior Personnel Analyst to focus on growing internal efforts in Diversity, Equity and Inclusion, as well as to assist in representing LACERS' interests in other HR related City mandates.

A Cybersecurity Analyst position will report to the Executive Officer working across all departmental lines to facilitate and monitor a departmentwide cybersecurity program. This position will provide ongoing systems monitoring independent of the Systems Division, including overseeing implementation of LACERS' cybersecurity strategic roadmap. It is anticipated to utilize a new Cybersecurity Analyst classification in development by the City; however, if the new classification is not available to LACERS in the new fiscal year, an alternate position will be used in conjunction with a selective certification for cybersecurity credentialed individuals.

BPI: GOVERNANCE

ADVANCES THE STRATEGIC PLAN GOAL TO UPHOLD GOOD GOVERNANCE PRACTICES WHICH AFFIRM TRANSPARENCY, ACCOUNTABILITY, AND FIDUCIARY DUTY

FY23 BUDGET REQUEST

	Expense	Positions
Total Request	**$40,000**	
Strategic Planning	$25,000	
Symposium	$15,000	

IMPACT

SET THE COURSE FOR RISK MANAGEMENT AND STRATEGIC VISION FOR THE NEXT 3 TO 5 YEARS

PURPOSE

In accordance with LACERS' Strategic Planning Policy and Board mandate, LACERS shall conduct a strategic planning session every three to five years. The last strategic planning process was conducted in FY 2019 and the initiatives have largely been achieved. Coupled with the challenging circumstances of the time and ongoing transformation of the department, LACERS is due for another Strategic Planning session in FY23. Conducting strategic planning every few years ensures that LACERS mission, motto, guiding principles, goals and objectives are aligned. This process helps assess current situations and any opportunities to further enhance or reaffirm LACERS mission and vision. In addition, LACERS is due for its triennial Board policy review following the strategic planning process, which will help inform policy updates. A governance consultant will help guide LACERS to realize any efficiencies/inefficiencies, opportunities, threats, and innovation within the organization.

Further, next year LACERS is planning for a Pension Symposium. A Symposium focused on LACERS and the retirement industry is informative and provides transparency for the Board and the public. The last LACERS Pension Symposium was held in 2017 and as much has changed, a new forum for sharing Retirement industry topics and trends would come at an opportune time.

BPI: GOVERNANCE (CONT.)

DELIVERABLES

- Conduct of a Board Strategic Plan session and Plan documentation
- Review and update of Board policies
- Hosting of a Pension Symposium for the public

BPI: HIGH PERFORMING WORKFORCE

ADVANCES THE STRATEGIC PLAN GOALS TO RECRUIT, RETAIN, MENTOR, EMPOWER, AND PROMOTE A HIGH PERFORMING WORKFORCE; INCREASE ORGANIZATION EFFECTIVENESS, EFFICIENCY, AND RESILIENCY

FY23 BUDGET REQUEST		
	Expense	**Positions**
Total Request	**$307,805**	**1**
Learning Management	$44,000	
Diversity, Equity, and Inclusion (DEI)	$245,805	1
Intranet	$18,000	

IMPACT

PURPOSE

LACERS has steadily been making investments in becoming a high performance workplace, but one of the most important factors in creating a high performance workplace is instilling a high-development culture – one that values the growth of individuals.

Per research done by Gallup, organizations that have made a strategic investment in employee development see a two-fold increase in employee retention and significant increase in productivity, as marked by profitability. As a government entity, profitability is not a concern, but the ability of our employees to take action and produce more efficiently is.

At LACERS, we can take the step of investing employee development by focusing on increasing employee engagement. Through the DEI initiative, we intend to surface the needs of all employees, express clearly the needs of the organization, and create pathways for growth into leadership, for employees of all types. By focusing on development of a LACERS learning management system and Intranet, we can reinforce the cultural values of LACERS, connect employees with one another, and connect employees back to the larger organization.

By meeting employees’ basic needs with clear expectations, sincere recognition, the right materials and the right equipment, we can make strides in creating a highly driven workforce that meets the needs of the organization and our Members.

BPI: HIGH PERFORMING WORKFORCE (CONT.)

METRICS

- Conduct and collect DEI surveys and establish baselines to measure progress
- Measure participation in training programs
- Hire a position to lead and consultant to develop DEI efforts in LACERS
- Create up to 10 unique learning pathways in the LMS
- Launch the Intranet and develop internal communications function, integrate various new communication platforms into single channel

BPI: HEADQUARTERS MOVE

ADVANCES THE STRATEGIC PLAN GOALS TO PROVIDE ORGANIZATIONAL EFFECTIVENESS, EFFICIENCY, AND RESILIENCY; OUTSTANDING CUSTOMER SERVICE

FY23 BUDGET REQUEST		
	Expense	**Positions**
Total Request	**$2,532,764**	
Insurance	$128,500	
Systems	$73,827	
Property Management	$1,509,000	
Capital Expense	$462,000	
HQ Move and Other Expenses	$359,437	

IMPACT

PURPOSE

- Providing a work environment that supports employee performance and well-being allowing LACERS to attract, retain, and develop the best employees in the City of Los Angeles.

- Designing a workplace that promotes innovation, creativity, collaboration, and security using technology and design.

The "Headquarters Move" BPI is a multi-phased initiative and this upcoming fiscal year focuses on continuing preparation for staff occupancy at the new headquarters building and providing a welcoming space to serve our Members. Moreover, this BPI includes LACERS' work to transition from the old to the new headquarters and the work required to surrender the old headquarters as outlined in LACERS' lease agreement.

METRICS

Seismic & Structural Reinforcement

Internal Demolition

Identify Vendors to Perform Work

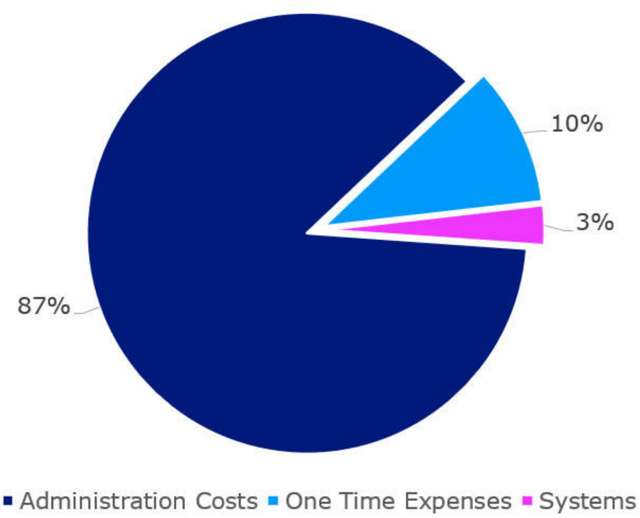
Office Furniture & Fixtures

BPI: HEADQUARTERS MOVE (CONT.)

BUDGET

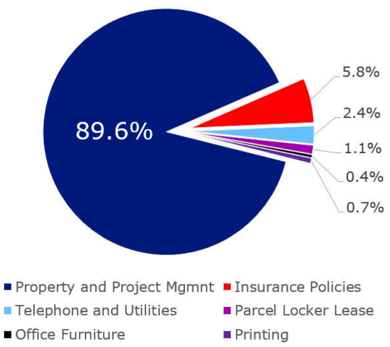
- For FY23, LACERS is submitting a preliminary budget request of $2,532,764 for the Headquarters Move BPI which includes an estimated $1.5M in 977 N Broadway Operating Budget and $258,437 in one-time costs for the migration of staff from LA Times to 977 and the close-out process in LA Times.
- LACERS' Property Manager is currently developing the 977 N Broadway Operating Budget for FY23. The final budget will be included in the May budget submission.

HQ MOVE BPI EXPENSES - $2.5 MILLION



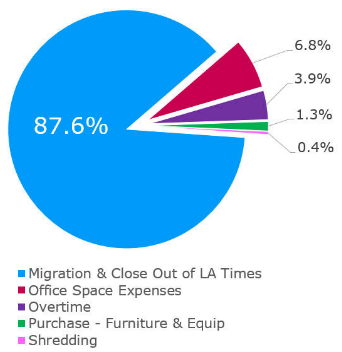
ADMINISTRATION - 87%

$2,200,500



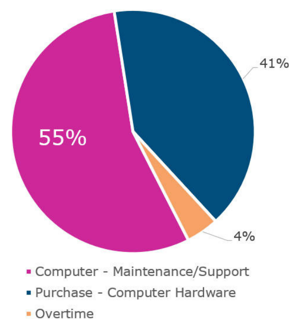
ONE-TIME EXPENSES - 10%

$258,437



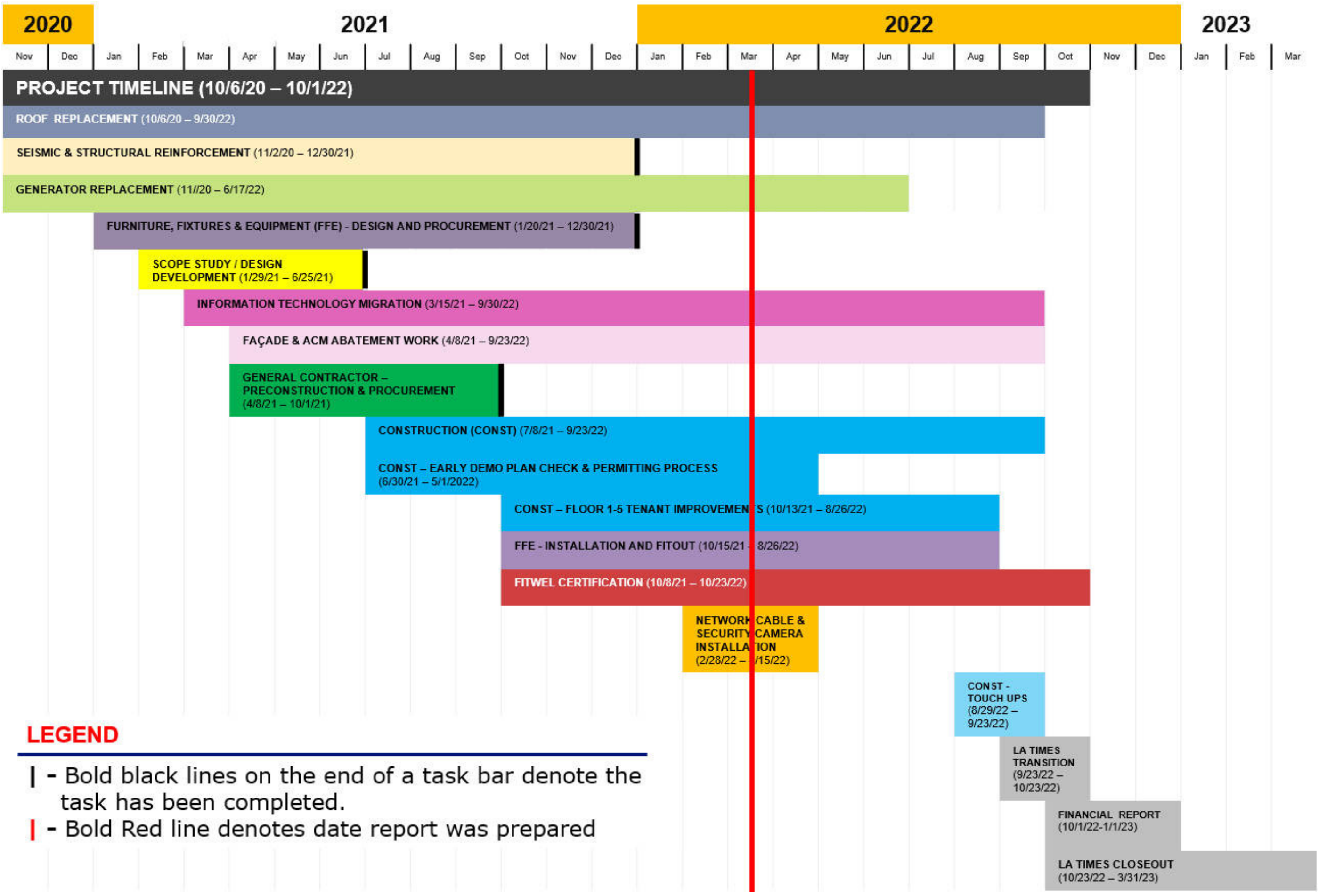
SYSTEMS - 3%

$73,827



BPI: HEADQUARTERS MOVE (CONT.)

TIMELINE



BPI: HEADQUARTERS MOVE (CONT.)

10 YEAR CAPITAL PLAN

Once LACERS has finalized the transition to the 977 building, LACERS will implement a 10-Year Capital Plan that ensures proactive planning of capital expenditures and establishes spending priorities and overall capital improvement goals.

The plan prioritizes performing routine evaluations of the building's mechanical and structural resilience. This includes tracking the lifespan of the building's HVAC system, elevator lift, generators, and electrical components. Modernization of the mentioned systems and implementing eco-friendly technology are also part of the 10-Year Capital Plan. As new technology becomes available, LACERS will evaluate how to incorporate these technologies into the HQ to promote sustainability and reduce our energy costs. This plan will also include routine reviews of how our LACERS HQ serves our Members and staff and promotes human health and wellbeing.

For FY23, LACERS proposes the following work be funded as part of the 10-Year Capital Plan:

FY23 CAPITAL PLAN BUDGET REQUEST

Category	Property Component	Expense
Site Improvement	Water Intrusion: Joint sealants along base of building have deteriorated allowing water to enter between sidewalk and edge of building. Sealants should be removed and replaced.	$15,000
Parking Garage	Floor Cracking: Cracking in the concrete parking garage floor slabs has been observed in many areas. As a precautionary measure wider cracks in traffic lanes, along with cracks that could permit water infiltration, should be filled with a semi-rigid epoxy or urethane sealant to minimize water infiltration to the steel reinforcing.	$20,000
	Wall Cracking: The garage walls need to be inspected and the cracks that appear to be the most likely source of water infiltration need to be sealed by epoxy injecting the cracks. To maintain good long-term structural conditions, it is recommended that the parking garage walls be reinspected every 3-years.	$10,000
	Miscellaneous Repairs: Various repairs to the floor slabs of the parking garage where bollards were previously installed, other concrete patchwork, or poor drainage in the parking garage.	$25,000
	Electric Car Charging Stations: Work with DWP to install electric car charging stations in parking garage	$60,000
Interiors	Window Film: Installation of window film on all floors to reduce heat gain and glare.	$20,000

BPI: HEADQUARTERS MOVE (CONT.)

CAPITAL PLAN (CONT.)

FY23 CAPITAL PLAN BUDGET REQUEST

Category	Property Component	Expense
Elevators	Door Controls: The two traction elevators were upgraded with new machines and controllers in 2009. Door controls now need to be upgraded.	$18,000
	Auto-Rescue Upgrade: In case of a power outage the installation of this upgrade will safely bring passengers to the nearest landing and open the elevator doors for passenger's release.	$132,468
Electrical	Switchboard Maintenance: Preventative maintenance (PM) of the main switchboards should be completed every five-years to maximize reliability and service life.	$25,000
	PM Results: Rebuild components in the electrical system based on the results of the Switchboard PM performed.	$65,000
	Motor Control Center (MCC): Replace/rebuild components of the MCC based on age and useful service life.	$25,000
Fire & Life Safety	Fire Sprinkler System - Inspection: Perform 5-year internal sprinkler piping inspection in accordance with NFPA 25.	$3,000
	Fire Sprinkler System - Spare Sprinkler Heads: A stock of sprinkler heads should be verified to include all types and ratings provided in the amount as outlined in NFPA 13 Section 6.2.9.	$1,000
	Fire Sprinkler System - Hydraulic Calculations: A hydraulic calculation plate needs to be provided for the floor control assembly on Floor 5.	$500
	Fire Sprinkler System - Bracing: All feed and cross mains should be provided longitudinal bracing as required by NFPA 13.	$50,000
	Fire Sprinkler System - Bracing: Branch line restraint splay wires should be replaced with wires at a 45 degree angle to comply with NFPA 13 Section 9.3.6.1.	$10,000
	TOTAL	**$461,968**

BPI: ENVIRONMENTAL, SOCIAL, AND GOVERNANCE INVESTING

ADVANCES THE STRATEGIC PLAN GOALS TO PROVIDE GOVERNANCE PRACTICES WHICH AFFIRM TRANSPARENCY, ACCOUNTABILITY, AND FIDUCIARY DUTY

FY23 BUDGET REQUEST		
	Expense	**Positions**
Total Request	**$82,750**	**1****
PRI Membership	$14,000	
MSCI ESG Research Software	$13,750*	
ESG Consultant	$55,000*	

*Investment Budget
**Position costs not reflected

IMPACT

PURPOSE

- Enhance the long-term risk adjusted returns of the LACERS investment portfolio through the implementation of a robust Environmental, Social, and Governance (ESG) Program guided by a comprehensive Responsible Investment Policy, and ESG Framework, and the Principles for Responsible Investment (PRI).

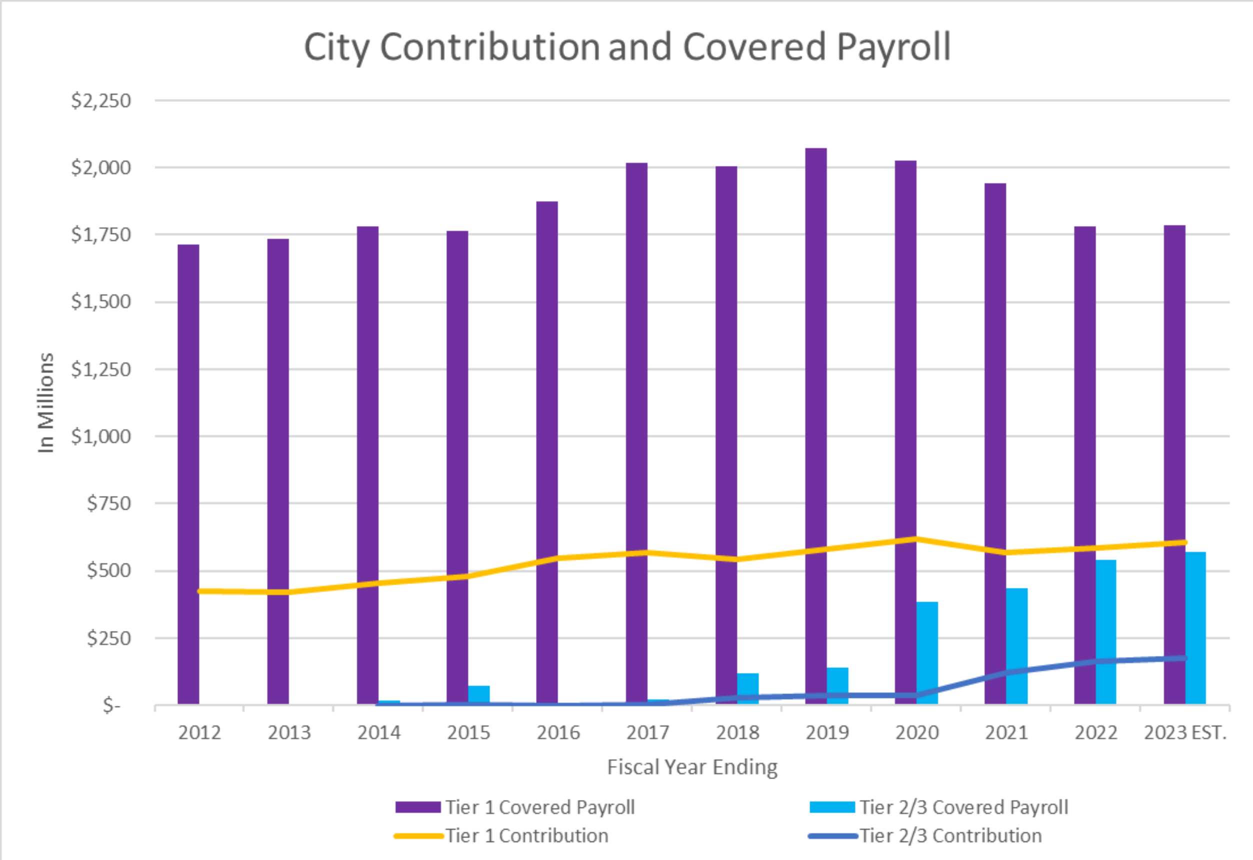
- Additional resource of a designated Investment Officer II position to facilitate implementation of the ESG Program pursuant to the PRI Action Plan, ESG Risk Framework and Board directives, as well as contributes toward the LACERS DEI initiatives and expansion of the Emerging Manager Program.

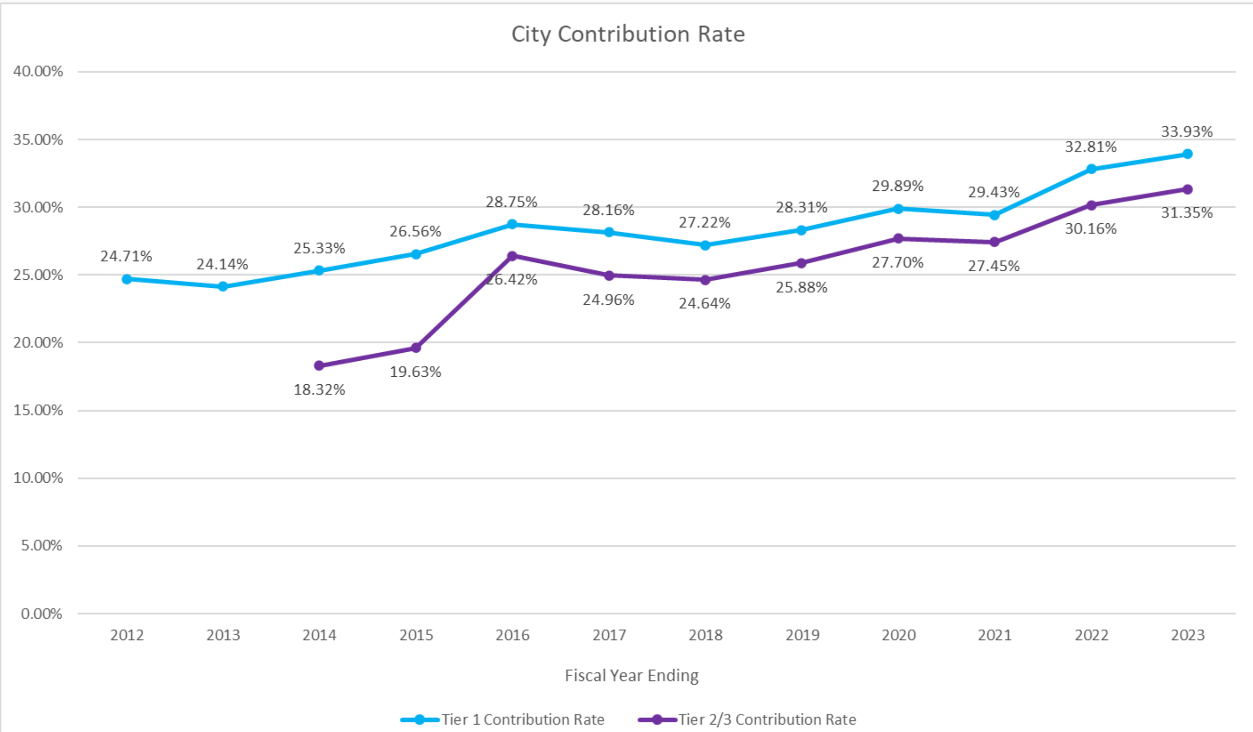
DELIVERABLES

- Consolidation of PRI and ESG Risk Framework Action Plans into a single comprehensive ESG action plan document

CITY CONTRIBUTION

The City Contribution is a percentage of the City's covered payroll. Over a ten-year period, both factors in calculating the contribution amount: (1) City payroll and (2) contribution rate have been on an upward trend. This corresponds to an increasing City contribution amount.





CITY CONTRIBUTION (CONTINUED)

	FY23	FY22	% CHANGE
Total	$ 711,080,847	$ 715,507,022	-0.6
Retirement and Health Benefits	784,841,207	748,034,421	4.9
True-up Adjustment	(75,194,360)	(34,089,399)	120.6
Family Death Benefit Plan	47,000	71,000	-33.8
Excess Benefit Plan	1,332,000	1,464,000	-9.0
Limited Term Retirement	55,000	27,000	103.7

The City contributes funding for four plans administered by LACERS: Retirement and Health Benefits, the Excess Benefit Plan, the Family Death Benefit Plan, and the Limited Term Retirement Plan.

City contribution rates toward retirement and health benefits for LACERS Members are set by the Board upon adoption of the annual actuarial valuations. Stated in the form of a percentage of covered payroll, the amount of the City's contribution is determined on the final covered payroll adopted in the City's budget. The FY23 City Contribution reflected above is based on last fiscal year's final covered payroll and will change when the final covered payroll for FY23 is known. As of now, the estimate is based on the FY22 final covered payroll of $1.79 billion for Tier 1 Members and rate of 33.93%; and a covered payroll of $569 million and rate of 31.35% for Tier 3 Members. A credit adjustment of $75,194,360 is applied toward the FY23 contribution to LACERS. This credit amount represents a true-up of the Fiscal Year 2021-22 contribution -- the difference between the contributions paid on July 15, 2021 based on the budgeted covered payroll amount and the actual payroll toward the end of the Fiscal Year. The City is also required by statute to make employer contributions for the Family Death Benefit Plan, the Excess Benefit Plan, and the Limited Term Retirement Plan.

Family Death Benefit Plan

Approximately 2,155 Active Members are opted into the Family Death Benefit Plan which provides an additional benefit to qualifying surviving minor children, or widow/widower over age 60 if the Member dies while an active City employee. The City's contribution to the Family Death Benefit is equivalent to a match of the Member's contribution of $1.90 per month for FY23. This monthly amount is established pursuant to a biennial study of the full actuarial costs of the benefit as required by the Los Angeles Administrative Code.

CITY CONTRIBUTION (CONTINUED)

Excess Benefit Plan

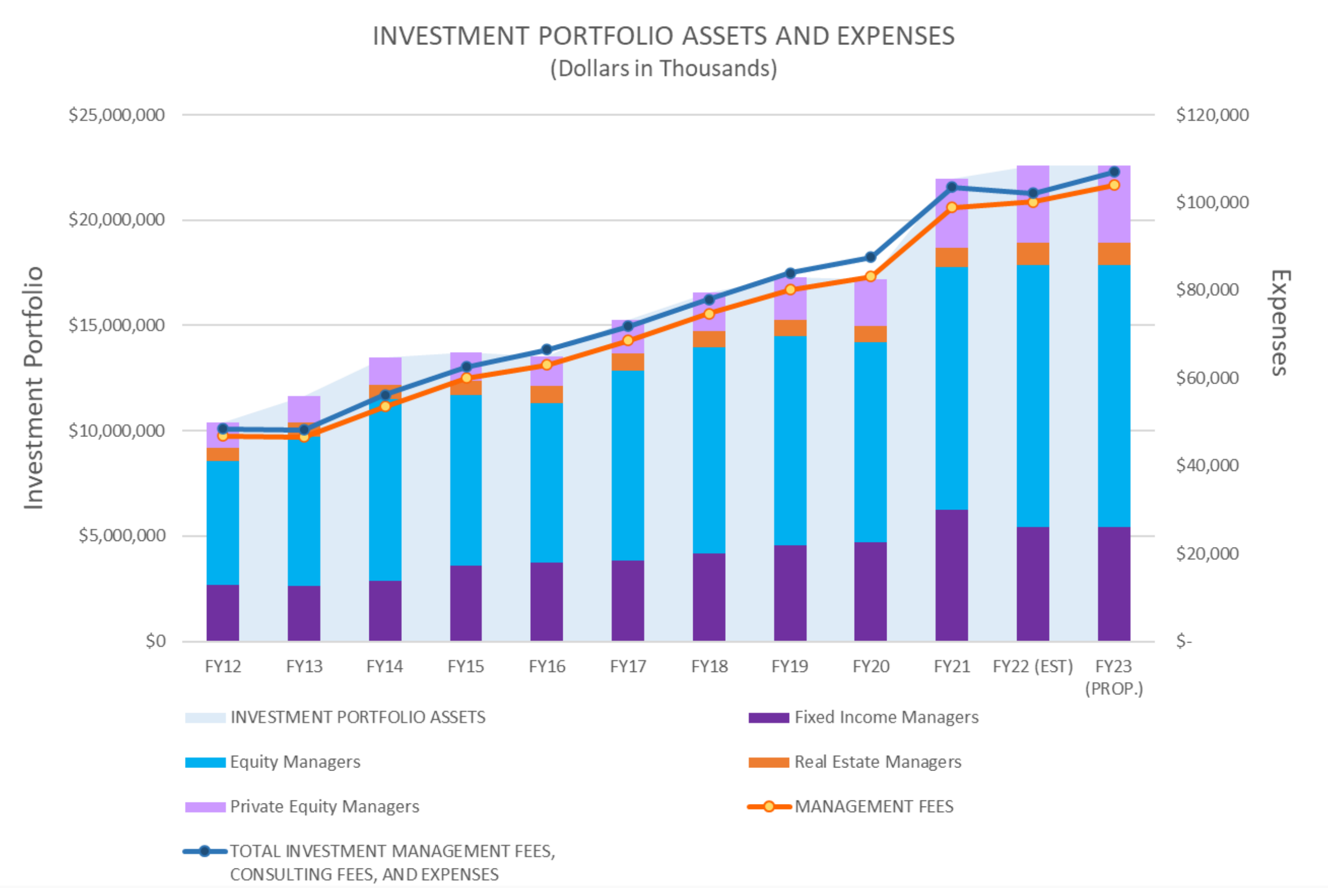
The Excess Benefit Plan was established separate from the LACERS Trust Fund, to pay retirement benefit amounts in excess of the benefit limits established by the Internal Revenue Code (IRC), currently $245,000[1] for 2022. In 2022, there are 48 LACERS Members who receive their monthly LACERS' retirement benefit up to the limit allowable by the IRC, and the remainder of their benefit is paid separately by City funds. The City's cost of this program is the projected amount of the benefits that will be paid from the City's account for FY23, plus reasonable administrative expenses.

Limited Term Retirement Plan (LTRP)

The LTRP provides elected officials, who serve four-year terms, the option of participating in a defined contribution plan until they have completed the five years of City service needed to vest in the defined benefit plan. The City provides a contribution to LTRP Members at the same rate as the employer contribution to the LACERS defined benefit plan. There are currently two LTRP Members in the plan.

1-------
This represents the unadjusted Excess Benefit limit. The individual limit must be adjusted based on the age of the Member at retirement, years of City service, service purchases, and calculated on a single-life annuity basis.

INVESTMENT MANAGEMENT FEES AND EXPENSES



In the past ten-year period, overall fees have increased along with the increase in portfolio value.

The Investment Management Fees are largely asset-based fees established in the respective contracts with investment managers hired by LACERS. Investment consulting fees are flat fees paid to our General Fund consultant, our Private Equity consultant, and our Real Estate consultant. Other expenses include research and services which support administration of the investment program.

	FY23	FY22	$ CHANGE	% CHANGE
Total	$ 107,027,414	$ 95,652,261	$ 11,375,153	11.9
Investment Management Fees	104,026,264	93,652,851	10,373,413	11.1
Investment Consulting Fees	2,632,000	1,740,500	891,500	51.2
Other Investment Expenses	369,150	258,910	110,240	42.6

INVESTMENT MANAGEMENT FEES AND EXPENSES

The 2022-23 Investment Management Fees & Expenses Budget increased by $11.4 million or 11.9%. This includes:

- $9.6 million from new commitments of over $380M to Private Equity and Real Estate.
- $0.8 million in net increase for Public Equity due to asset reallocation and increased market value.
- $0.9 million due to increase in Real Estate and Private Equity Legal Consulting, as well as estimated amount for the new Private Credit Consulting.
- $0.1 million increase in other expenses such as the new Private Equity Benchmark license, ESG Research Software and CEM Benchmarking.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

PROPOSED BUDGET
AND
PERSONNEL RESOLUTIONS

Fiscal Year 2022 - 23

Presented March 22, 2022

TABLE OF CONTENTS

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

COMBINED STATEMENT OF RECEIPTS AND EXPENDITURES[3]

Actual 2020-21	Adopted Budget 2021-22	Estimated 2021-22[1]		Budget Appropriation 2022-23[2]
			RECEIPTS	
$ 659,689,020	$ 715,507,022	$ 725,524,035	City Contributions (see Schedule 1)..	$ 711,080,847
259,217,329	269,850,000	250,000,000	Member Contributions..	262,500,000
67,168	71,000	68,000	Family Death Benefit Plan Member Contributions....................	47,000
10,923,779	11,520,000	12,165,000	Self-Funded Dental Insurance Premium..................................	12,840,000
918,708	660,000	986,000	Member Insurance Premium Reserve......................................	1,296,000
379,258,551	362,560,000	340,000,000	Earnings on Investments...	350,200,000
2,113,011,755	--	220,000,000	Gain on Sale of Investments..	--
$ 3,423,086,310	$ 1,360,168,022	$ 1,548,743,035	Total Receipts..	$ 1,337,963,847
			EXPENDITURES	
$ 1,066,341,253	$ 1,170,660,000	$ 1,172,000,000	Retirement Allowances..	$ 1,277,000,000
989,654	1,156,000	884,000	Family Death Benefit Plan Allowance......................................	884,000
136,902,985	149,800,000	148,500,000	Retired Medical & Dental Subsidy...	160,380,000
15,810,471	18,000,000	17,300,000	Retired Medicare Part B Reimbursements..............................	20,412,000
8,232,476	8,590,000	8,890,000	Self-Funded Dental Insurance Claims.....................................	10,437,000
15,285,377	15,609,000	14,000,000	Refund of Member Contributions...	15,400,000
2,298,471	2,684,000	2,000,000	Refund of Deceased Retired Accum. Contributions................	2,200,000
31,791,154	33,392,154	32,860,965	Administrative Expense	39,786,791
759,296	864,000	852,000	Self-Funded Insurance Administrative Fee..............................	973,000
101,556,101	95,652,261	102,137,086	Investment Management Fees and Expenses........................	107,027,414
$ 1,379,967,238	$ 1,496,407,415	$ 1,499,424,051	Total Expenditures..	$ 1,634,500,205
2,043,119,072	(136,239,393)	49,318,984	Increase (Decrease) in Fund Balance.......................................	(296,536,358)
$ 3,423,086,310	$ 1,360,168,022	$ 1,548,743,035	Total Expenditures and Increase (Decrease) in Fund Balance..............	$ 1,337,963,847

1. The City Contributions amount for the FY 2021-22 Estimated Budget was based on the City's final covered payroll of $2,356,383,016 and included the application of a net credit adjustment for FY 2020-21 of $34,089,399 deducted from FY 2021-22 contribution payment. The credit adjustment represents a true-up of the FY 2020-21 City contribution.

2. The preliminary City Contributions amount for FY 2022-23 is based on the FY 2021-22 final covered payroll of $2,356,383,016 and includes a credit adjustment of $75,194,360 for the true-up of FY 2021-22 contributions which will be deducted from the FY 2022-23 contribution payment. The preliminary City Contribution budget amount will be finalized upon the receipt of adopted City covered payroll information from the City for FY 2022-23.

3. The above Statement contains LACERS combined Receipts and Expenditures including the 115 Trust.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

DETAIL OF RECEIPTS AND EXPENDITURES
115 TRUST FUND

Actual 2020-21	Adopted Budget 2021-22	Estimated 2021-22		Appropriation 2022-23
			RECEIPTS	
$ 103,454,114	$ 95,829,221	$ 97,346,611	City Contributions (see Schedule 1)...................................	$ 82,709,266
10,923,779	11,520,000	12,165,000	Self-Funded Insurance Premium..	12,840,000
918,708	660,000	986,000	Member Insurance Premium Reserve................................	1,296,000
5,423,939	7,115,000	7,729,167	Earnings on Investments..	7,115,000
31,126,776	--	4,120,975	Gain on Sale of Investments...	--
$ 151,847,316	$ 115,124,221	$ 122,347,753	Total Receipts..	$ 103,960,266
			EXPENDITURES	
$ 8,232,476	$ 8,590,000	$ 8,890,000	Self-Funded Insurance Claims...	$ 10,437,000
759,296	864,000	852,000	Self-Funded Insurance Administrative Fee..........................	973,000
			Administrative Expense	
105	70,000	1,000	Contracts..	40,000
517,945	642,000	615,542	Share of Department Adm. Expenses.............................	904,467
1,485,675	1,877,000	1,913,000	Investment Management Expense.....................................	2,433,000
$ 10,995,497	$ 12,043,000	$ 12,271,542	Total Expenditures...	$ 14,787,467
140,851,819	103,081,221	110,076,211	Increase in Fund Balance..	89,172,799
$ 151,847,316	$ 115,124,221	$ 122,347,753	Total Expenditures and Increase in Fund Balance................	$ 103,960,266

Note: All 115 Trust Receipts and Expenditures above are included in the LACERS Combined STATEMENT OF RECEIPTS AND EXPENDITURES on page 2.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE 1 -- CITY CONTRIBUTIONS

ACTUARIAL REQUIREMENTS

To fund the liabilities of the System for future service as required in Article XI Section 1158 and 1160 of the City Charter in accordance with the actuarial valuation of those liabilities as of June 30, 2021 as follows:

	Health (115 TR)	Retirement	Total
Tier 1 33.93% of $1,787,408,108 total actuarial salary of Tier 1 members for fiscal year 2022-23	$67,385,287	$539,082,285	$ 606,467,572
Tier 3 31.35% of $568,974,908 total actuarial salary of Tier 3 members for fiscal year 2022-23	25,148,692	153,224,943	178,373,635
Subtotal	**$ 92,533,979**	**$ 692,307,228**	**$ 784,841,207**
Family Death Benefit Plan (FDBP) To match the estimated total amount contributed by Family Death Benefit Plan members in accordance with the provisions of Section 4.1090 of the Administrative Code.		47,000	47,000
Excess Benefit Plan Fund (EBP) To fund retirement benefits in excess of the limits set by Internal Revenue Code Section 415 (b) in accordance with the provisions of Section 4.1800 of the Administrative Code.		1,332,000	1,332,000
Limited Term Retirement Plan Fund (LTRP) To fund the Defined Contribution Plan for elected City officials in accordance with the provisions of Section 4.1850 of the Administrative Code.		55,000	55,000
Total City Contributions	**$ 92,533,979**	**$ 693,741,228**	**$ 786,275,207**
True-up Adjustment: Credit of difference in City contributions for FY 2021-22 based on estimated covered payroll on July 15, 2021 and actual covered payroll up to February 26, 2022.	(9,824,713)	(65,369,647)	(75,194,360)
Total City Contributions After True Up	**$ 82,709,266**	**$ 628,371,581**	**$ 711,080,847**

City Contributions by Funding Source:

	Total Covered Payroll	Contributions						
		Tier 1 (33.93%)	**Tier 3 (31.35%)**	**Shared Cost for FDBP/EBP/LTP**	**Tier 1 True-Up**	**Tier 3 True-Up**	**FY22 True-Up Adjustments**	**Total**
General Fund (TRAN)	$1,965,097,211	$497,415,231	$153,474,093	$1,195,879	(57,414,709)	(8,584,375)	$ (65,999,084)	$ 586,086,119
Airports	277,199,409	76,793,081	19,119,079	168,692	(6,696,649)	(1,074,324)	(7,770,973)	88,309,879
Harbor	84,932,315	24,364,958	3,979,929	51,687	(1,166,262)	(160,002)	(1,326,264)	27,070,310
LACERS	16,250,481	4,166,827	1,219,711	9,889	66,844	12,924	79,768	5,476,195
LAFPP	12,903,600	3,727,475	580,823	7,853	(158,871)	(18,936)	(177,807)	4,138,344
Total	$ 2,356,383,016	$ 606,467,572	$ 178,373,635	$ 1,434,000	$ (65,369,647)	$ (9,824,713)	$ (75,194,360)	$ 711,080,847

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

SCHEDULE 2 -- ADMINISTRATIVE EXPENSE

Expenditures 2020-21	Adopted Budget 2021-22	Estimated Expenditures 2021-22		Budget Appropriation 2021-23
			SALARIES	
$ 17,685,900	$ 16,670,841	$ 17,355,255	General	$ 19,360,152
468,868	703,718	415,118	As Needed	664,985
526,569	508,258	453,845	Overtime	486,854
$ 18,681,337	$ 17,882,817	$ 18,224,218	Total Salaries	$ 20,511,991
			EXPENSE	
$ 52,693	$ 163,500	$ 121,418	Printing and Binding	$ 190,500
--	86,815	42,291	Travel	139,665
7,338,434	8,362,800	8,315,627	Employee Benefits	9,551,390
--	9,500	2,084	Transportation Expense	11,000
4,083,430	5,250,726	4,777,598	Contracts	7,520,435
1,068,698	1,309,899	1,129,261	Office and Administrative	1,614,710
$ 12,543,255	$ 15,183,240	$ 14,388,279	Total Expense	$ 19,027,700
			EQUIPMENT	
$ 566,563	$ 326,097	$ 248,468	Furniture, Office and Technical Equipment	$ 247,100
$ 566,563	$ 326,097	$ 248,468	Total Equipment	$ 247,100
$ 31,791,154	$ 33,392,154	$ 32,860,965	Total Administrative Expense	$ 39,786,791

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM
INVESTMENT MANAGEMENT FEES AND EXPENSES: FY 2022-23

		BUDGET FY 2021-22	EXPENSE FY 2021-22	BUDGET FY 2022-23
1	Baird Advisors	$ 793,641	$ 679,462	$ 677,700
2	LM Capital	357,945	-	-
3	Loomis Sayles	933,078	826,468	830,050
4	Neuberger Berman	7,951	-	-
5	State Street (Fixed Income Index)	150,231	287,142	246,029
6	Garcia Hamilton & Associates	571,688	514,832	514,401
7	Income Research & Management	630,032	547,276	548,484
8	JP Morgan	666,700	578,011	576,896
9	Bain Capital (formerly Sankaty)	990,354	877,825	882,955
10	Prudential LAC99)	1,597,647	1,625,374	1,550,220
11	DDJ Capital	901,895	1,477,628	1,467,150
12	Benefit Street Prts LLC	415,995	363,844	481,192
13	Loomis Sayles	944,017	1,082,595	1,062,978
14	Wellington	1,792,921	2,321,840	2,444,715
15	Crescent	364,960	995	571,157
16	Monroe	364,960	109,357	787,881
17	Granahan	873,543	670,560	596,252
18	EAM Investors	1,047,726	735,382	767,221
19	Principal Global	821,374	986,733	1,125,158
20	Rhumbline (S&P 500)	227,149	210,788	208,036
21	Rhumbline (Russell 2000)	14,419	15,670	18,500
22	Rhumbline (Russell 2000 Value)	-	8,831	8,685
23	Copeland Cap Mgmt	1,070,004	1,071,827	1,142,392
24	Segall	604,466	554,239	594,169
25	Axiom International	2,751,460	2,382,141	2,055,500
26	Barrow, Hanley, Mewhinney & Strauss	2,316,767	2,371,391	2,593,608
27	Dimensional Fund Advisor (Emerging Mkt)	1,962,982	1,889,853	1,835,844
28	Lazard Asset Management	2,998,069	2,823,230	2,949,082
29	MFS Institutional Advisors	2,387,305	2,456,169	2,358,107
30	Oberweis Asset Management	2,703,078	2,472,240	2,191,888
31	State Street Global (Non-US Index)	455,188	469,827	451,642
32	State Street EMG Mkt C	151,478	151,934	141,732
33	State Street EAFE SC	128,032	129,403	122,824
34	Wasatch	2,136,510	2,259,048	2,121,214
35	Centersquare (REITS)	1,003,721	1,705,937	1,819,122
36	Dimensional Fund Advisor (TIPS)	453,305	607,791	647,258
37	Real Estate Managers	10,823,164	12,779,224	13,653,663
38	Private Equity Managers	47,239,100	52,064,280	53,982,560
	Subtotal - Investment Management Fee	**$ 93,652,851**	**$ 100,109,147**	**$ 104,026,264**
39	ESG Consultant	$ 55,000	$ -	$ -
40	General Fund Consulting	465,000	465,000	465,000
41	Private Equity Consulting	762,500	761,694	775,000
42	Real Estate Consulting	215,000	215,000	275,000
43	Real Estate & Private Equity Legal Consulting	220,000	325,000	689,000
44	Northern Trust	23,000	18,000	28,000
45	Private Credit Consulting			400,000
	Subtotal - Investment Consulting Fee	**$ 1,740,500**	**$ 1,784,694**	**$ 2,632,000**
46	Bloomberg Financial Services	$ 44,500	$ 27,835	$ 32,000
47	Tax Accounting Services	110,000	110,000	110,000
48	Institutional Shareholder Services	71,910	71,910	130,000
49	Pitchbook Subscription	22,500	23,500	27,500
50	Pacific Center for Asset Management	10,000	10,000	10,000
51	Cambridge Associates Private Equity Benchmark License			5,500
52	CEM Benchmark			40,000
53	MSCI ESG Research Software			13,750
53	Bloomberg News			400
	Subtotal - Other Investment Expense	**$ 258,910**	**$ 243,245**	**$ 369,150**

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

PROPOSED PERSONNEL RESOLUTION
FISCAL YEAR 2022-23

WHEREAS, the Board of Administration of the Los Angeles City Employees' Retirement System has the responsibility and authority to establish the number and types of positions to be utilized by the Los Angeles City Employees' Retirement System;

NOW, THEREFORE, BE IT RESOLVED, that:

1. Effective July 1, 2022, the positions listed in the attached schedule of Positions and Salaries are hereby authorized within the Los Angeles City Employees' Retirement System. The class code numbers, classifications and salaries as set forth herein are hereby determined to be appropriate in accordance with existing City laws and ordinances, and applicable Memoranda of Understanding, as appropriate. Further, the employment of the designated number of persons in each code and classification as set forth herein is hereby authorized.

2. Memoranda of Understanding approved by the City Council shall be considered to be incorporated into this Resolution where appropriate. Salaries established under approved Memoranda of Understanding shall apply to all classes of employees therein noted. The provisions of each of the Memoranda of Understanding shall take precedence over any conflicting provision contained in this Resolution, but only for those employees in classes to which the Memoranda of Understanding apply.

3. One Assistant General Manager (Class Code 9269), when designated by the General Manager to assume the additional administrative and supervisory duties of Executive Officer, shall be compensated at the fourth premium level rate above the appropriate step rate or premium level rate of the incumbent. Upon approval of the General Manager, one additional Assistant General Manager (Class Code 9269) may receive salary up to the fourth premium level rate above the appropriate step rate of the prescribed salary range. This compensation is pensionable.

4. Upon approval of the General Manager, substitute authority positions may be filled using any class approved and established by the Board of Civil Service Commissioners. This approval shall specify the period during which the position shall be filled.

5. Upon approval of the General Manager, persons may be employed in any class approved and established by the Board of Civil Service Commissioners in-lieu of a vacant position if the in-lieu employment is consistent with City policies and procedures for such employment.

6. The General Manager shall have the authority to correct any clerical or typographical errors in this document.

Tuesday, March 22, 2022

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM
POSITIONS AND SALARIES: FY 2022-23

(a) Regular Positions

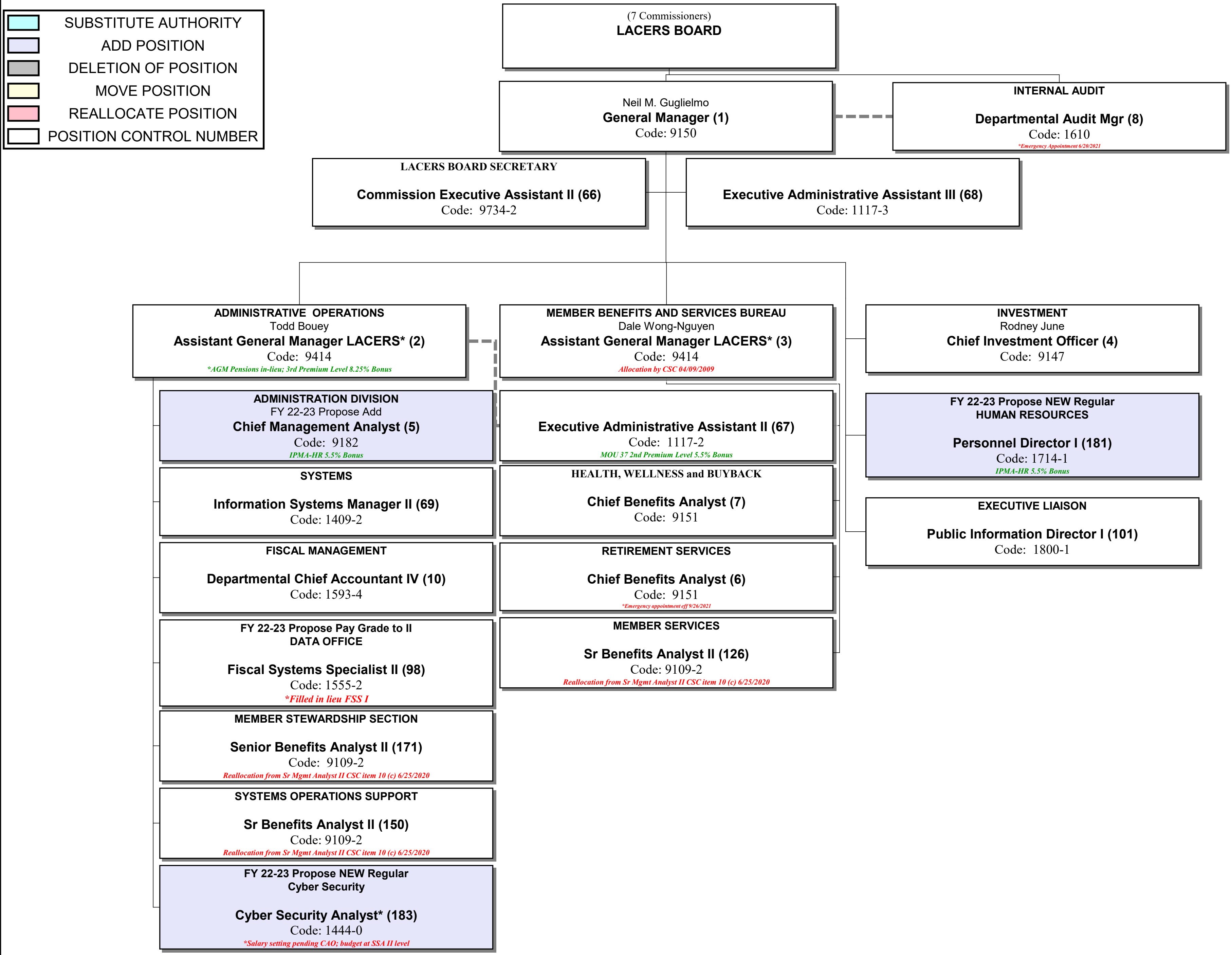
FY22	FY23	Change	MOU	Class Code	Class Title	Salary Range
3	3	0	1	1513	ACCOUNTANT	$ 60,593 - $ 88,531
12	13	1	3	1223	ACCOUNTING CLERK	$ 53,870 - $ 78,780
1	1	0	20	1119	ACCOUNTING REC SUPVR II	$ 71,722 - $ 104,838
9	11	2	3	1358	ADMINISTRATIVE CLERK	$ 41,384 - $ 60,552
2	2	0	36	9414	ASST GM LACERS	$ 155,054 - $ 226,964
26	28	2	1	9108	BENEFITS ANALYST	$ 80,408 - $ 117,575
32	35	3	20	1203	BENEFITS SPECIALIST	$ 60,948 - $ 89,094
3	2	-1	36	9151	CH BENEFITS ANALYST	$ 135,448 - $ 198,005
1	1	0	36	9147	CH INVESTMENT OFCR	$ 197,002 - $ 288,039
0	1	1	36	9182	CH MANAGEMENT ANALYST	$ 135,448 - $ 198,005
1	1	0	1	9734	COMMISSION EXEC ASST II	$ 77,172 - $ 112,856
0	1	1	0	1444	CYBER SECURITY ANALYST	TBD - TBD
1	1	0	36	1610	DEPARTMENTAL AUDIT MGR	$ 135,448 - $ 198,005
1	1	0	36	1593	DEPT CHIEF ACCT IV	$ 135,448 - $ 198,005
1	1	0	37	1117	EXEC ADMIN ASST II	$ 66,774 - $ 97,614
1	1	0	37	1117	EXEC ADMIN ASST III	$ 71,618 - $ 104,671
1	0	-1	20	1555	FISCAL SYSTEMS SPEC I	$ 96,737 - $ 141,399
0	1	1	20	1555	FISCAL SYSTEMS SPEC II	$ 112,981 - $ 165,202
1	1	0	0	9150	GM-LACERS	$ 188,129 - $ 333,454
1	1	0	36	1409	INFO SYSTEM MGR II	$ 135,448 - $ 198,005
1	1	0	1	1625	INTERNAL AUDITOR III	$ 91,182 - $ 133,297
1	1	0	1	1625	INTERNAL AUDITOR IV	$ 112,981 - $ 165,202
3	3	0	0	9146	INVESTMENT OFFICER I	$ 105,047 - $ 153,551
4	5	1	0	9146	INVESTMENT OFFICER II	$ 130,875 - $ 191,323
2	2	0	0	9146	INVESTMENT OFFICER III	$ 164,513 - $ 240,516
6	6	0	1	9184	MANAGEMENT ANALYST	$ 77,172 - $ 112,856
1	1	0	20	1129	PERS RECORDS SUPV	$ 64,915 - $ 94,941
1	1	0	1	1731	PERSONNEL ANALYST	$ 77,172 - $ 112,856
0	1	1	63	1714	PERSONNEL DIR I	$ 121,605 - $ 177,814
1	1	0	20	1525	PR ACCOUNTANT I	$ 87,570 - $ 128,057
1	1	0	20	1525	PR ACCOUNTANT II	$ 92,394 - $ 135,114
1	1	0	20	1201	PRINCIPAL CLERK	$ 60,948 - $ 89,094
2	2	0	8	1431	PROGRAMMER/ANALYST III	$ 83,436 - $ 121,960
1	1	0	8	1431	PROGRAMMER/ANALYST V	$ 97,259 - $ 142,192
1	1	0	36	1800	PUB INFO DIRECTOR I	$ 95,463 - $ 139,582
10	11	1	20	9109	SENIOR BENEFITS ANALYST I	$ 98,804 - $ 144,447
7	7	0	20	9109	SENIOR BENEFITS ANALYST II	$ 122,294 - $ 178,795
2	2	0	20	1523	SR ACCOUNTANT I	$ 70,302 - $ 102,813
3	3	0	20	1523	SR ACCOUNTANT II	$ 76,191 - $ 111,394
20	18	-2	3	1368	SR ADMINISTRATIVE CLERK	$ 51,030 - $ 74,646
2	2	0	20	9171	SR MGMT ANALYST I	$ 94,962 - $ 138,852
1	1	0	20	9171	SR MGMT ANALYST II	$ 117,575 - $ 171,925
1	1	0	64	9167	SR PERSONNEL ANALYST I	$ 94,962 - $ 138,852
1	1	0	64	9167	SR PERSONNEL ANALYST II	$ 117,575 - $ 171,925
1	1	0	20	1597	SR SYSTEMS ANALYST I	$ 91,308 - $ 133,506
1	1	0	20	1597	SR SYSTEMS ANALYST II	$ 112,981 - $ 165,202
3	2	-1	1	1596	SYSTEMS ANALYST	$ 77,172 - $ 112,856
0	1	1	21	1455	SYSTEMS PROGRAMMER I	$ 119,016 - $ 140,063
1	1	0	21	1455	SYSTEMS PROGRAMMER II	$ 103,105 - $ 150,732
1	1	0	21	1455	SYSTEMS PROGRAMMER III	$ 111,708 - $ 163,323
177	187	10				

(b) To be Employed As Needed in Such Numbers as Required:

Class Code	Class Title
1133	RETIREMENT RELIEF WORKER
1358	ADMINISTRATIVE CLERK
1501	STUDENT WORKER
1502	STUDENT PROFESSIONAL WORKER
1535	ADMINISTRATIVE INTERN I
1535	ADMINISTRATIVE INTERN II
1538	SR PROJECT COORDINATOR
1596	SYSTEMS ANALYST
9184	MANAGEMENT ANALYST
9269	ASSISTANT GENERAL MANAGER PENSIONS

FY21	FY22	Change	MOU	Class Code	Class Title	Salary Range
7	7	0	N/A	0101-2	COMMISSIONER	$50 PER MEETING
7	7	0				

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023



UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

	SUBSTITUTE AUTHORITY
	ADD POSITION
	DELETION OF POSITION
	MOVE POSITION
	REALLOCATE POSITION
	POSITION CONTROL NUMBER

FY 22-23 Propose NEW Regular
HUMAN RESOURCES

Personnel Director I (181)
Code: 1714-1
**Senior Personnel Analyst II in lieu (9167-T)*
IPMA-HR 5.5% Bonus

Sr. Pers Analyst I (130)
Code: 9167-1
**Emergency Appointment eff 12/19/2021*
Filled in lieu 9167-O

Diversity, Equity, and Inclusion

Senior Personnel Analyst II (146)
Code: 9167-2
CSC-2811Allocated 09/14/2017 Regularized 18/19

Pers Analyst (97)
Code: 1731

Personnel Records Supervisor (143)
Code: 1129

Sr Adm Clk (116)
Code: 1368
**Admin Clerk in lieu*
**2 level bilingual*

UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

	SUBSTITUTE AUTHORITY
	ADD POSITION
	DELETION OF POSITION
	MOVE POSITION
	REALLOCATE POSITION
	POSITION CONTROL NUMBER

INTERNAL AUDIT

Departmental Audit Mgr (8)
Code: 1610
**Emergency Appointment 6/20/2021*

Internal Auditor IV (70)
Code: 1625-4

Internal Auditor III (144)
Code: 1625-3
CSC 17/18-135 allocated 7/13/17

UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

SUBSTITUTE AUTHORITY
ADD POSITION
DELETION OF POSITION
MOVE POSITION
REALLOCATE POSITION
POSITION CONTROL NUMBER

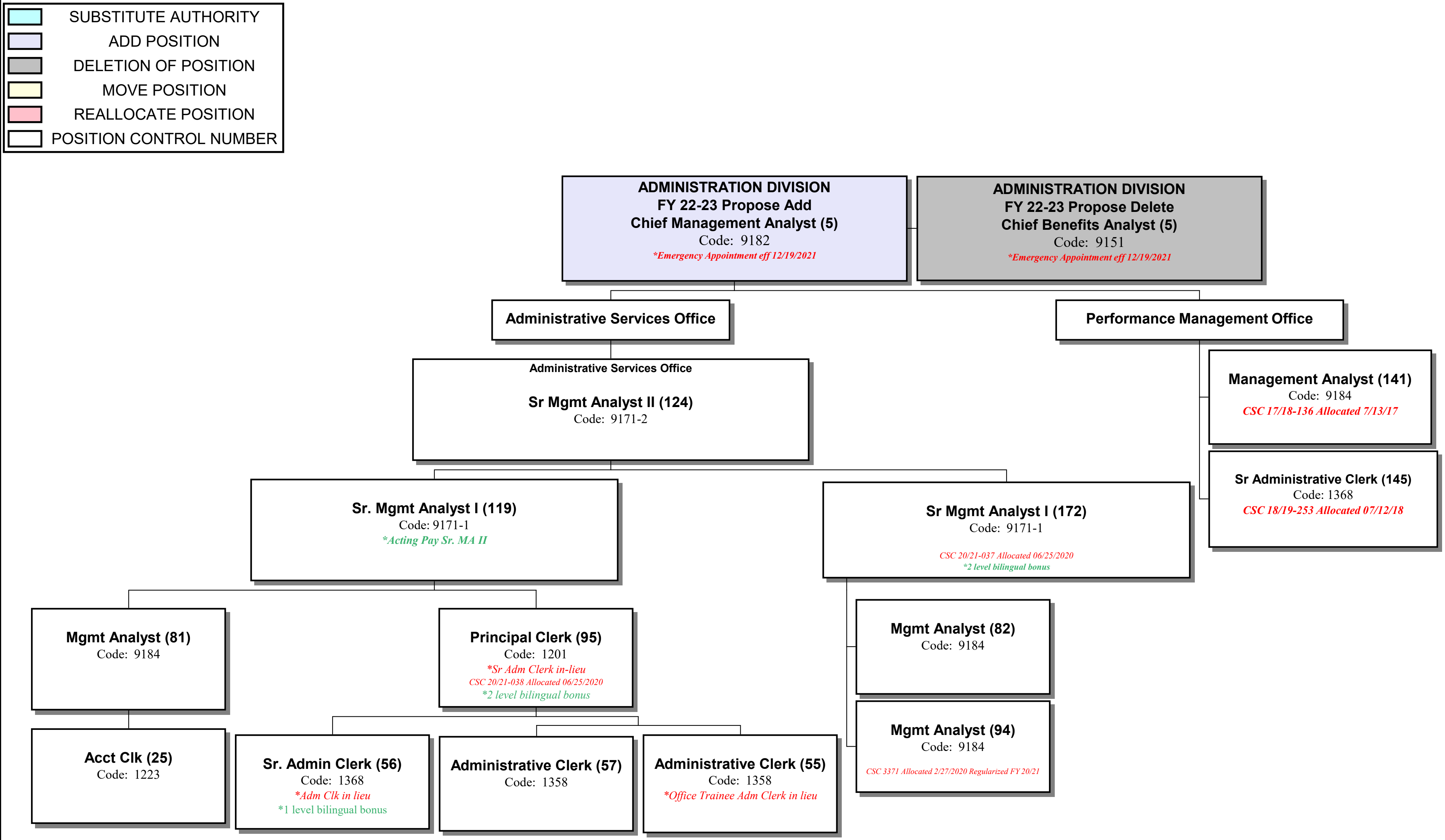
INVESTMENT

Chief Investment Officer (4)
Code: 9147

- **Public Markets** — **Investment Officer III (9)**, Code: 9146-3
  - **Investment Officer II (73)**, Code: 9146-2
  - **Investment Officer I (72)**, Code: 9146-1
  - **Investment Officer II (75)**, Code: 9146-2, **Investment Officer I in-lieu*
  - **Investment Officer I (167)**, Code: 9146-2, *CSC 3087 Allocated 12/13/18 Regularized 20/21*
  - **Management Analyst (93)**, Code: 9184
  - **Senior Adm Clk (118)**, Code: 1368
- **Private Markets** — **Investment Officer III (148)**, Code: 9146-3, *CSC 18/19-3148 Allocated 2/14/19*
  - **Investment Officer II (155)**, Code: 9146-2, *CSC 18/19-3149 Allocated 2/14/19*
  - **Investment Officer II (74)**, Code: 9146-2
  - **Investment Officer I (71)**, Code: 9146-1
  - **FY 22-23 Propose NEW Regular** — **Investment Officer II (187)**, Code: 9146-2
  - **FY 22-23 Propose NEW Regular** — **Adm Clk (182)**, Code: 1358

UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023



UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

SUBSTITUTE AUTHORITY
ADD POSITION
DELETION OF POSITION
MOVE POSITION
REALLOCATE POSITION
POSITION CONTROL NUMBER

MEMBER STEWARDSHIP SECTION

Senior Benefits Analyst II (171)
Code: 9109-2
Reallocation from Sr Mgmt Analyst II CSC item 10 (c) 6/25/2020

Active Member Accounts

Sr Benefits Analyst I (170)
Code: 9109-1
Benefits Analyst in lieu
CSC 20/21-041 Allocated 6/25/20

Benefits Analyst (96)
Code: 9108
CSC 20/21-040 Allocated 06/25/2020
**Benefits Specialist in lieu eff 1/2/2022*

Benefits Specialist (30)
Code: 1203

Member Stewardship

Benefits Analyst (163)
Code: 9108
CSC 2213 Allocated 6/25/15

Benefits Specialist (29)
Code: 1203

Benefits Specialist (16)
Code: 1203
CSC 19/20-060 Allocated 06/27/19

FY 22-23 Move from RSD to Member Stewardship
Membership Processing Unit

Benefits Analyst (76)
Code: 9108
Benefits Specialist in lieu eff 1/2/2022
Reallocate from Mgmt Analyst CSC item 10(c) 6/25/2020

Sr Adm Clk (115)
Code: 1368

Adm Clk (62)
Code: 1358

Adm Clk (63)
Code: 1358

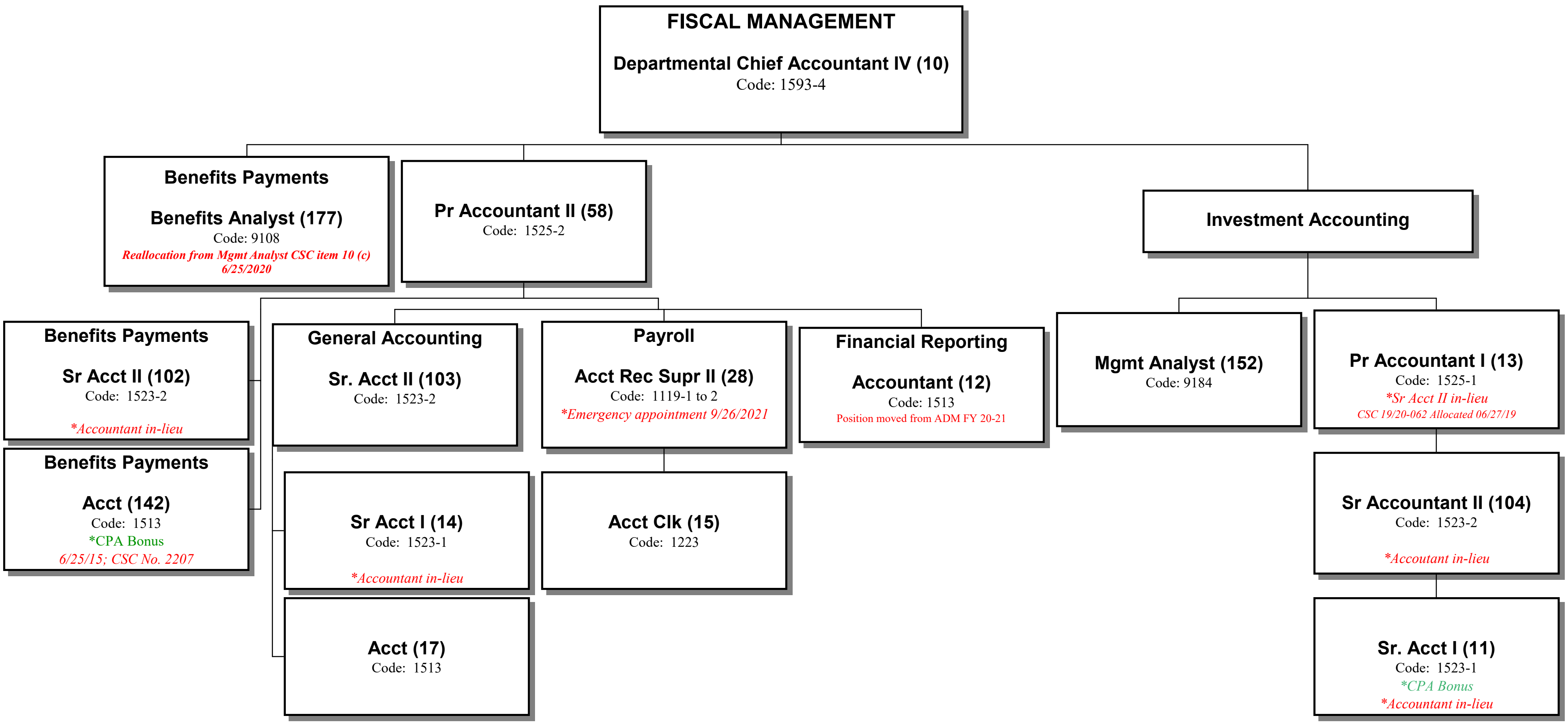
Adm Clk (64)
Code: 1358
*Office Trainee Adm Clerk in lieu

Adm Clk (65)
Code: 1358

UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

- SUBSTITUTE AUTHORITY
- ADD POSITION
- DELETION OF POSITION
- MOVE POSITION
- REALLOCATE POSITION
- POSITION CONTROL NUMBER



UPDATED 3/7/2022

LACERS

CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023

SUBSTITUTE AUTHORITY
ADD POSITION
DELETION OF POSITION
MOVE POSITION
REALLOCATE POSITION
POSITION CONTROL NUMBER

SYSTEMS OPERATIONS SUPPORT

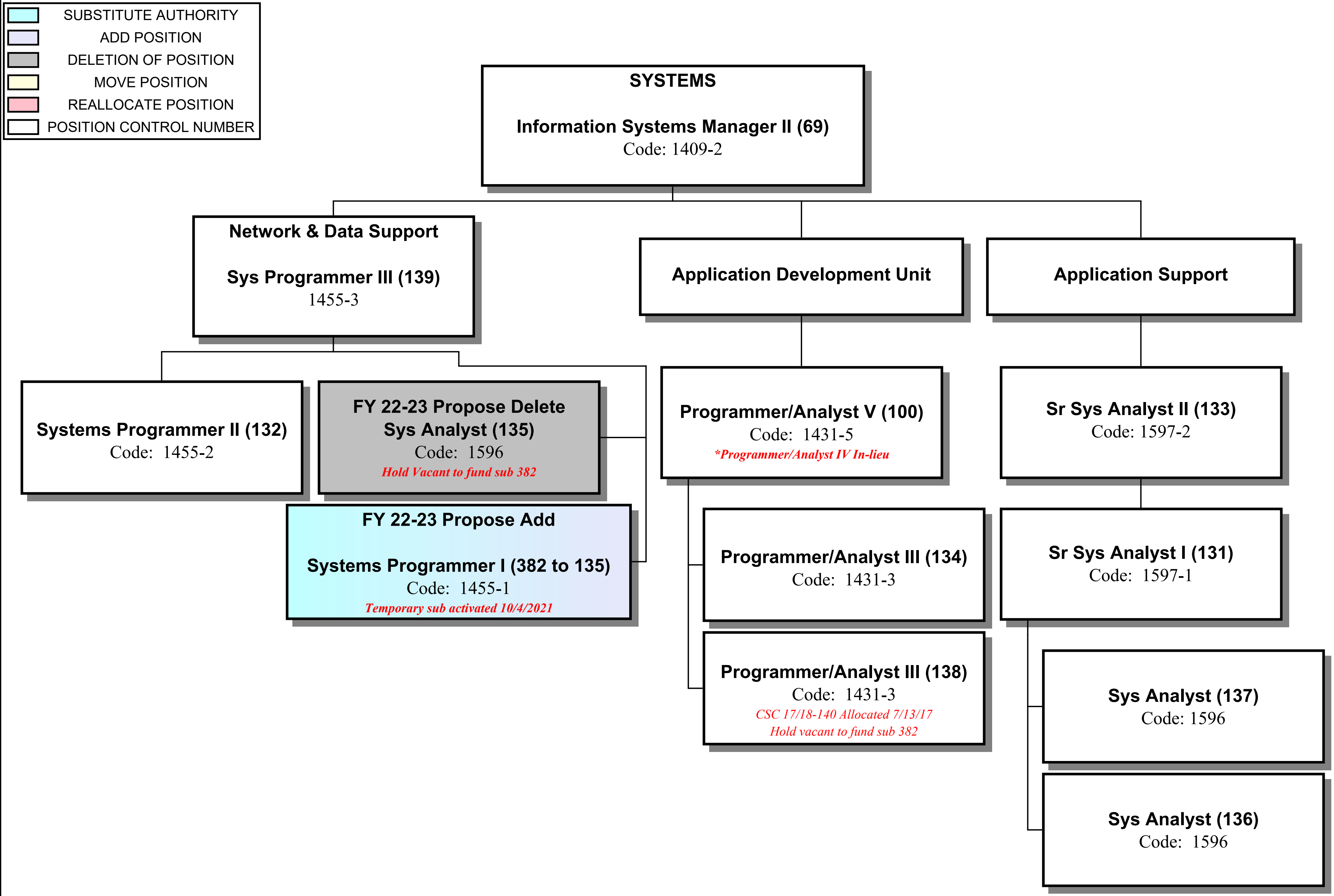
Sr Benefits Analyst II (150)
Code: 9109-2
Reallocation from Sr Mgmt Analyst II CSC item 10 (c) 6/25/2020

Benefits Analyst (80)
Code: 9108
Move from AMA&MSU to SOS FY21-22
**Benefits Specialist in lieu eff 1/2/2022*

Sr Benefits Analyst I (166)
Code: 9109-1
**Emergency appointment eff. 10/11/2020*
Reallocation from Mgmt Analyst CSC item 10 (c) 6/25/2020

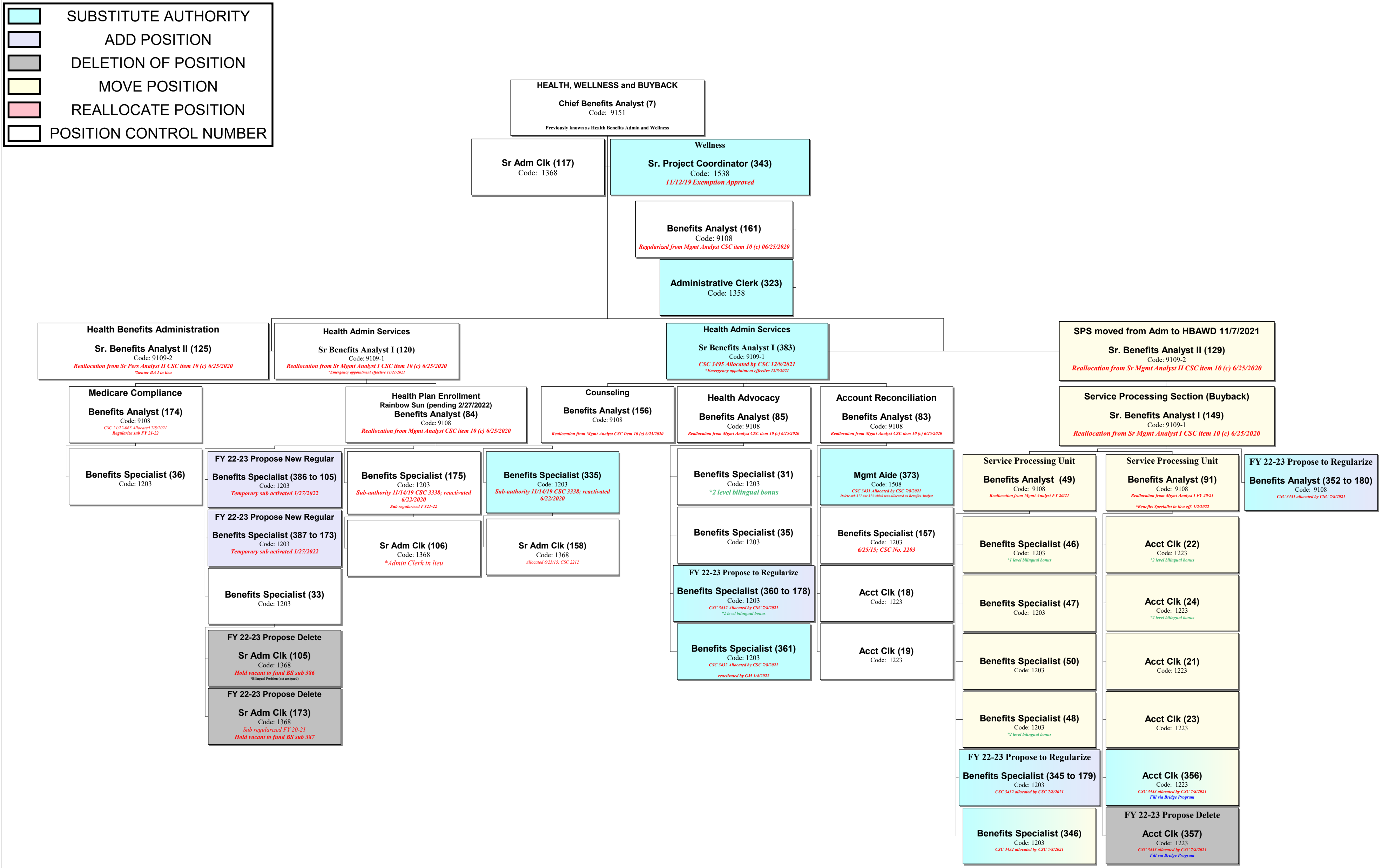
UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023



UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023



UPDATED 3/7/2022

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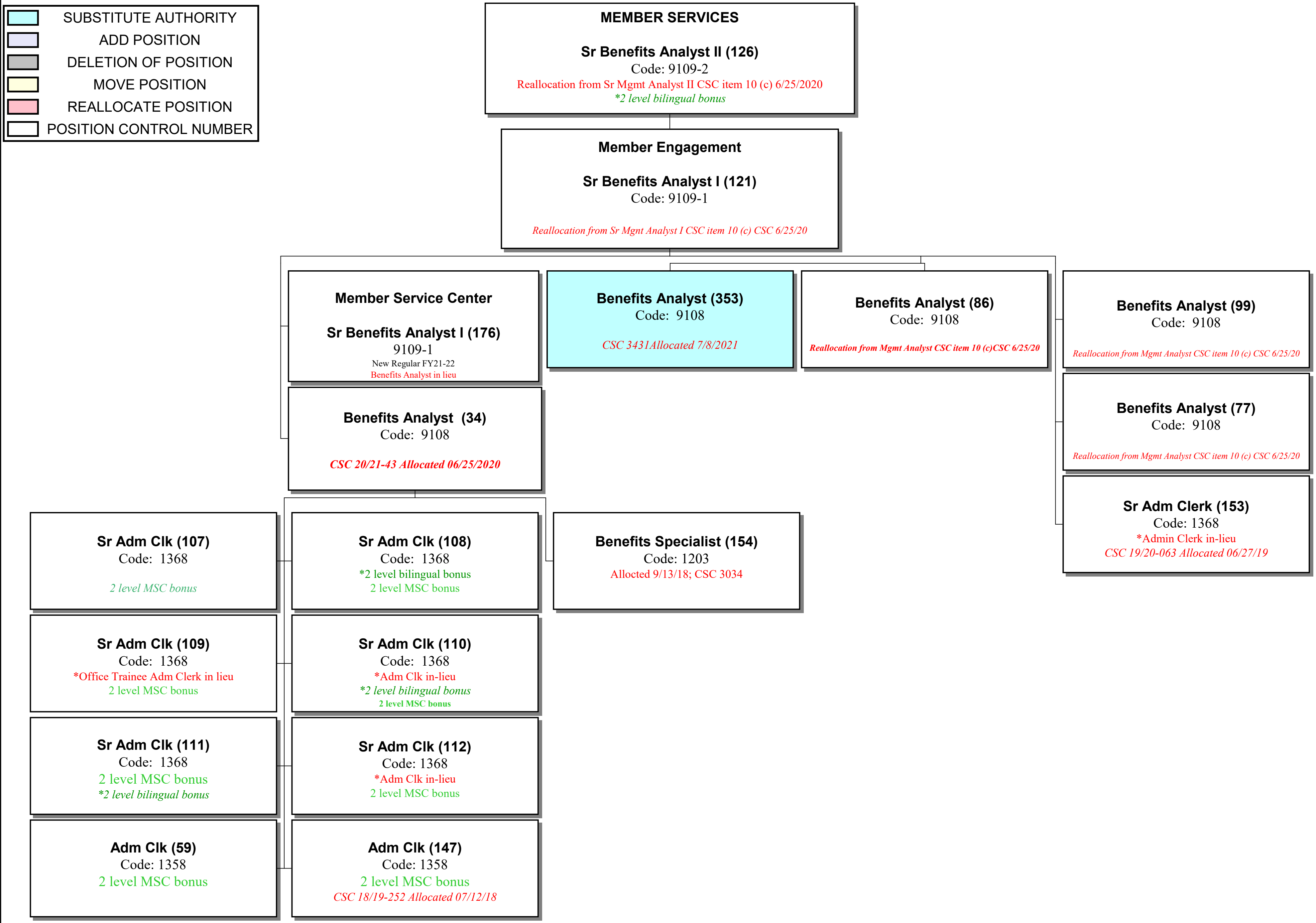
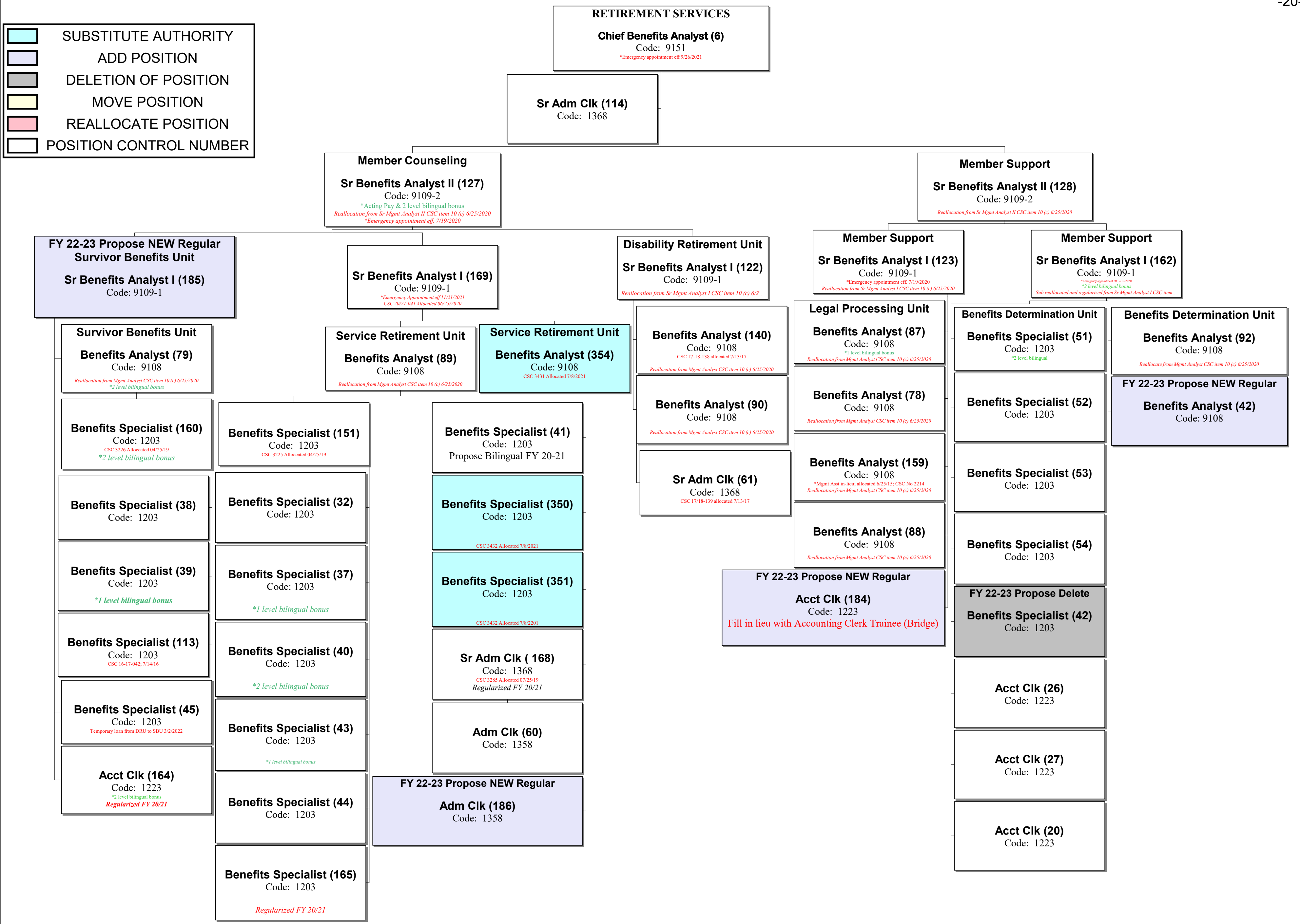


UPDATED 3/7/2022

LACERS
CONCEPTUAL ORGANIZATIONAL CHART FY 2022/2023



UPDATED 3/7/2022

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

PROPOSED RESOLUTION

DELEGATION OF AUTHORITY TO THE GENERAL MANAGER TO APPROVE TRANSFERS BETWEEN APPROPRIATION ACCOUNTS FOR FISCAL YEAR 2022-23

WHEREAS, the Fiscal Year 2022-23 Budget aims to improve expenditure ratios and budget closer to past and projected expenditure levels. Greater flexibility to move funds between appropriation accounts will help mitigate impacts of the budget tightening;

WHEREAS, Charter Section 343(b) and Administrative Code Section 5.36, provides authority to the head of the department, the LACERS Board of Administration, to transfer between budget appropriation accounts, within limits prescribed by the City Administrative Officer, the most current at $59,296 in 2021-22;

WHEREAS, on March 22, 2022, the Board has approved the 2022-23 Budget and desires that the General Manager have the flexibility to move funds between appropriation accounts in order to meet priorities in the most efficient and timely manner;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby delegates authority to the General Manager to transfer between budget appropriation accounts not to exceed the City thresholds.

March 22, 2022

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

PROPOSED RESOLUTION

AUTHORIZATION FOR
DEPARTMENTAL EXEMPLARY STAFF RECOGNITION PROGRAM
FISCAL YEAR 2022-23

WHEREAS, on March 11, 2003, the Board established a departmental Exemplary Staff Recognition Program to provide a framework for team building and recognition throughout the Department;

WHEREAS, the Board endeavors to continue the program in order to recognize employees for their efforts, and to identify role models who communicate the standards established through our guiding principles;

WHEREAS, funds for program-related expenditures during the 2022-23 Fiscal Year have been included in the FY 2022-23 Departmental budget in order to continue the program; and

WHEREAS, the Controller's Office requires an annual Board Resolution confirming the establishment of the program in order to process future payments of related expenses;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby confirms the permanent establishment of the LACERS Exemplary Staff Recognition Program, and authorizes program-related expenditures for Fiscal Year 2022-23 not to exceed $4,000.

March 22, 2022

LACERS
LA CITY EMPLOYEES' RETIREMENT SYSTEM

REPORT TO BOARD OF ADMINISTRATION | **MEETING: MARCH 22, 2022**
From: Ferralyn Sneed, Chief Benefits Analyst | **ITEM: VII - D**

SUBJECT: **FAMILY DEATH BENEFIT PLAN – CONSIDERATION OF BENEFIT PAYABLE ON BEHALF OF DECEASED ADULT DISABLED CHILD ABBY MARIA FRANCES BANAS AND POSSIBLE BOARD ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Board approve the retroactive Family Death Benefit Plan (FDBP) benefit payment for deceased disabled child Abby Maria Frances Banas based upon her neurologic comorbidities, which prevented her from performing any substantial gainful activity.

Background

The FDBP is a voluntary supplemental benefit program designed to provide added financial protection for the families of LACERS members who die prior to retirement eligibility. Plan benefits are similar to the survivor benefits provided through the Social Security Old Age Survivors and Disability Insurance (OASDI) program. FDBP premiums are actuarially derived based on bi-annual valuations to ensure the plan is self-sustaining. Plan participants and the City contribute equally to the program and contributions are invested as a part of the LACERS portfolio. The contributed funds and earnings are kept in a separate reserve account; however, unlike retirement contributions, FDBP funds are non-refundable in the event the member terminates employment with the City.

Under the FDBP provisions, benefits may continue on behalf of children up to the age of 18 as long as they remain enrolled full-time in secondary school. However, a child who, before reaching the age of 22, becomes unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death, or to be of long continued and indefinite duration, may receive a continuation of their benefit if approved by the Board of Administration. A substantial gainful activity is defined as follows by the Social Security Administration:

> *Substantial gainful activity means the performance of significant physical or mental activities in work for pay or profit, or in work of a type generally performed for pay or profit. Significant activities are useful in the accomplishment of a job or the operation of a business and have economic value. Work may be substantial even if it is performed on a seasonal or part-time basis, or even if the individual does less, is paid less, or has less responsibility than in previous*

work. Work activity is gainful if it is the kind of work usually done for pay, whether in cash or in kind, or for profit, whether or not a profit is realized.

LACERS Member Stephen J. Banas passed away on October 20, 2018. At the time of death, the Member's Accumulated Contributions beneficiary form dated May 24, 2007, nominated his spouse Deidre Banas and his daughter Lindsey Banas also known as Lindsey Pettit as beneficiaries. Ms. Pettit subsequently waived her right to receive her benefit so that her mother Deidre Banas could elect to receive a Disability Survivorship benefit. (In order for Deidre Banas to receive a survivorship benefit, she must be to sole beneficiary of the Member's Accumulated contributions.) Deidre Banas began receiving a Disability Survivorship in January 2020.

Abby Maria Frances Banas (age 19) was the Member's adult disabled child and qualified to receive FDBP benefit at the time of the Member's death. After learning the extent and nature of Abby Banas' impairment, staff informed Deidre Banas on January 25, 2019, of the requirements and documents needed to process the FDBP benefit. Specifically, because Abby Banas was legally considered an adult, her mother was advised a conservatorship over the person and the estate for Abby Banas would be required in order to manage benefit. In February 2020, Deidre Banas informed LACERS the court hearing date on the conservatorship was scheduled for March 2020. However, hearing was later postponed for six months due to the pandemic.

In October of 2020, Deidre Banas informed LACERS she had received conservatorship for the person only for Abby Maria Frances Banas in September 2020. LACERS' staff requested a copy of the conservatorship document from Ms. Banas but only received a copy of the minute order. After consulting with the Office of the City Attorney, staff informed Ms. Banas the conservatorship she obtained did not cover the FDBP benefit. In November of 2020, the attorney for Deidre Banas filed for conservatorship for the estate and for a temporary emergency conservatorship. In a subsequent court proceeding, the conservatorship for the estate was denied by the court, stating that the powers that were previously granted for the Person were sufficient.

LACERS' staff forwarded the information received from the court to Deputy City Attorney (DCA) James Napier, who contacted the attorney representing Ms. Banas directly. The attorney explained to DCA Napier that the court rejected the conservatorship for the estate application and he had filed for reconsideration. On January 29, 2021, DCA Napier attended the second court hearing on the conservatorship. The following information was then communicated to LACERS staff, "The Conservator has conservatorship over the person and not the estate which is what the City Attorney usually requires. However, the Judge is proposing on granting conservatorship over the FDBP benefit only". Retirement Services Division managers reviewed the proposal and agreed to accept the conservatorship for the FDBP benefit as this type of court arrangement had been accepted in past based on City Attorney recommendation.

On February 9, 2021, the court granted a limited conservatorship to Deidre Banas and the judge signed the conservatorship document on March 1, 2021. On February 11, 2021, amid the finalization of the conservatorship, Abby Maria Frances Banas passed away. Deidre Banas requested the benefit due Abby Banas be paid as intended. Staff consulted DCA Napier who advised that, following approval from the Board of Administration, the benefit should be paid to the estate of Ms. Abby Maria Frances Banas.

Medical Evidence

Neurologist

Dr. Thomas P. Di Julio reviewed the medical records for Abby Maria Frances Banas on January 11, 2022. Dr. Di Julio opined that, prior to and at the time of her passing at age 19, Abby was disabled and unable to perform any substantial gainful activity based on her severe physical and mental impairments.

Board Determination

Pursuant to Administrative Code Section 4.1090.(a)(3)(b)(3), *The Board of Administration shall have the power to hear and determine all matters pertaining to the degree and the duration of any child's disability, and the determination of said Board shall be final and conclusive.*

Fiscal Impact

Abby Maria Frances Banas would have qualified for a monthly FDBP benefit of $937.50. The FDBP benefit would have been effective October 21, 2018. The FDBP payment would have ceased on January 30, 2021. There is no prorated amount for FDBP payments for the month of death. The retroactive benefit amount is $26,250.00.

Prepared By:

Marina Castaneda, Benefits Analyst
Delia Hernandez, Senior Benefits Analyst I

FS:DH:MC

Attachments: Attachment 1: Proposed Resolution

APPROVAL OF FAMILY DEATH BENENFIT PLAN BENEFIT PAYMENT FOR DECEASED BENEFICIARY ABBY MARIA FRANCES BANAS

PROPOSED RESOLUTION

WHEREAS, the General Manager presented certain medical reports and other evidence, and reported that the request for benefit payment filed was in regular and proper form;

WHEREAS, Dr. Thomas P. Di Julio examined the medical records of Abby Maria Frances Banas and concluded Abby Maria Frances Banas had been disabled for her entire life and unable to engage in any substantial gainful activity due to the severity of her medical impairments and that these impairments eventually resulted in her death;

WHEREAS, the medical evidence confirms Abby Maria Frances Banas became disabled prior to reaching the age of 22, in accordance with the provisions of Los Angeles Administrative Code Section 4.1090 governing the Family Death Benefit Plan;

WHEREAS, after discussion and consideration of the evidence, it is the finding and determination of this Board that Abby Maria Frances Banas was unable to engage in any substantial gainful activity by reason of medically determinable physical and mental impairments which resulted in death, pursuant to Los Angeles Administrative Code § 4.1090.(a)(3)(b)(3);

NOW, THEREFORE, BE IT RESOLVED that the Board hereby approves the Family Death Benefit Plan retroactive payment to the estate of deceased benefit recipient Abby Maria Frances Banas.

LACERS
LA CITY EMPLOYEES' RETIREMENT SYSTEM

PORTFOLIO PERFORMANCE REVIEW

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

QUARTER ENDING DECEMBER 31, 2021

NEPC

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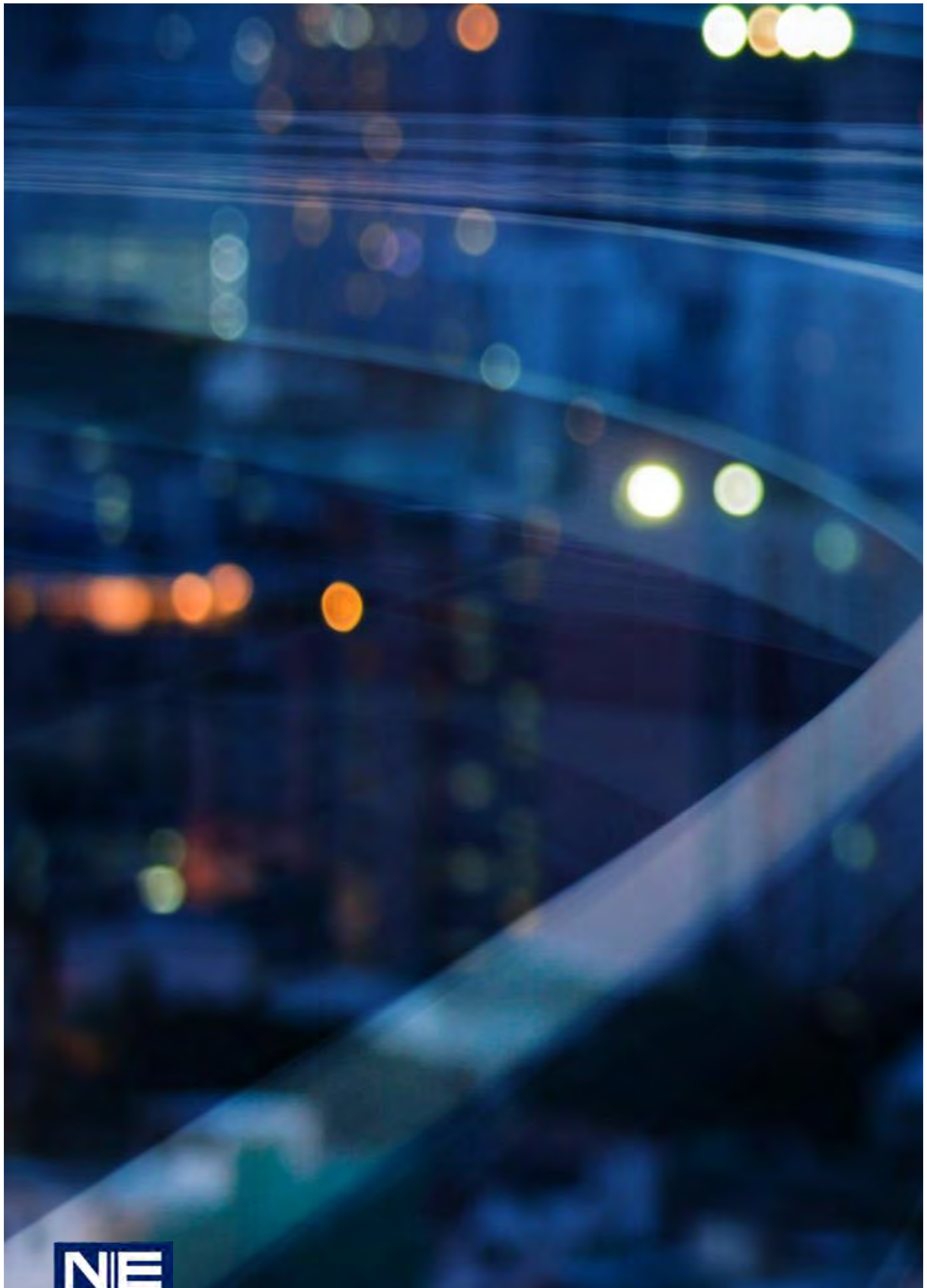
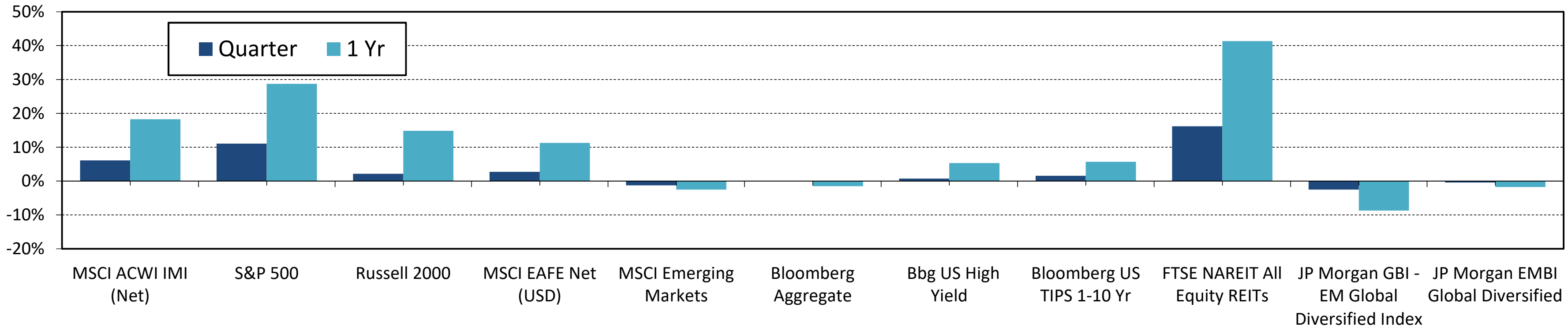


EXECUTIVE SUMMARY

PERFORMANCE OVERVIEW

Q4 Market Summary – Risk Assets Turned In Mixed Results



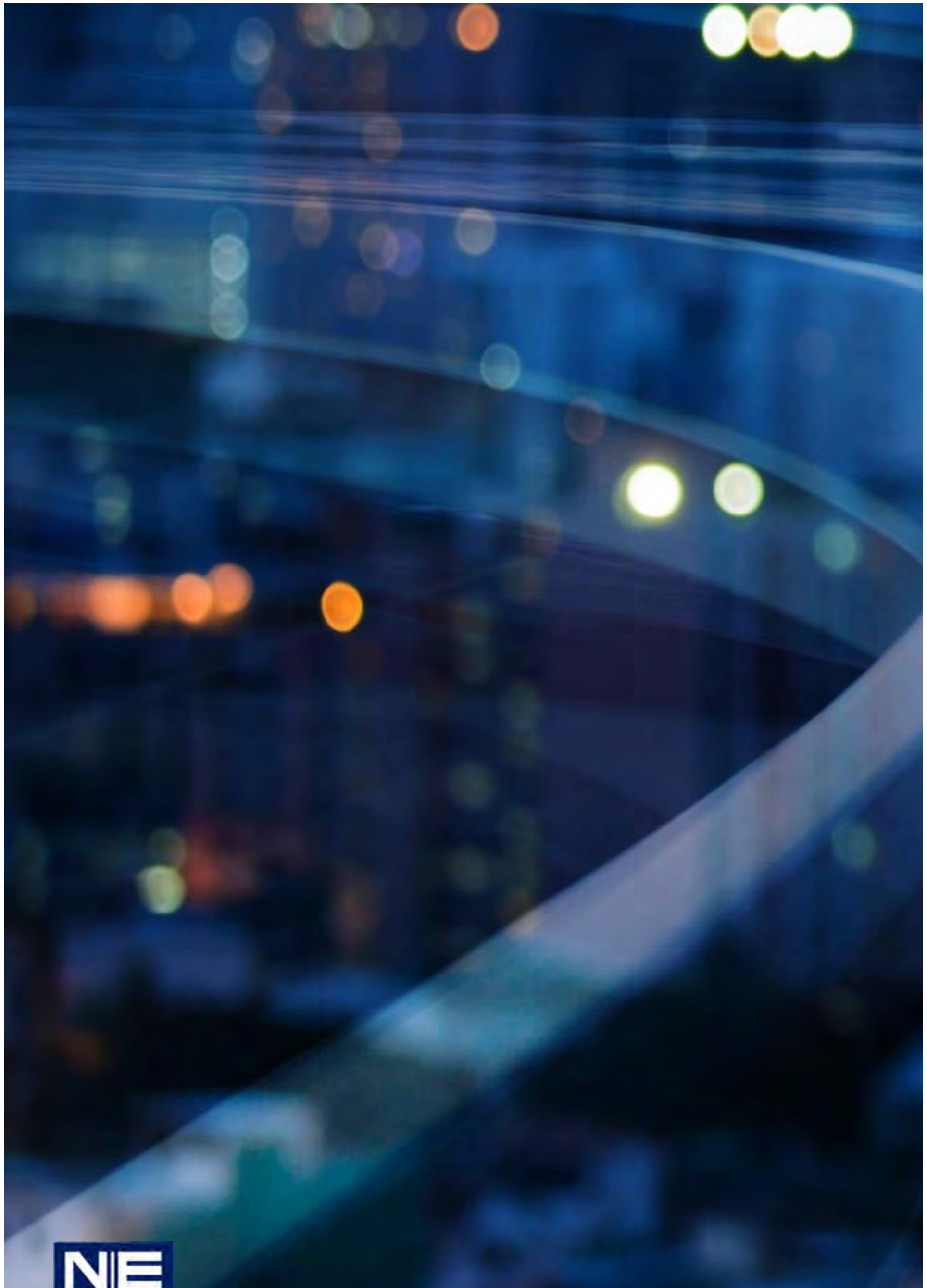
	Market Value ($)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	**24,048,346,810**	**4.3 (49)**	**16.8 (44)**	**15.6 (44)**	**11.8 (50)**	**10.5 (26)**	**7.4 (35)**	**8.7 (27)**	**Nov-94**
Policy Index		*4.8 (19)*	*13.5 (81)*	*16.1 (34)*	*11.8 (51)*	*10.3 (40)*	*7.3 (44)*	*8.7 (31)*	
InvMetrics Public DB $5-50B Gross Median		*4.3*	*16.5*	*15.3*	*11.8*	*10.1*	*7.3*	*8.4*	

Note: Performance is gross of fees

Global stocks were a mixed bag in the fourth calendar quarter of 2021.
US Equity outperformed, Non-U.S. Equity and Private Equity composites underperformed their benchmarks

Fixed-income markets ended the quarter mostly flat despite an uptick in volatility.
Core Fixed Income outperformed and Credit Opportunities underperformed

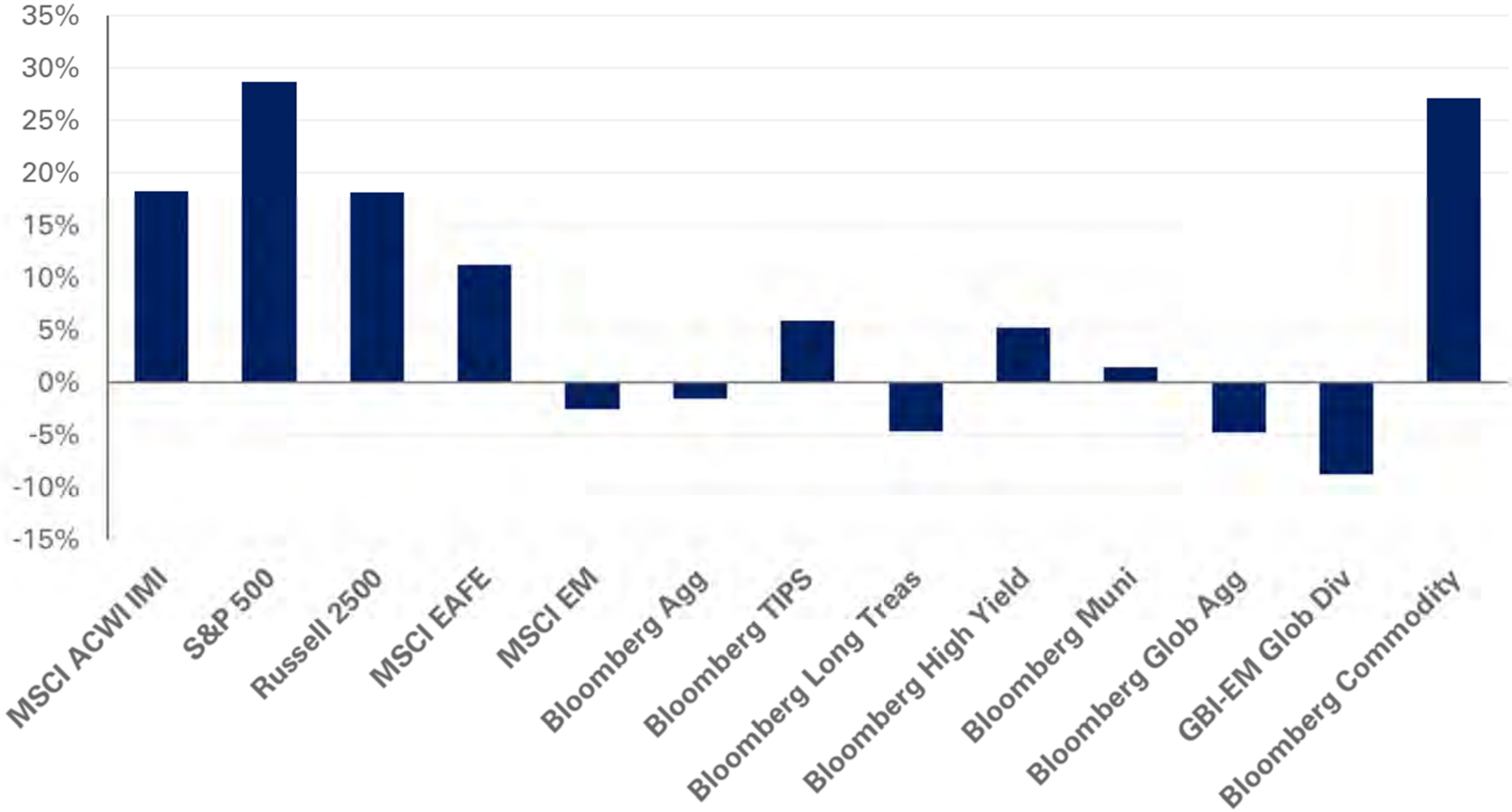
The reemergence of growth and inflation as significant influences on market pricing can potentially weaken the sway held by the extraordinary monetary and fiscal interventions that have become a way of life for over a decade.



MARKET ENVIRONMENT

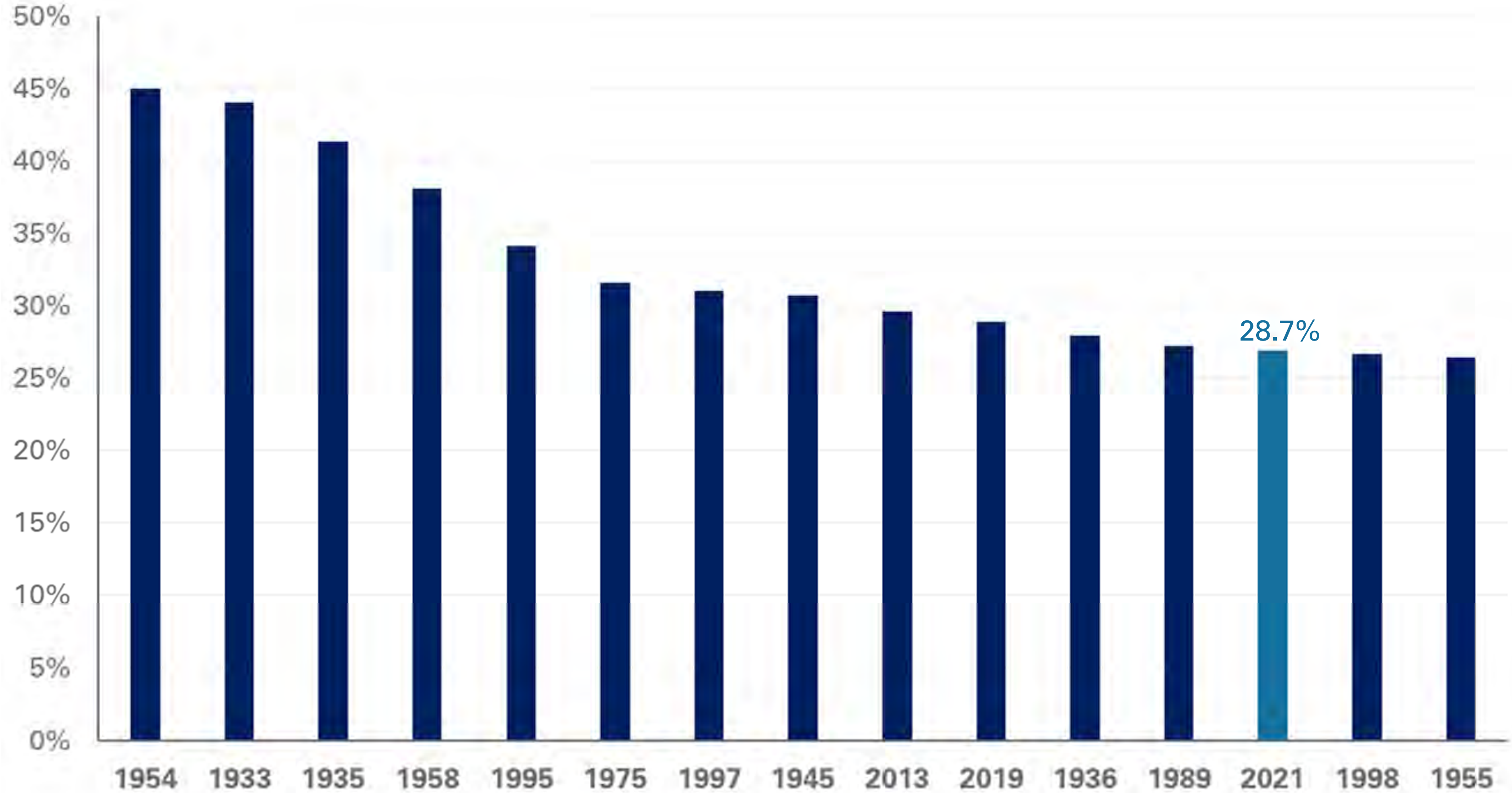
RISK ASSETS OUTPERFORMED

ANNUAL TOTAL RETURNS



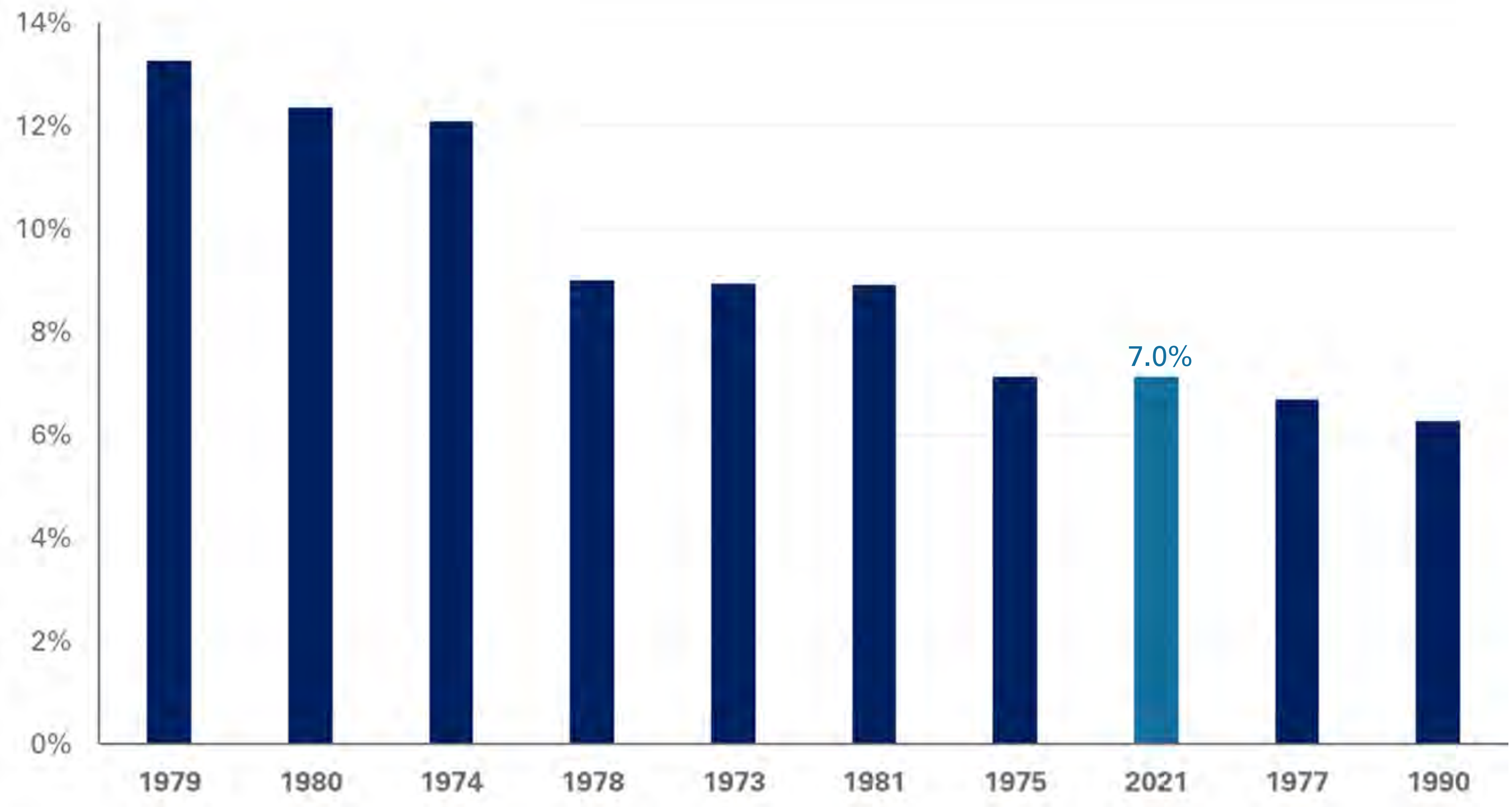
2021 EQUITY RETURNS WERE HISTORICALLY HIGH

TOP 15 S&P 500 CALENDAR YEAR RETURNS



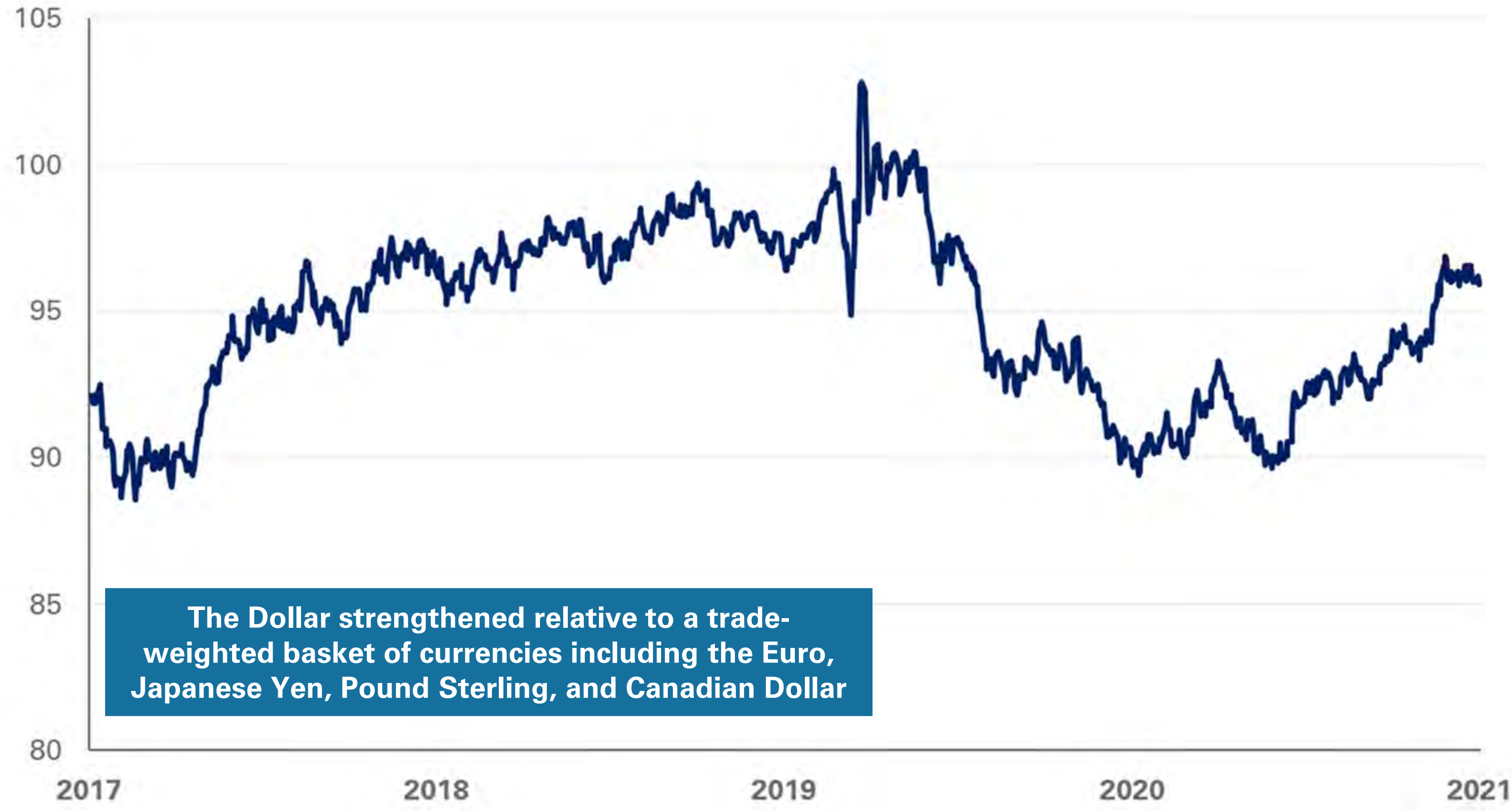
INFLATION ROSE AT HIGHEST LEVEL SINCE 1981

TOP 10 ANNUAL U.S. CPI-U CHANGES



THE U.S. DOLLAR STRENGTHENED IN 2021

U.S. DOLLAR INDEX

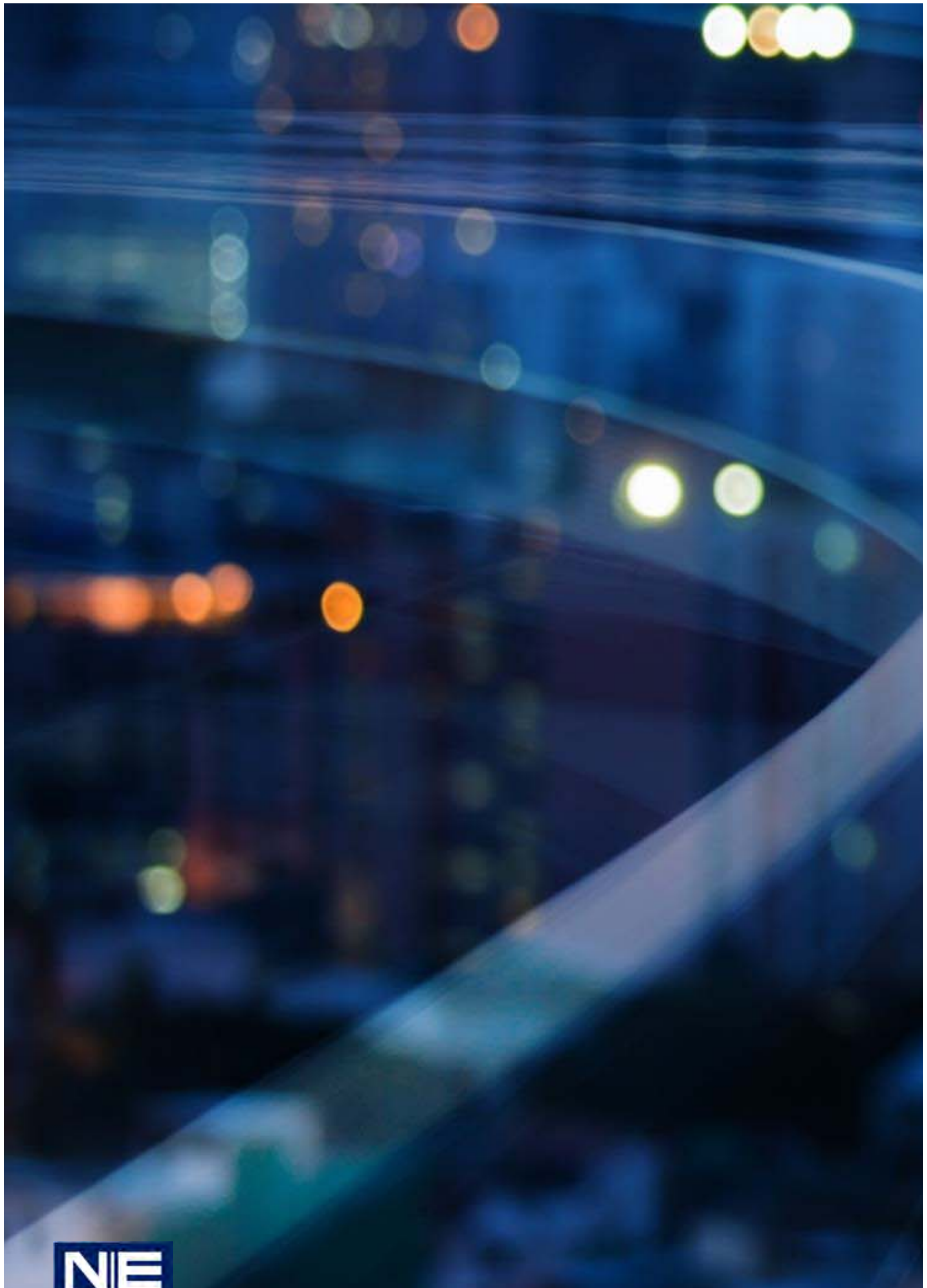


NEPC KEY MARKET THEMES

AS OF 12/31/21

Economic Crossroads Change in Status:	DORMANT · FADED · **NEUTRAL** · PREVALENT · DOMINANT ▪ Diminishing policy support and higher levels of inflation/growth are driving a transition from Fed policy as the dominant input for capital markets to economic fundamentals ▪ This transition will dramatically influence the pricing of risk premia across capital markets and the economic outcome may track a wide regime spectrum
Permanent Interventions Change in Status: *Prevalent to Faded*	DORMANT · **FADED** · NEUTRAL · PREVALENT · DOMINANT ▪ Permanent Interventions enhances investor sentiment but is cyclically fading as monetary policy shifts to a less accommodative stance ▪ The Federal Reserve has begun tapering asset purchases and recent commentary suggests rate liftoff may happen sooner than anticipated given the economic and inflation backdrop
Globalization Backlash Change in Status: *Prevalent to Neutral*	DORMANT · FADED · **NEUTRAL** · PREVALENT · DOMINANT ▪ The importance of this theme may increase as supply-chain disruptions and inflationary pressures strain the electorate and geopolitical relationships ▪ The world will likely be faced with an amplified wealth divide given economic and labor market conditions, which has historically driven more volatile political outcomes
China Transitions Change in Status:	DORMANT · FADED · NEUTRAL · **PREVALENT** · DOMINANT ▪ The "regulatory reset" highlights the potential for economic and capital market volatility on the country's long transition path ▪ While in-line with the longer-term economic goals, these regulations have negatively impacted market sentiment; creating a tail-risk for market and economic contagion

Key Market Themes influence global markets and may remain relevant for an extended period with significant implications for capital markets
Themes can be disrupted and incite outsized market volatility



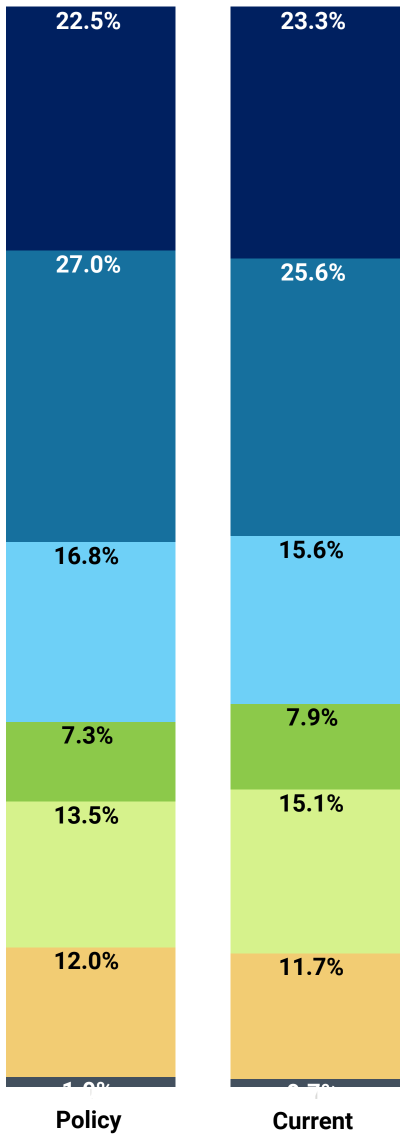
ASSET CLASS POLICY OVERVIEW

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

ASSET ALLOCATION VS. POLICY

Asset Allocation vs. Target



*Difference between Policy and Current Allocation

	Current ($)	Policy (%)	Current (%)	Differences* (%)	Policy Range (%)	Within Range
U.S. Equity	5,601,535,430	22.5	23.3	0.8	16.5 - 28.5	Yes
Non-US Equity	6,168,377,591	27.0	25.6	-1.4	21.0 - 33.0	Yes
Core Fixed Income	3,749,597,741	16.8	15.6	-1.2	13.3 - 20.0	Yes
Credit Opportunities	1,899,256,254	7.3	7.9	0.6	7.3 - 12.8	Yes
Private Equity	3,640,051,201	13.5	15.1	1.6		Yes
Real Assets	2,813,888,691	12.0	11.7	-0.3		Yes
Cash	175,639,903	1.0	0.7	-0.3	0.0 - 2.0	Yes
Total	**24,048,346,810**	**100.0**	**100.0**	**0.0**		

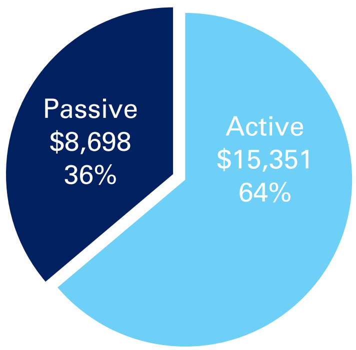
*Difference between Policy and Current Allocation

Note: Policy target asset allocation reflects the interim policy allocation adopted on September 14, 2021.
Please see appendix for policy definitions.

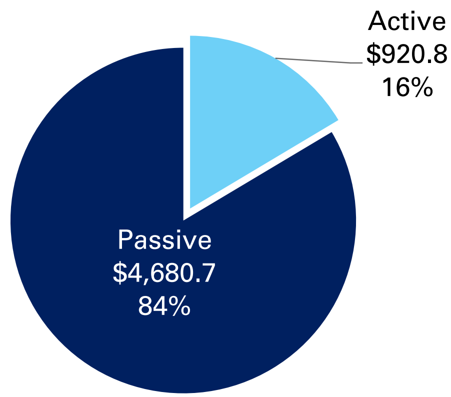
ACTIVE AND PASSIVE MANAGER BREAKDOWN

Note: Market values shown in millions $(000).

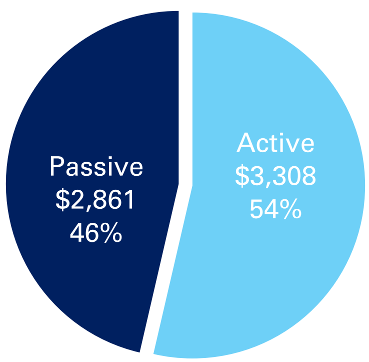
Total Fund



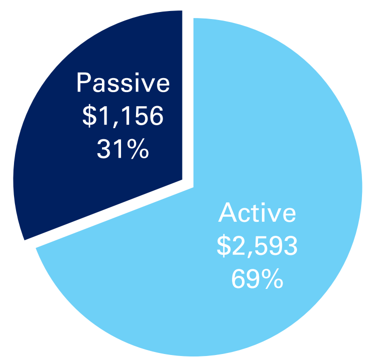
U.S. Equity



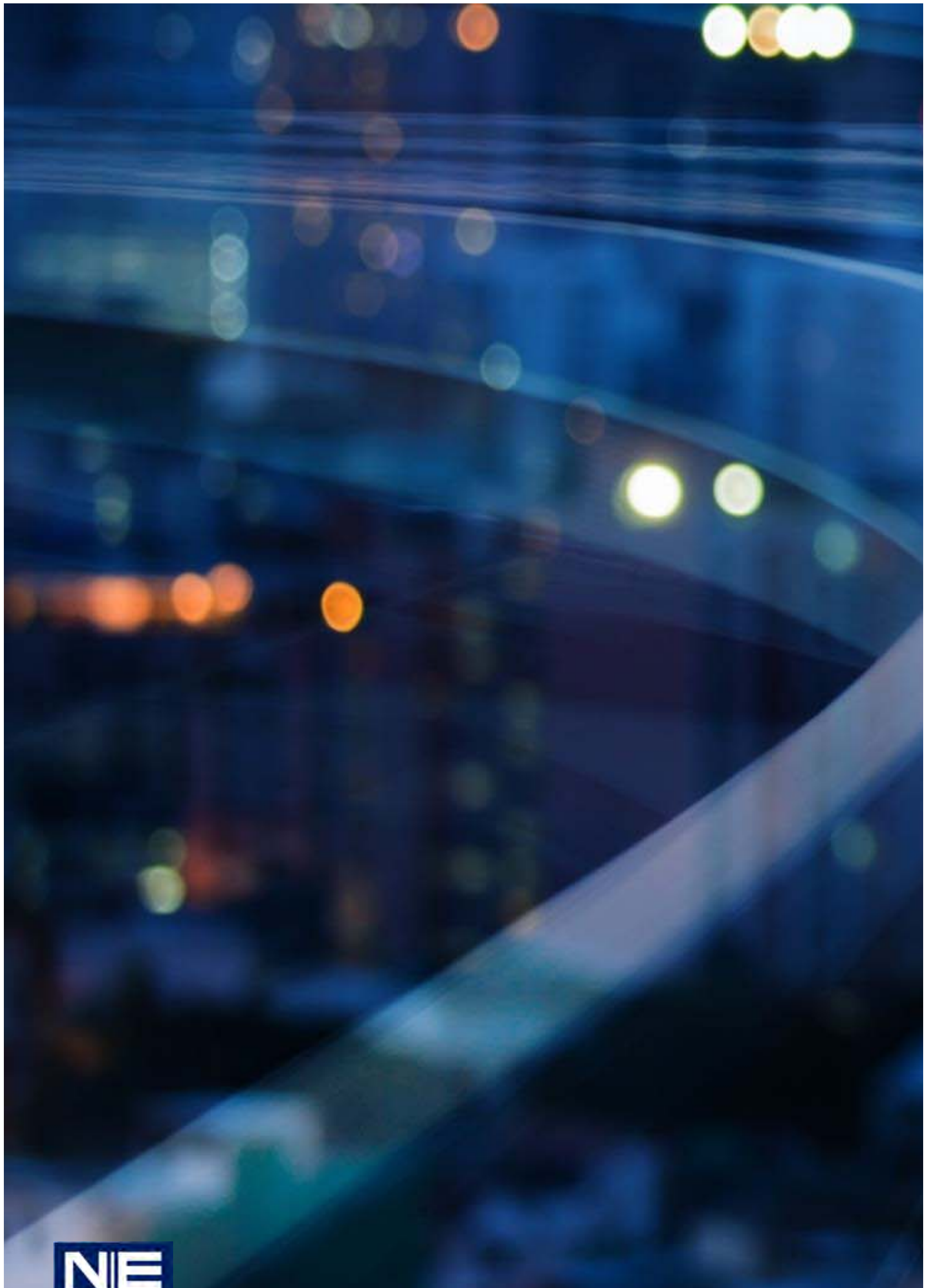
Non-U.S. Equity



Core Fixed Income



- LACERS allocated 64% to active managers and 36% to passive managers.
- Credit Opportunities, Private Equity, and Real Assets programs are active and therefore are not shown.



PERFORMANCE OVERVIEW

TOTAL FUND PERFORMANCE SUMMARY

GROSS OF FEES

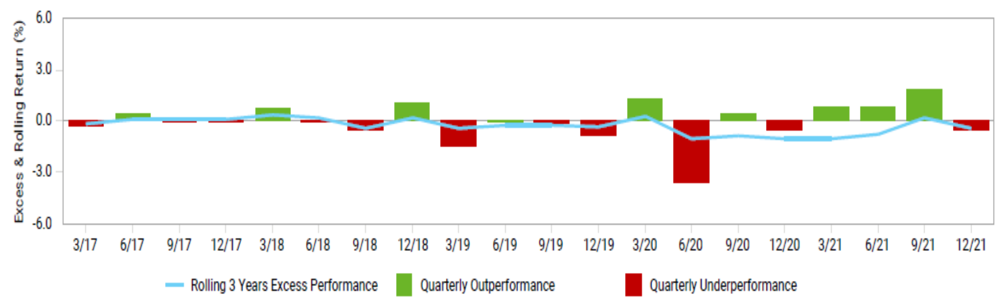
	Market Value ($)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	**24,048,346,810**	**4.3 (49)**	**16.8 (44)**	**15.6 (44)**	**11.8 (50)**	**10.5 (26)**	**7.4 (35)**	**8.7 (27)**	**Nov-94**
Policy Index		*4.8 (19)*	*13.5 (81)*	*16.1 (34)*	*11.8 (51)*	*10.3 (40)*	*7.3 (44)*	*8.7 (31)*	
InvMetrics Public DB $5-50B Gross Median		*4.3*	*16.5*	*15.3*	*11.8*	*10.1*	*7.3*	*8.4*	

Over the past five years the Fund return of 11.8% equaled the policy index. This return ranks in the 50th percentile within the Public Funds $5 Billion- $50 Billion universe. The Fund's volatility of 8.8% ranked in the 63rd percentile over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio ranks in the 57th percentile and the Sortino Ratio ranks in the 61st percentile. Both measures outperformed the benchmark indicating that active management benefited the Plan.

Over the past three years the Fund return of 15.6% underperformed the policy index by 0.5% and ranked in the 44th percentile in its peer group. The Fund's volatility ranks in the 60th percentile and the Sharpe Ratio ranks in the 54th percentile. The Sortino Ratio of 2.3 ranks in the 57th percentile.

In the one-year ended December 31, 2021, the Fund returned 16.8% and outperformed the policy index by 3.3%. The Fund's return was above median and ranked in the 44th percentile in its peer group.

Quarter Excess Return with a Rolling 3 Years Excess Return vs. Policy Index over 5 Years Ending December 31, 2021



5 Years Ending December 31, 2021	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
LACERS Master Trust	**11.8**	**8.8**	**1.2**	**1.9**
Policy Index	*11.8*	*10.1*	*1.0*	*1.6*
InvMetrics Public DB $5-50B Gross Median				

3 Years Ending December 31, 2021	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
LACERS Master Trust	**15.6**	**10.0**	**1.4**	**2.3**
Policy Index	*16.1*	*11.6*	*1.3*	*2.0*
InvMetrics Public DB $5-50B Gross Median				

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

EXECUTIVE SUMMARY

	Market Value ($)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	15 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	**24,048,346,810**	**4.3 (35)**	**16.8 (23)**	**15.6 (23)**	**11.8 (14)**	**10.5 (12)**	**7.4 (13)**	**8.7 (11)**	**Nov-94**
Policy Index		*4.8 (16)*	*13.5 (72)*	*16.1 (14)*	*11.8 (15)*	*10.3 (15)*	*7.3 (15)*	*8.7 (18)*	
InvMetrics Public DB $1-50B Gross Median		*4.0*	*14.5*	*14.6*	*10.6*	*9.5*	*6.8*	*8.1*	

3 Years Ending December 31, 2021				
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
LACERS Master Trust	**15.6 (23)**	**10.0 (47)**	**1.4 (33)**	**2.3 (32)**
Policy Index	*16.1 (14)*	*11.6 (85)*	*1.3 (59)*	*2.0 (51)*
InvMetrics Public DB $1-50B Gross Median	*14.6*	*10.2*	*1.3*	*2.1*

5 Years Ending December 31, 2021				
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
LACERS Master Trust	**11.8 (14)**	**8.8 (46)**	**1.2 (36)**	**1.9 (35)**
Policy Index	*11.8 (15)*	*10.1 (85)*	*1.0 (54)*	*1.6 (49)*

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

COMPOSITE PERFORMANCE DETAIL GROSS

	Allocation		Performance (%)							
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	**24,048,346,810**	**100.00**	**4.33**	**16.79**	**15.62**	**11.80**	**10.52**	**8.16**	**8.74**	**Nov-94**
Policy Index			*4.82*	*13.46*	*16.09*	*11.77*	*10.27*	*7.90*	*8.68*	
Over/Under			*-0.49*	*3.33*	*-0.47*	*0.03*	*0.25*	*0.26*	*0.06*	
U.S. Equity	**5,601,535,430**	**23.3**	**9.43**	**26.33**	**25.28**	**17.51**	**16.24**	**9.94**	**11.53**	**Nov-94**
U.S. Equity Blend			*9.28*	*25.66*	*25.79*	*17.97*	*16.30*	*9.72*	*10.60*	
Over/Under			*0.15*	*0.67*	*-0.51*	*-0.46*	*-0.06*	*0.22*	*0.93*	
Non-U.S. Equity	**6,168,377,591**	**25.6**	**1.58**	**10.56**	**15.91**	**11.73**	**9.21**	**7.89**	**5.94**	**Nov-94**
MSCI AC World ex USA (Net)			*1.82*	*7.82*	*13.18*	*9.61*	*7.28*	*6.80*	*5.52*	
Over/Under			*-0.24*	*2.74*	*2.73*	*2.12*	*1.93*	*1.09*	*0.42*	
Core Fixed Income	**3,749,597,741**	**15.6**	**0.05**	**-0.98**	**5.63**	**4.11**	**-**	**-**	**3.58**	**Jul-12**
Core Fixed Income Blend			*0.01*	*-1.55*	*4.79*	*3.57*	-	-	*2.90*	
Over/Under			*0.04*	*0.57*	*0.84*	*0.54*	-	-	*0.68*	
Credit Opportunities	**1,899,455,260**	**7.9**	**-0.53**	**0.46**	**6.51**	**5.27**	**-**	**-**	**5.23**	**Jul-13**
Credit Opportunities Blend			*-0.49*	*1.03*	*7.21*	*5.37*	-	-	*5.58*	
Over/Under			*-0.04*	*-0.57*	*-0.70*	*-0.10*	-	-	*-0.35*	
Real Assets	**2,813,888,691**	**11.7**	**5.42**	**14.72**	**8.65**	**6.88**	**7.87**	**5.42**	**6.48**	**Dec-94**
Real Assets Policy Benchmark			*7.75*	*18.81*	*10.74*	*9.27*	*7.75*	*6.96*	*8.25*	
Over/Under			*-2.33*	*-4.09*	*-2.09*	*-2.39*	*0.12*	*-1.54*	*-1.77*	
Private Equity	**3,639,852,195**	**15.1**	**8.13**	**54.98**	**23.26**	**20.34**	**16.07**	**12.97**	**11.98**	**Dec-95**
Private Equity Blend			*10.06*	*29.36*	*29.49*	*21.46*	*19.81*	*13.57*	*14.26*	
Over/Under			*-1.93*	*25.62*	*-6.23*	*-1.12*	*-3.74*	*-0.60*	*-2.28*	
Cash	**175,639,903**	**0.7**								

- Policy Index = Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021. 22.5% Russell 3000+ 27% MSCI ACWI ex USA + 16.75% BBgBarc US Aggregate TR+ 7.25% Credit Opportunities Blend+ 12% Real Assets Policy Benchmark+ 13.5% Private Equity Blend+ 1% 91 Day T-Bills
- U.S. Equity Blend = Russell 3000
- Core Fixed Income Blend = Bloomberg US AggregateBond Index TR
- Credit Opportunities Blend = 20.7%Bloomberg US High Yield 2% Issuer Cap TR+ Credit Suisse Leveraged Loan Index 20.7% + 55% Blended emerging Markets Debt Index + 3.6% Credit Suisse Leveraged Loan Index Lagged
- Real Assets Policy Benchmark = 41.67% Bloomberg US TIPS Index + 25% FTSE NAREIT ALL Equity REIT Index + 33.33% Real Estate Blended Benchmark

- Private Equity Blend = Russell 3000 + 300bps

Please refer to the Appendix and/or investment policy for a full description and composition of blended indices

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

COMPOSITE PERFORMANCE DETAIL NET

	Allocation		Performance (%)							
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	20 Yrs (%)	Inception (%)	Inception Date
LACERS Master Trust	**24,048,346,810**	**100.0**	**4.29**	**16.62**	**15.44**	**11.61**	**10.33**	**7.95**	**7.61**	**Jul-01**
Policy Index			*4.82*	*13.46*	*16.09*	*11.77*	*10.27*	*7.90*	*7.61*	
Over/Under			*-0.53*	*3.16*	*-0.65*	*-0.16*	*0.06*	*0.05*	*0.00*	
U.S. Equity	**5,601,535,430**	**23.3**	**9.41**	**26.22**	**25.20**	**17.43**	**16.11**	**9.75**	**9.72**	**Sep-01**
U.S. Equity Blend			*9.28*	*25.66*	*25.79*	*17.97*	*16.30*	*9.72*	*9.66*	
Over/Under			*0.13*	*0.56*	*-0.59*	*-0.54*	*-0.19*	*0.03*	*0.06*	
Non-U.S. Equity	**6,168,377,591**	**25.6**	**1.50**	**10.21**	**15.51**	**11.34**	**8.85**	**7.52**	**6.88**	**Jun-01**
MSCI AC World ex USA (Net)			*1.82*	*7.82*	*13.18*	*9.61*	*7.28*	*6.80*	*6.00*	
Over/Under			*-0.32*	*2.39*	*2.33*	*1.73*	*1.57*	*0.72*	*0.88*	
Core Fixed Income	**3,749,597,741**	**15.6**	**0.02**	**-1.06**	**5.53**	**4.01**	**-**	**-**	**3.47**	**Jul-12**
Core Fixed Income Blend			*0.01*	*-1.55*	*4.79*	*3.57*	-	-	*2.90*	
Over/Under			*0.01*	*0.49*	*0.74*	*0.44*	-	-	*0.57*	
Credit Opportunities	**1,899,455,260**	**7.9**	**-0.63**	**0.18**	**6.20**	**4.95**	**-**	**-**	**4.90**	**Jul-13**
Credit Opportunities Blend			*-0.49*	*1.03*	*7.21*	*5.37*	-	-	*5.58*	
Over/Under			*-0.14*	*-0.85*	*-1.01*	*-0.42*	-	-	*-0.68*	
Real Assets	**2,813,888,691**	**11.7**	**5.39**	**14.58**	**8.49**	**6.72**	**7.72**	**5.27**	**5.42**	**Jun-01**
Real Assets Policy Benchmark			*7.75*	*18.81*	*10.74*	*9.27*	*7.75*	*6.96*	*6.92*	
Over/Under			*-2.36*	*-4.23*	*-2.25*	*-2.55*	*-0.03*	*-1.69*	*-1.50*	
Private Equity	**3,639,852,195**	**15.1**	**8.14**	**55.00**	**23.28**	**20.35**	**16.08**	**12.90**	**12.23**	**Sep-01**
Private Equity Blend			*10.06*	*29.36*	*29.49*	*21.46*	*19.81*	*13.57*	*13.51*	
Over/Under			*-1.92*	*25.64*	*-6.21*	*-1.11*	*-3.73*	*-0.67*	*-1.28*	
Cash	**175,639,903**	**0.7**								

- Policy Index = Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021. 22.5% Russell 3000+ 27% MSCI ACWI ex USA + 16.75% BBgBarc US Aggregate TR+ 7.25% Credit Opportunities Blend+ 12% Real Assets Policy Benchmark+ 13.5% Private Equity Blend+ 1% 91 Day T-Bills
- U.S. Equity Blend = Russell 3000
- Core Fixed Income Blend = Bloomberg US AggregateBond Index TR
- Credit Opportunities Blend = 20.7%Bloomberg US High Yield 2% Issuer Cap TR+ Credit Suisse Leveraged Loan Index 20.7% + 55% Blended emerging Markets Debt Index + 3.6% Credit Suisse Leveraged Loan Index Lagged
- Real Assets Policy Benchmark = 41.67% Bloomberg US TIPS Index + 25% FTSE NAREIT ALL Equity REIT Index + 33.33% Real Estate Blended Benchmark

- Private Equity Blend = Russell 3000 + 300bps

Please refer to the Appendix and/or investment policy for a full description and composition of blended indices

Los Angeles City Employees' Retirement System

December 31, 2021

RISK STATISTICS GROSS OF FEES

3 Years Ending December 31, 2021	Return	Standard Deviation	Alpha	Information Ratio	Sortino Ratio	Tracking Error
LACERS Master Trust	**15.62 (35)**	**10.02 (47)**	**1.76 (42)**	**-0.24 (38)**	**2.29 (39)**	**2.42 (41)**
InvMetrics Public DB $1-50B Gross Median	14.96	10.12	1.06	-0.37	2.10	2.88

5 Years Ending December 31, 2021	Return	Standard Deviation	Alpha	Information Ratio	Sortino Ratio	Tracking Error
LACERS Master Trust	**11.80 (32)**	**8.78 (46)**	**1.53 (39)**	**-0.05 (30)**	**1.85 (39)**	**1.98 (33)**
InvMetrics Public DB $1-50B Gross Median	11.06	8.81	0.93	-0.27	1.73	2.59

3 Years Ending December 31, 2021	Return	Standard Deviation	Alpha	Information Ratio	Sortino Ratio	Tracking Error
LACERS Master Trust	**15.62 (15)**	**10.02 (73)**	**1.76 (63)**	**-0.24 (24)**	**2.29 (62)**	**2.42 (21)**
InvMetrics Public DB $5-50B Gross Median	14.93	8.49	2.92	-0.38	2.42	3.89

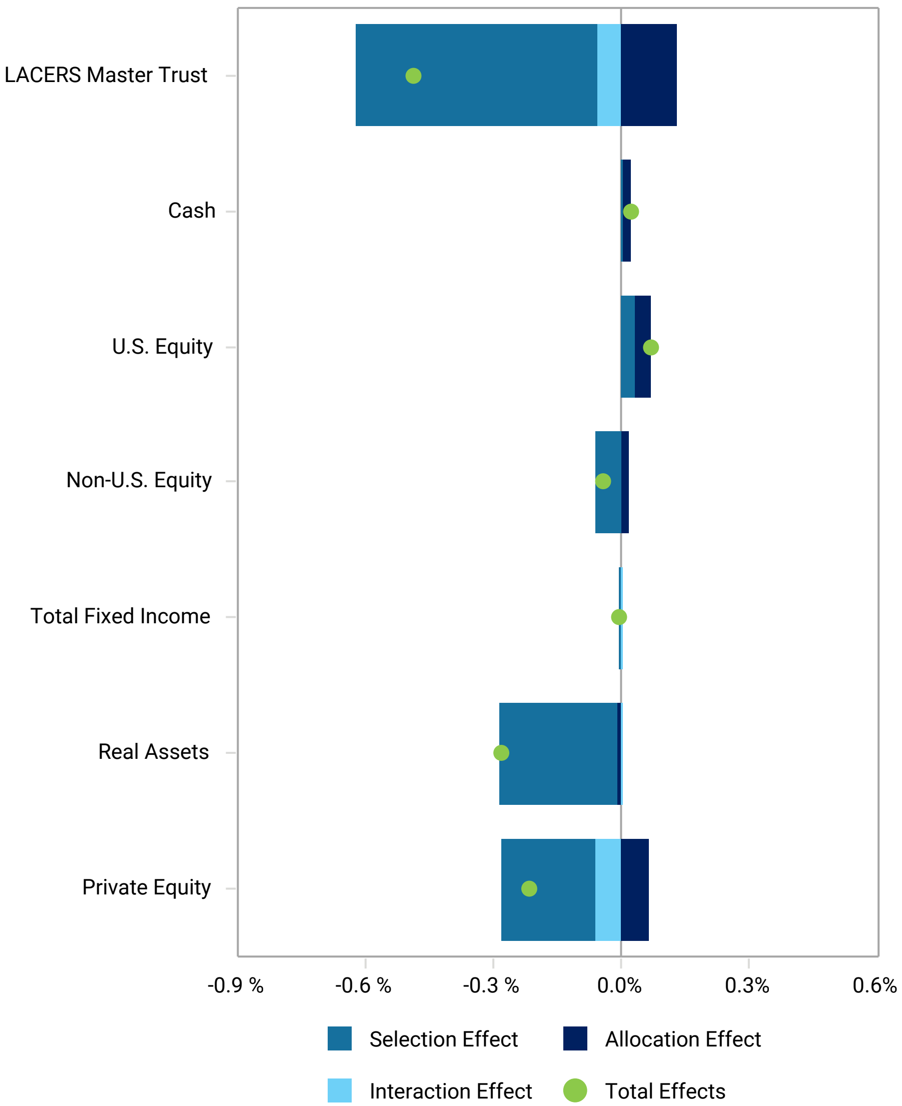
5 Years Ending December 31, 2021	Return	Standard Deviation	Alpha	Information Ratio	Sortino Ratio	Tracking Error
LACERS Master Trust	**11.80 (23)**	**8.78 (78)**	**1.53 (63)**	**-0.05 (23)**	**1.85 (63)**	**1.98 (16)**
InvMetrics Public DB $5-50B Gross Median	11.23	7.48	2.58	-0.23	2.11	3.35

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

ATTRIBUTION ANALYSIS

Attribution Effects
1 Quarter Ending December 31, 2021



*Total Actual and Index returns are weighted average calculations.

Attribution Summary
1 Quarter Ending December 31, 2021

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Cash				0.0	0.0	0.0	0.0
U.S. Equity	9.4	9.3	0.2	0.0	0.0	0.0	0.1
Non-U.S. Equity	1.6	1.8	-0.2	-0.1	0.0	0.0	0.0
Total Fixed Income	- 0.1	-0.1	0.0	0.0	0.0	0.0	0.0
Real Assets	5.4	7.7	-2.3	-0.3	0.0	0.0	-0.3
Private Equity	8.1	10.1	-2.0	-0.3	0.1	-0.1	-0.2
LACERS Master Trust	**4.3**	**4.8**	**-0.5**	**-0.6**	**0.1**	**-0.1**	**-0.5**

Wtd. = Weighted

Note: Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021

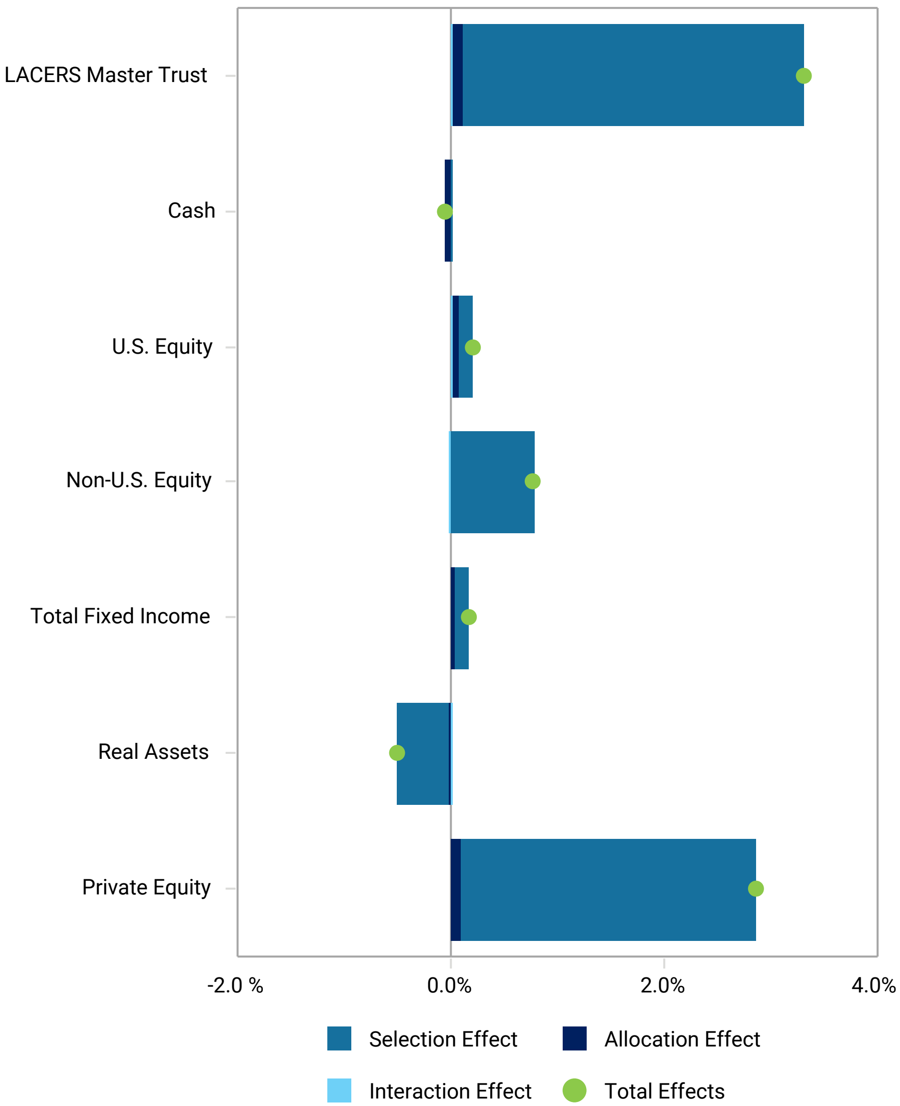
Total Fixed Income is comprised of the Core Fixed Income and Credit Opportunities asset classes.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

ATTRIBUTION ANALYSIS

Attribution Effects
1 Year Ending December 31, 2021



*Total Actual and Index returns are weighted average calculations.

Attribution Summary
1 Year Ending December 31, 2021

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Cash				0.0	-0.1	0.0	-0.1
U.S. Equity	26.3	25.7	0.7	0.2	0.1	0.0	0.2
Non-U.S. Equity	10.6	7.8	2.7	0.8	0.0	0.0	0.8
Total Fixed Income	-0.6	-1.1	0.5	0.1	0.0	0.0	0.2
Real Assets	14.7	18.8	-4.1	-0.5	0.0	0.0	-0.5
Private Equity	55.0	29.4	25.5	2.8	0.1	0.0	2.9
LACERS Master Trust	**16.8**	**13.5**	**3.3**	**3.4**	**0.1**	**0.0**	**3.3**

Wtd. = Weighted

Note: Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021.

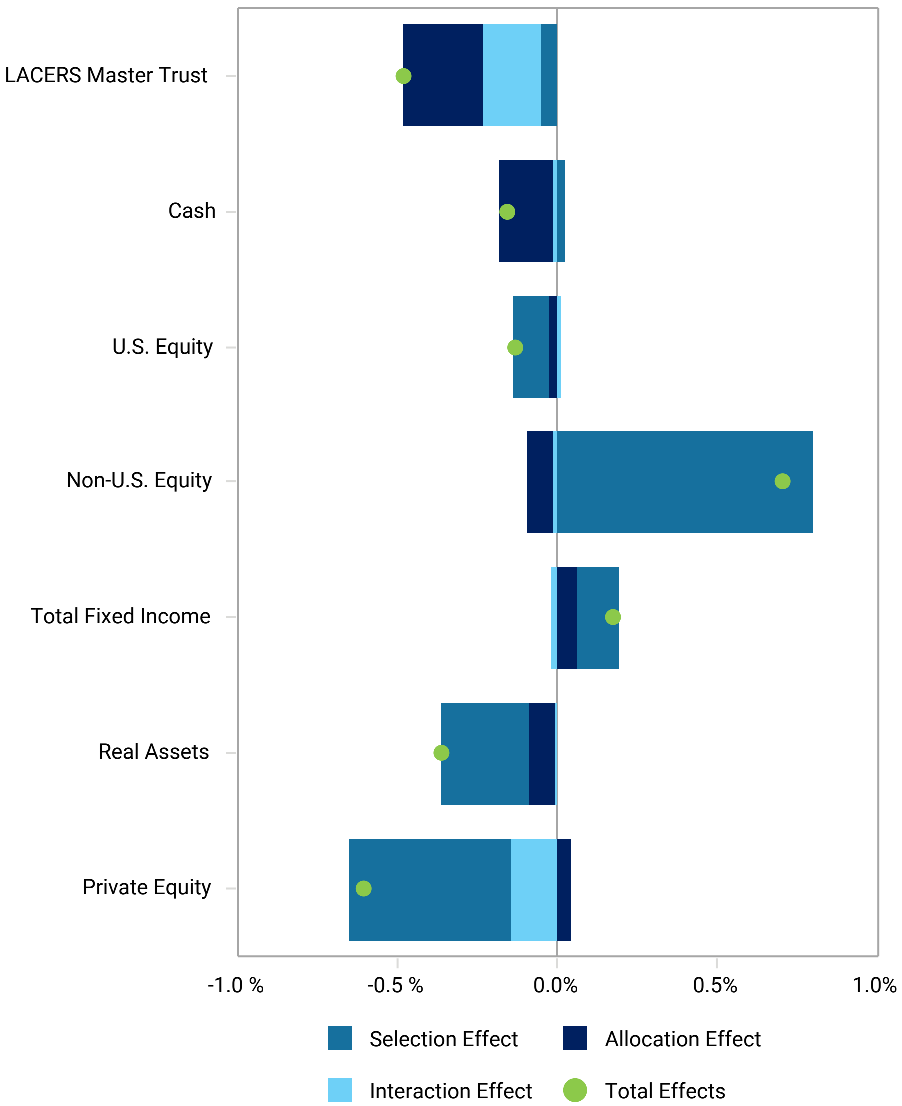
Total Fixed Income is comprised of the Core Fixed Income and Credit Opportunities asset classes.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

ATTRIBUTION ANALYSIS

Attribution Effects
3 Years Ending December 31, 2021



*Total Actual and Index returns are weighted average calculations.

Attribution Summary
3 Years Ending December 31, 2021

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Cash				0.0	-0.2	0.0	-0.2
U.S. Equity	25.3	25.8	-0.5	-0.1	0.0	0.0	-0.1
Non-U.S. Equity	15.9	13.2	2.7	0.8	-0.1	0.0	0.7
Total Fixed Income	5.9	5.3	0.6	0.1	0.1	0.0	0.2
Real Assets	8.6	10.7	-2.1	-0.3	-0.1	0.0	-0.4
Private Equity	23.3	29.6	-6.3	-0.6	0.0	-0.1	-0.6
LACERS Master Trust	15.6	16.1	-0.5	-0.1	-0.2	-0.2	-0.5

Wtd. = Weighted

Note: Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021.

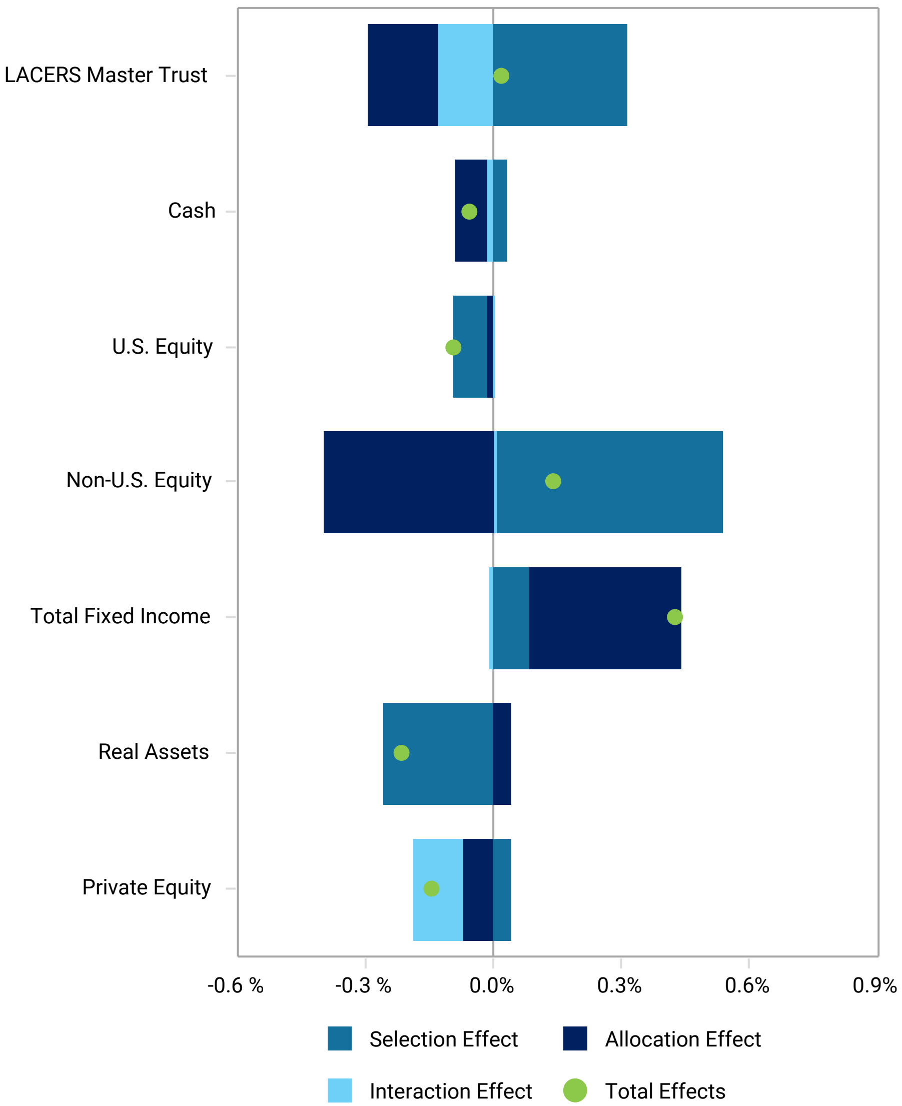
Total Fixed Income is comprised of the Core Fixed Income and Credit Opportunities asset classes.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

ATTRIBUTION ANALYSIS

Attribution Effects
5 Years Ending December 31, 2021



*Total Actual and Index returns are weighted average calculations.

Attribution Summary
5 Years Ending December 31, 2021

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Cash				0.0	-0.1	0.0	-0.1
U.S. Equity	17.5	18.0	-0.5	-0.1	0.0	0.0	-0.1
Non-U.S. Equity	11.7	9.6	2.1	0.5	-0.4	0.0	0.1
Total Fixed Income	4.4	4.0	0.4	0.1	0.4	0.0	0.4
Real Assets	6.9	9.3	-2.4	-0.3	0.0	0.0	-0.2
Private Equity	20.3	21.5	-1.2	-0.1	-0.1	-0.1	-0.1
LACERS Master Trust	11.8	11.8	0.0	0.2	-0.2	-0.1	0.0

Wtd. = Weighted

Note: Policy target asset allocation reflects interim asset allocation policy targets adopted on September 14, 2021.

Total Fixed Income is comprised of the Core Fixed Income and Credit Opportunities asset classes.

PRIVATE MARKETS PERFORMANCE

AS OF SEPTEMBER 30, 2021

Private Equity	10 Year IRR	Since Inception IRR	Since Inception Multiple
Aggregate Portfolio	16.2%	12.9%	1.77x
Core Portfolio	17.0%	13.4%	1.79x
Specialized Portfolio	3.5%	2.0%	1.13x
Russell 3000 + 300 bps	19.6%	13.1%	N/A

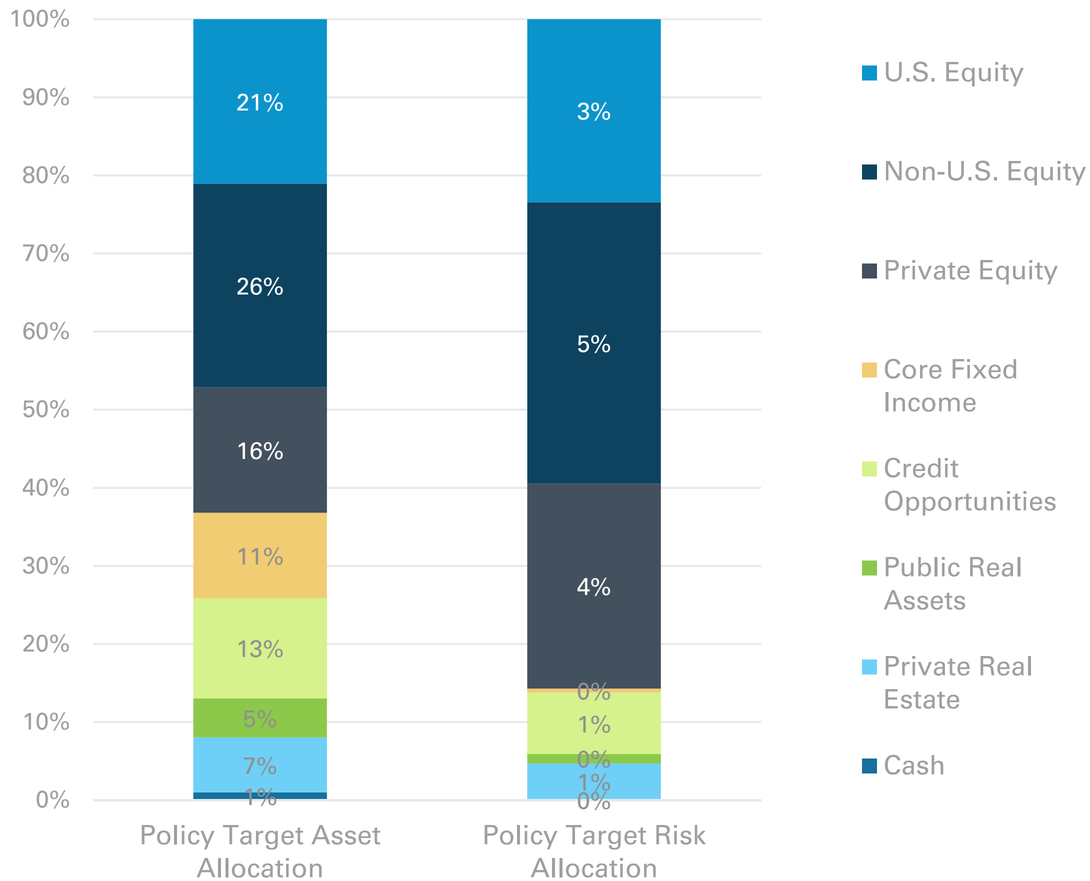
Real Estate	10 Year Return (Net)	Since Inception Return (Net)
Total Portfolio (TWR)[1]	8.62%	6.02%
NFI-ODCE + 80 basis points (TWR)	9.72%	7.14%

Note: The Total Value to Paid-In Ratio (TVPI) is a multiple that relates the current value of the private equity portfolio plus all distributions received to date with the total amount of capital contributed.

1 - IRR is not available for the Real Estate portfolio and therefore only time weighted returns (TWR) are reported.

TOTAL FUND RISK ALLOCATION

ASSET ALLOCATION VS. RISK ALLOCATION



- Public and Private Equity policy target asset allocation is 63%; accounts for 86% of the policy target portfolio risk.
- Core Fixed Income and Credit Opportunities policy allocation is 24%, accounting for 8% of the policy target portfolio risk.
- Real Assets (Private Real Estate and Pubic Real Assets) policy allocation is 12%, accounting for 5% of policy target portfolio risk.

* Adopted May 11, 2021

PUBLIC MARKETS RISK BUDGET COMPARISON

AS OF DECEMBER 31, 2021

Public Markets Asset Class	Target Risk Budget	Actual 3 Yr Tracking Error
U.S. Equity	1.25%	0.92%
Non-U.S. Equity	1.75%	1.64%
Core Fixed Income	1.75%	0.56%
Credit Opportunities	3.50%	1.91%
Public Real Assets*	1.25%	4.15%

- Current public market asset class composite tracking error statistics are compared to asset class target risk budgets to ensure active risks are within expectations.
- Risk budgets are to be evaluated over three-year periods, at minimum, to reflect a full market cycle.
- All equity public markets asset classes are within an appropriately narrow range of their respective risk budgets.
- Both Core Fixed Income and Credit Opportunities have exhibited lower than expected active risk.
- The Public Real Assets composite is not at its target strategy allocation.
- Note: The target Risk Budget was approved by the Board on June 22, 2021, and is reflected in the table above. Implementation of the new asset allocation is in progress.

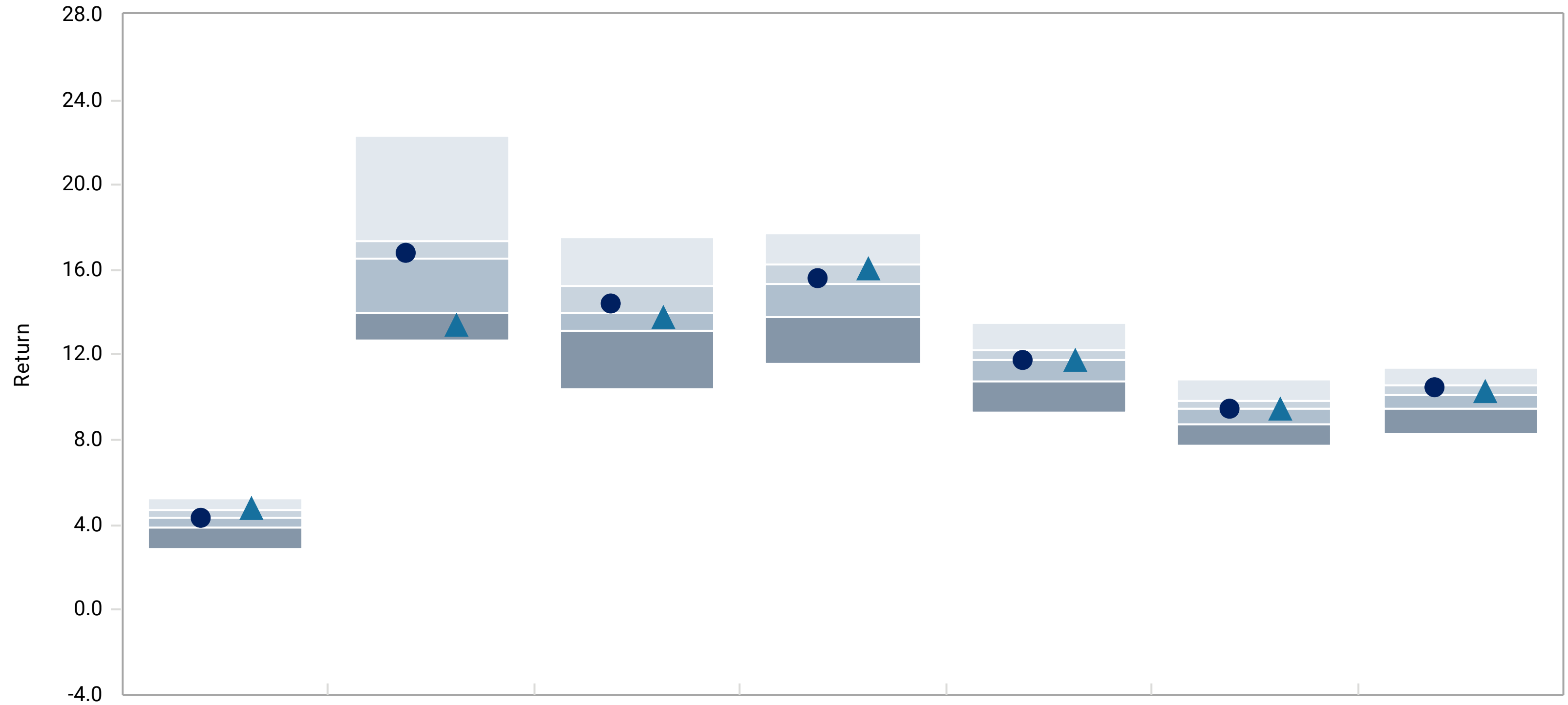
* The benchmark for the Public Real Assets composite is a custom policy benchmark that is comprised of the target weights of the public real asset components: 62.5% Bloomberg Barclays US TIPS and 37.5% FTSE NAREIT All Equity REIT Index. Historical composition can be found in the investment policy statement.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RETURN SUMMARY VS. $5-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $5-50B Gross



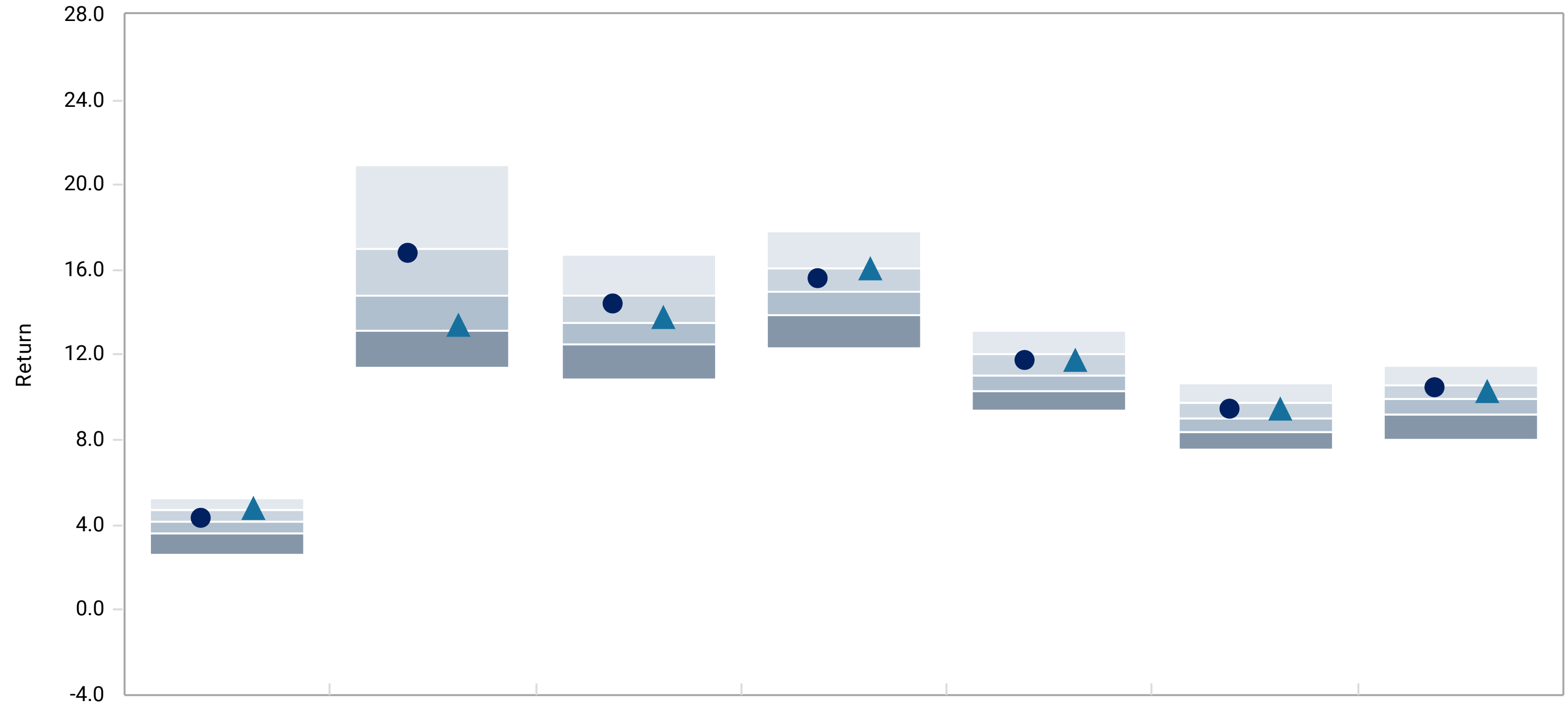
	3 Mo (%)	1 Year (%)	2 Years (%)	3 Years (%)	5 Years (%)	7 Years (%)	10 Years (%)
● LACERS Master Trust	4.3 (49)	16.8 (44)	14.4 (47)	15.6 (44)	11.8 (50)	9.5 (51)	10.5 (26)
▲ *Policy Index*	*4.8 (19)*	*13.5 (81)*	*13.8 (66)*	*16.1 (34)*	*11.8 (51)*	*9.5 (52)*	*10.3 (40)*
5th Percentile	5.3	22.3	17.5	17.7	13.5	10.9	11.4
1st Quartile	4.7	17.3	15.2	16.2	12.2	9.8	10.5
Median	4.3	16.5	14.0	15.3	11.8	9.5	10.1
3rd Quartile	3.9	14.0	13.1	13.8	10.8	8.7	9.4
95th Percentile	2.9	12.7	10.4	11.6	9.3	7.7	8.3
Population	32	31	31	31	31	29	28

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RETURN SUMMARY VS. $1-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $1-50B Gross



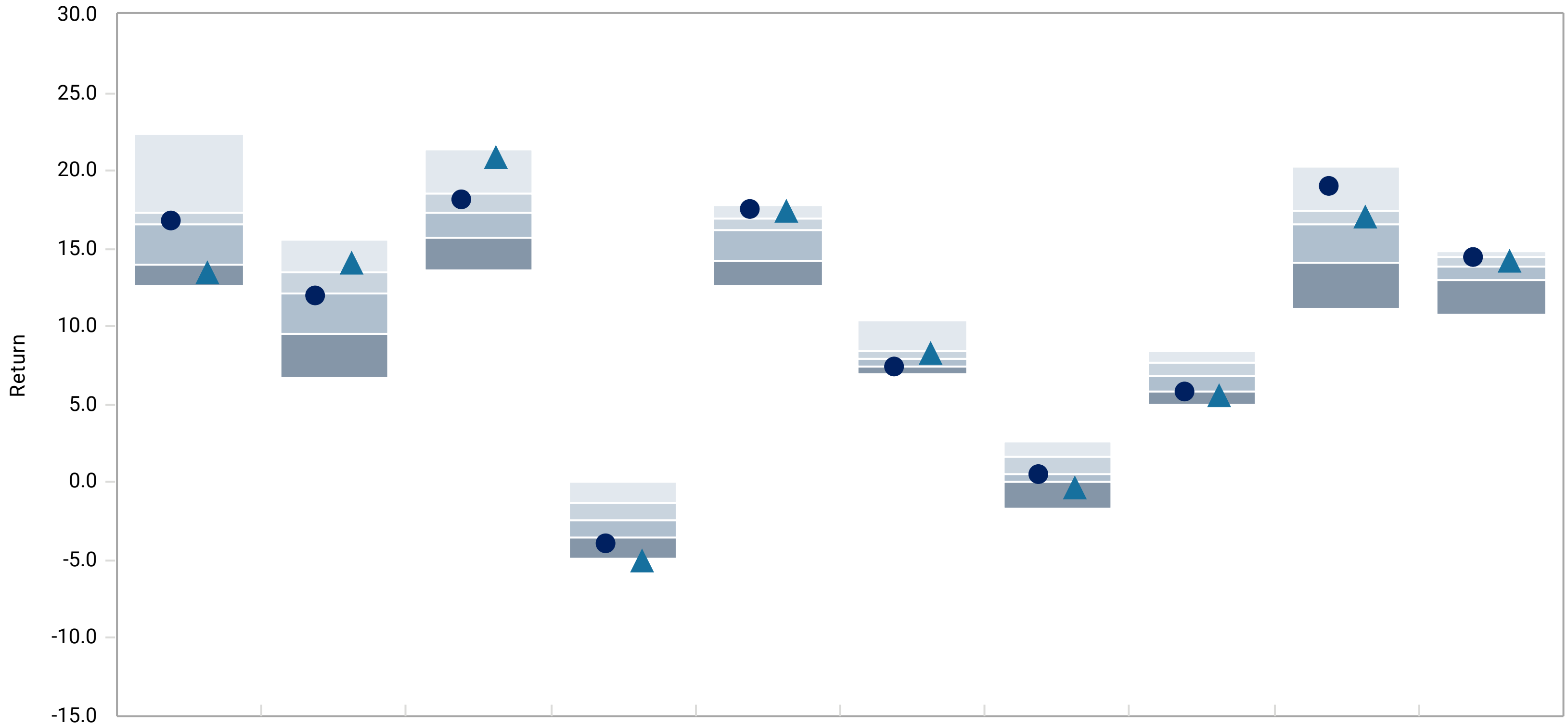
	3 Mo (%)	1 Yr (%)	2 Yrs (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
● LACERS Master Trust	4.3 (44)	16.8 (30)	14.4 (33)	15.6 (36)	11.8 (32)	9.5 (36)	10.5 (26)
▲ *Policy Index*	*4.8 (20)*	*13.5 (71)*	*13.8 (45)*	*16.1 (27)*	*11.8 (33)*	*9.5 (36)*	*10.3 (32)*
5th Percentile	5.2	20.9	16.7	17.8	13.1	10.7	11.5
1st Quartile	4.7	17.0	14.8	16.1	12.1	9.7	10.5
Median	4.1	14.8	13.5	15.0	11.1	9.0	9.9
3rd Quartile	3.6	13.2	12.5	13.9	10.3	8.4	9.2
95th Percentile	2.6	11.4	10.8	12.3	9.4	7.5	8.0
Population	82	80	80	80	80	78	76

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RETURN SUMMARY VS. $5-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $5-50B Gross



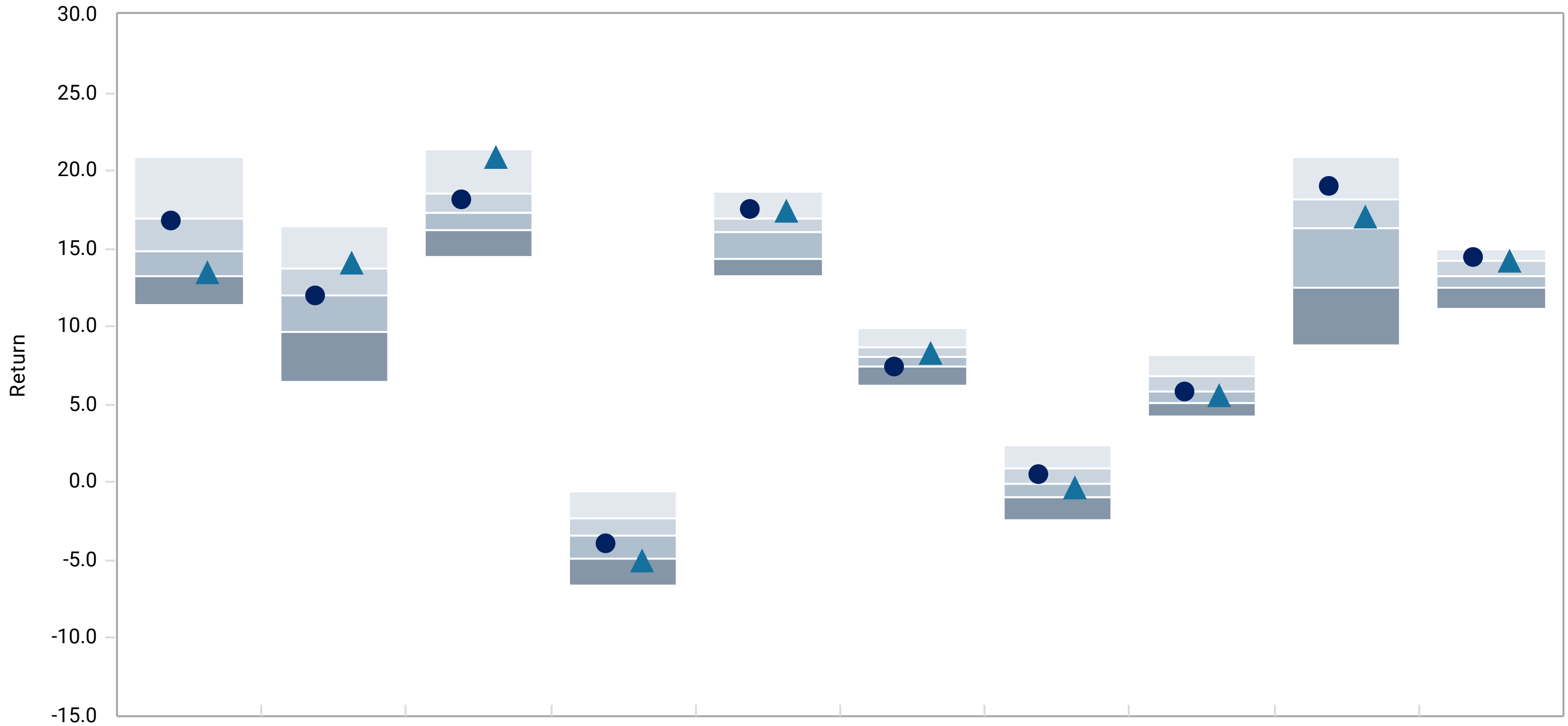
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
● LACERS Master Trust	16.8 (44)	12.1 (52)	18.1 (28)	-3.9 (78)	17.6 (9)	7.4 (84)	0.5 (55)	5.9 (75)	19.0 (12)	14.5 (18)
▲ *Policy Index*	*13.5 (81)*	*14.1 (19)*	*20.9 (7)*	*-5.0 (97)*	*17.4 (11)*	*8.3 (27)*	*-0.4 (80)*	*5.6 (78)*	*17.1 (30)*	*14.2 (34)*
5th Percentile	22.3	15.6	21.4	0.1	17.8	10.3	2.7	8.5	20.2	14.8
1st Quartile	17.3	13.5	18.5	-1.3	16.9	8.4	1.6	7.7	17.4	14.4
Median	16.5	12.1	17.3	-2.4	16.2	8.0	0.5	6.8	16.6	13.9
3rd Quartile	14.0	9.5	15.7	-3.6	14.3	7.5	0.0	5.9	14.1	12.9
95th Percentile	12.7	6.7	13.6	-4.9	12.6	6.9	-1.7	4.9	11.2	10.7
Population	31	50	37	32	38	38	38	37	37	34

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RETURN SUMMARY VS. $1-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $1-50B Gross



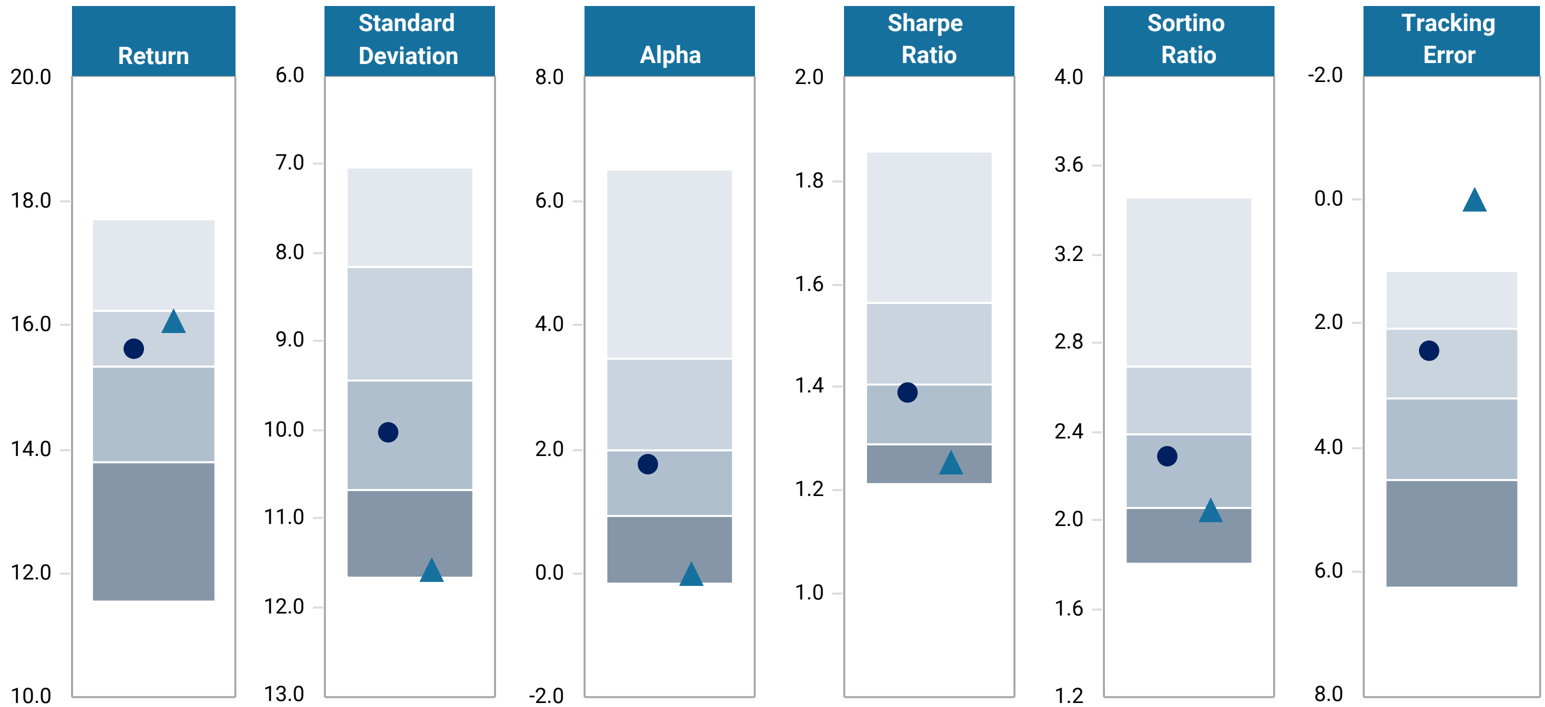
	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
● LACERS Master Trust	16.8 (30)	12.1 (49)	18.1 (32)	-3.9 (58)	17.6 (13)	7.4 (78)	0.5 (34)	5.9 (50)	19.0 (19)	14.5 (12)
▲ *Policy Index*	*13.5 (71)*	*14.1 (22)*	*20.9 (9)*	*-5.0 (77)*	*17.4 (14)*	*8.3 (35)*	*-0.4 (60)*	*5.6 (54)*	*17.1 (34)*	*14.2 (22)*
5th Percentile	20.9	16.4	21.4	-0.6	18.7	9.9	2.4	8.2	20.9	15.0
1st Quartile	17.0	13.8	18.5	-2.3	16.9	8.6	1.0	6.9	18.1	14.2
Median	14.8	12.0	17.3	-3.4	16.1	8.1	0.0	5.9	16.3	13.2
3rd Quartile	13.2	9.6	16.2	-4.8	14.4	7.4	-0.9	5.1	12.4	12.5
95th Percentile	11.4	6.5	14.5	-6.6	13.2	6.2	-2.4	4.2	8.8	11.2
Population	80	134	100	88	94	102	100	97	95	84

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $5-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $5-50B Gross



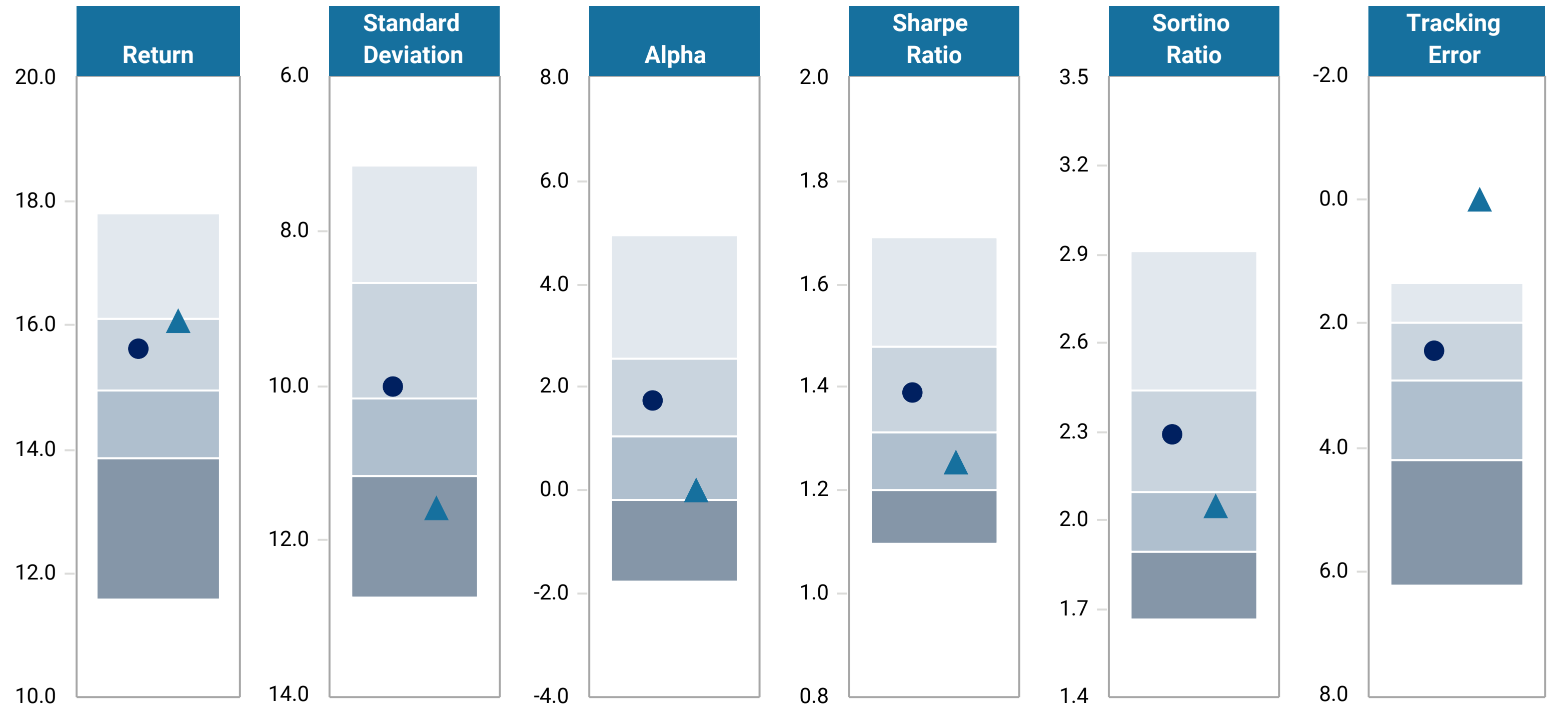
	Return 3 Yrs (%)	Standard Deviation 3 Yrs (%)	Alpha 3 Yrs (%)	Sharpe Ratio 3 Yrs (%)	Sortino Ratio 3 Yrs (%)	Tracking Error 3 Yrs (%)
● LACERS Master Trust	15.6 (44)	10.0 (60)	1.8 (61)	1.4 (54)	2.3 (57)	2.4 (36)
▲ *Policy Index*	*16.1 (34)*	*11.6 (90)*	*0.0 (91)*	*1.3 (88)*	*2.0 (76)*	*0.0 (1)*
5th Percentile	17.7	7.0	6.5	1.9	3.5	1.2
1st Quartile	16.2	8.2	3.5	1.6	2.7	2.1
Median	15.3	9.4	2.0	1.4	2.4	3.2
3rd Quartile	13.8	10.7	0.9	1.3	2.1	4.5
95th Percentile	11.6	11.7	-0.2	1.2	1.8	6.3
Population	31	31	31	31	31	31

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $1-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $1-50B Gross



	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)
● LACERS Master Trust	15.6 (35)	10.0 (46)	1.8 (42)	1.4 (39)	2.3 (39)	2.4 (39)
▲ *Policy Index*	*16.1 (27)*	*11.6 (82)*	*0.0 (71)*	*1.3 (68)*	*2.0 (58)*	*0.0 (1)*
5th Percentile	17.8	7.2	4.9	1.7	2.9	1.3
1st Quartile	16.1	8.7	2.6	1.5	2.4	2.0
Median	15.0	10.2	1.1	1.3	2.1	2.9
3rd Quartile	13.9	11.2	-0.2	1.2	1.9	4.2
95th Percentile	11.6	12.7	-1.8	1.1	1.7	6.2
Population	81	81	81	81	81	81

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $5-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $5-50B Gross

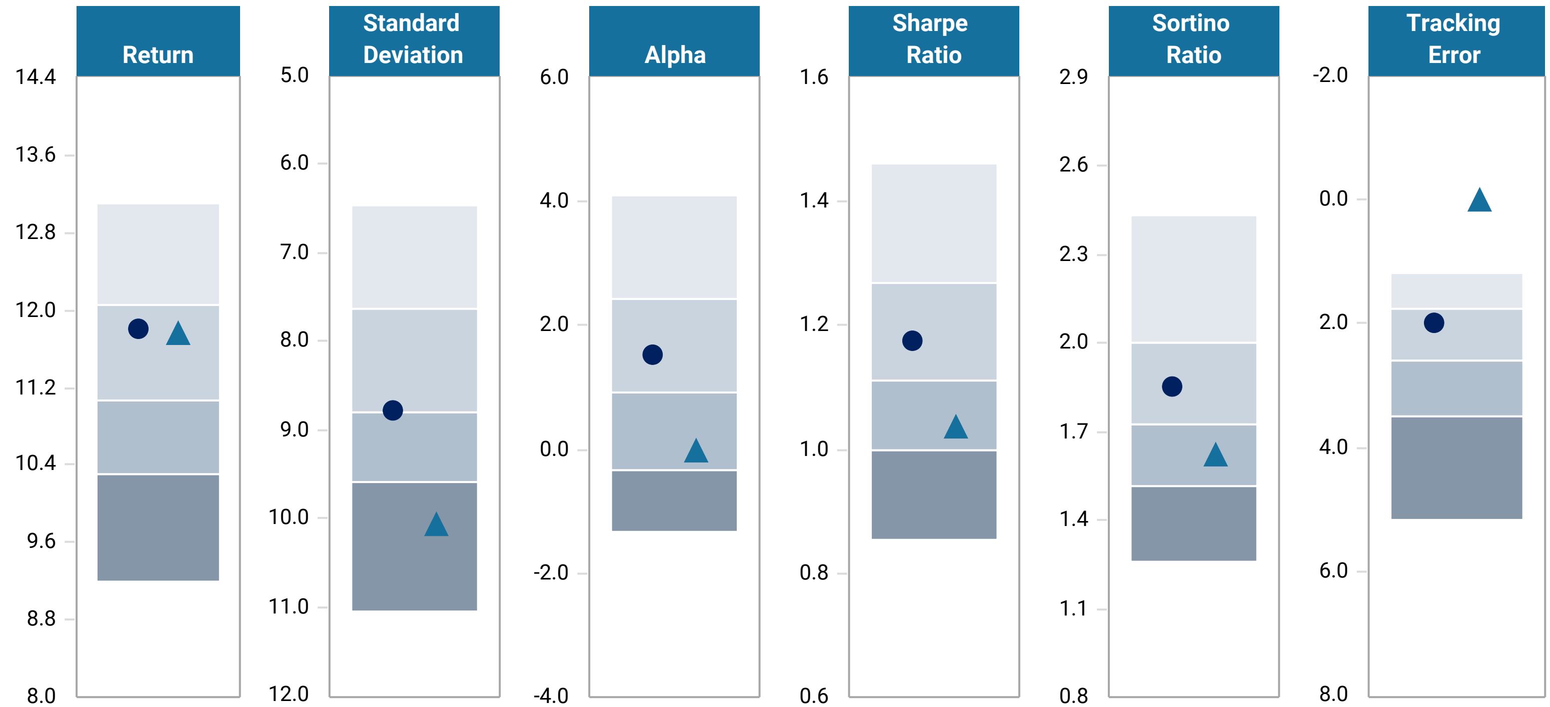
	Return 5 Yrs (%)	Standard Deviation 5 Yrs (%)	Alpha 5 Yrs (%)	Sharpe Ratio 5 Yrs (%)	Sortino Ratio 5 Yrs (%)	Tracking Error 5 Yrs (%)
● LACERS Master Trust	11.8 (50)	8.8 (63)	1.5 (57)	1.2 (57)	1.9 (61)	2.0 (29)
▲ *Policy Index*	*11.8 (51)*	*10.1 (91)*	*0.0 (92)*	*1.0 (90)*	*1.6 (80)*	*0.0 (1)*
5th Percentile	13.5	6.3	5.2	1.6	2.9	1.1
1st Quartile	12.2	6.9	3.0	1.4	2.3	1.8
Median	11.8	8.1	1.8	1.2	1.9	2.7
3rd Quartile	10.8	9.3	0.9	1.1	1.7	3.9
95th Percentile	9.3	10.3	-0.4	1.0	1.5	5.2
Population	31	31	31	31	31	31

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $1-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $1-50B Gross



	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)
● LACERS Master Trust	11.8 (32)	8.8 (47)	1.5 (39)	1.2 (39)	1.9 (39)	2.0 (32)
▲ *Policy Index*	*11.8 (33)*	*10.1 (83)*	*0.0 (72)*	*1.0 (65)*	*1.6 (59)*	*0.0 (1)*
5th Percentile	13.1	6.5	4.1	1.5	2.4	1.2
1st Quartile	12.1	7.6	2.4	1.3	2.0	1.8
Median	11.1	8.8	0.9	1.1	1.7	2.6
3rd Quartile	10.3	9.6	-0.3	1.0	1.5	3.5
95th Percentile	9.2	11.0	-1.3	0.9	1.3	5.2
Population	81	81	81	81	81	81

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $5-50B PEER UNIVERSE

LACERS Master Trust vs. InvMetrics Public DB $5-50B Gross

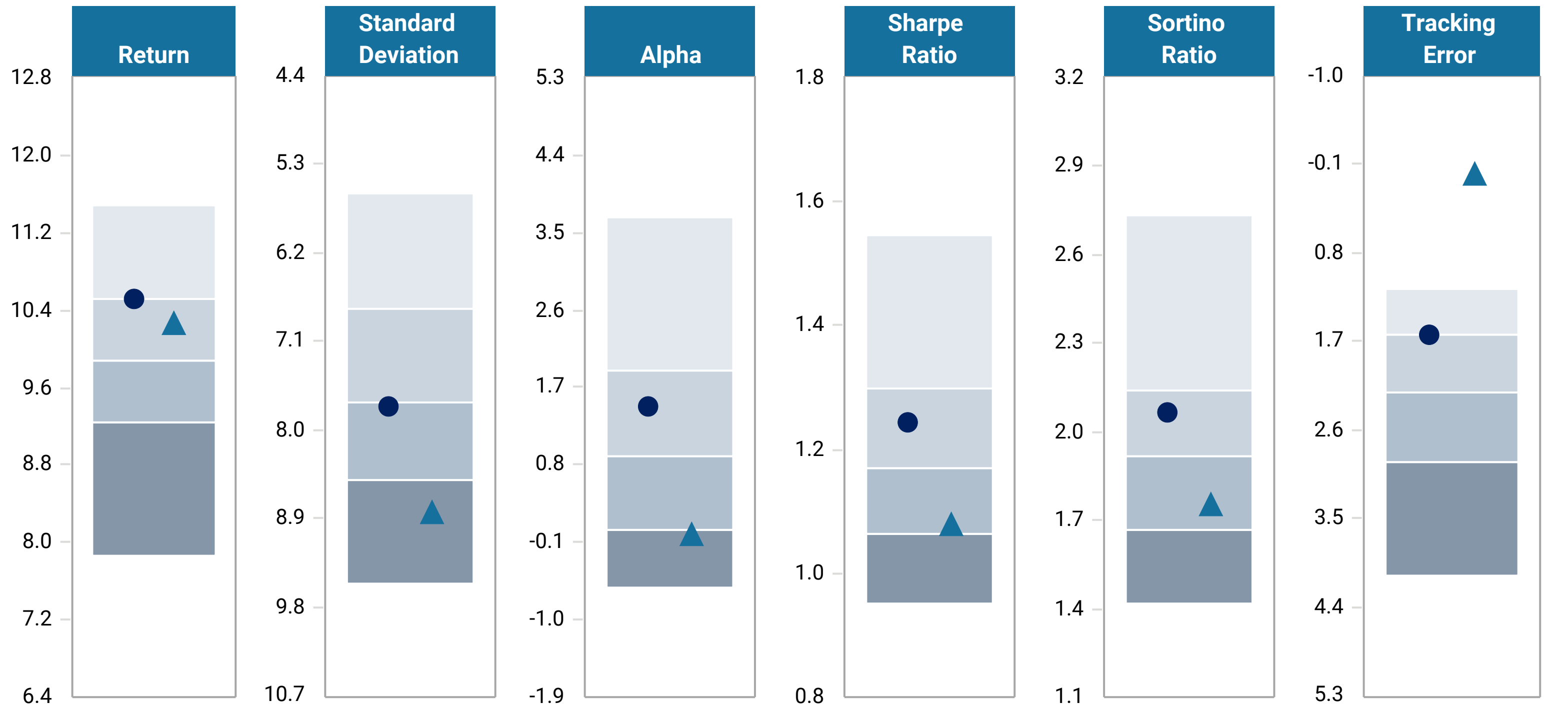
	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)
● LACERS Master Trust	10.5 (26)	7.8 (66)	1.5 (56)	1.2 (56)	2.1 (56)	1.6 (25)
▲ *Policy Index*	*10.3 (40)*	*8.8 (88)*	*0.0 (91)*	*1.1 (85)*	*1.8 (84)*	*0.0 (1)*
5th Percentile	11.4	5.5	4.2	1.6	2.9	1.0
1st Quartile	10.5	6.4	2.4	1.4	2.3	1.6
Median	10.1	7.2	1.8	1.3	2.1	2.3
3rd Quartile	9.4	8.0	0.8	1.2	1.9	3.2
95th Percentile	8.3	8.9	-0.3	1.0	1.7	4.1
Population	28	28	28	28	28	28

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

RISK STATISTICS VS. $1-50B PEER UNIVERSE

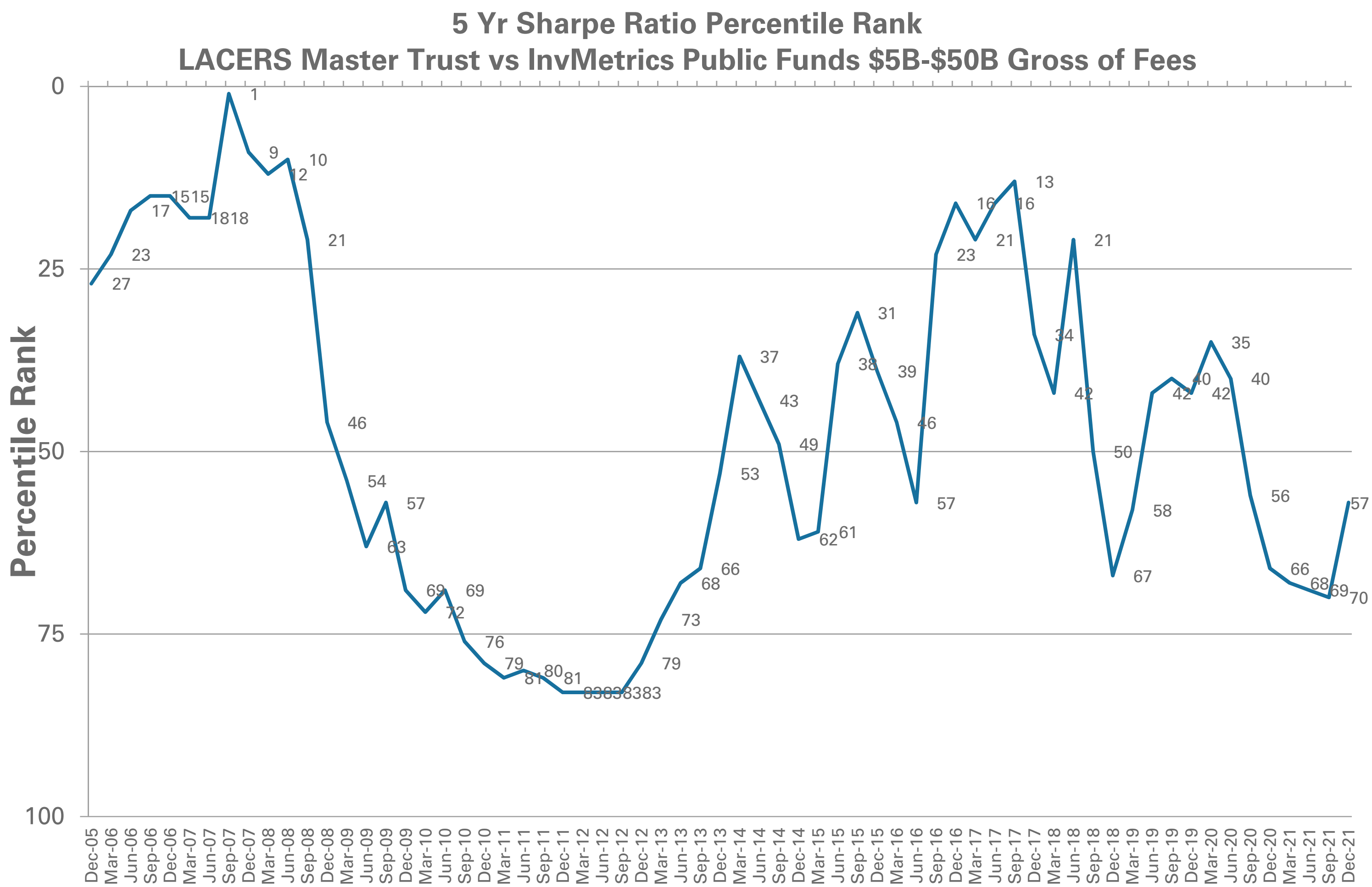
LACERS Master Trust vs. InvMetrics Public DB $1-50B Gross



	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)
● LACERS Master Trust	10.5 (26)	7.8 (53)	1.5 (39)	1.2 (37)	2.1 (36)	1.6 (25)
▲ *Policy Index*	*10.3 (32)*	*8.8 (84)*	*0.0 (77)*	*1.1 (72)*	*1.8 (66)*	*0.0 (1)*
5th Percentile	11.5	5.6	3.7	1.5	2.7	1.2
1st Quartile	10.5	6.8	1.9	1.3	2.1	1.6
Median	9.9	7.7	0.9	1.2	1.9	2.2
3rd Quartile	9.2	8.5	0.0	1.1	1.7	2.9
95th Percentile	7.9	9.6	-0.6	1.0	1.4	4.1
Population	77	77	77	77	77	77

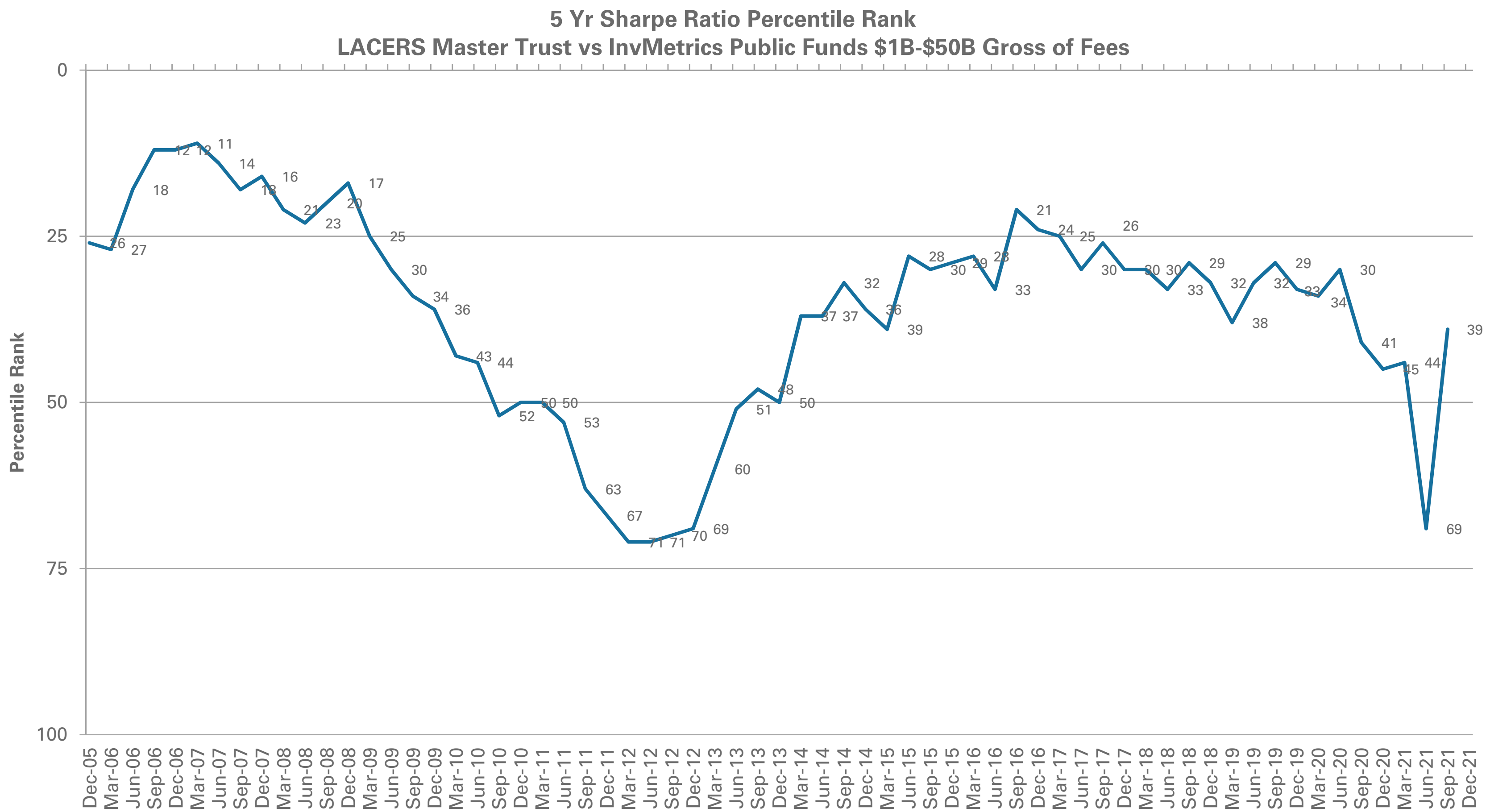
HISTORICAL RISK ADJUSTED RETURN

UNIVERSE COMPARISON ($5-$50 B GROSS OF FEES)



HISTORICAL RISK ADJUSTED RETURN

UNIVERSE COMPARISON ($1-$50 B GROSS OF FEES)



U.S. EQUITY MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

U.S. EQUITY (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
U.S. Equity	**5,601,535,430**	**100.00**	**9.43**	**26.33**	**25.28**	**17.51**	**16.24**	**11.53**	**Nov-94**
U.S. Equity Blend			9.28	25.66	25.79	17.97	16.30	10.60	
Over/Under			0.15	0.67	-0.51	-0.46	-0.06	0.93	
RhumbLine Advisers Russell 2000	360,964,032	6.44	2.18	14.81	20.04	12.06	-	10.44	Apr-15
Russell 2000 Index			2.14	14.82	20.02	12.02	-	10.49	
Over/Under			0.04	-0.01	0.02	0.04	-	-0.05	
RhumbLine Advisers Russell 2000 Growth	28,939	0.00							
Rhumbline Advisers Russell 2000 Value	161,010,669	2.87	4.38	28.16	-	-	-	28.16	Jan-21
Russell 2000 Value Index			4.36	28.27	-	-	-	28.27	
Over/Under			0.02	-0.11	-	-	-	-0.11	
EAM Investors	121,681,920	2.17	5.35	4.48	26.41	19.92	-	16.94	Oct-15
Russell 2000 Growth Index			0.01	2.83	21.17	14.53	-	14.17	
Over/Under			5.34	1.65	5.24	5.39	-	2.77	
Principal Global Investors	353,866,411	6.32	10.71	27.08	29.78	21.17	-	17.23	Aug-14
Russell Midcap Index			6.44	22.58	23.29	15.10	-	12.57	
Over/Under			4.27	4.50	6.49	6.07	-	4.66	
RhumbLine Advisers S&P 500	4,158,737,314	74.24	11.04	28.65	25.88	18.37	16.48	10.87	Mar-93
S&P 500 Index			11.03	28.71	26.07	18.47	16.55	10.74	
Over/Under			0.01	-0.06	-0.19	-0.10	-0.07	0.13	
Escrow Account	6,653	0.00							

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

U.S. EQUITY (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Copeland Capital Management	259,439,031	4.63	8.50	26.76	-	-	-	40.92	Oct-20
Russell 2000 Index			2.14	14.82	-	-	-	38.94	
Over/Under			6.36	11.94	-	-	-	1.98	
Granahan Investment Management	91,349,210	1.63	-12.29	0.35	-	-	-	29.26	Oct-20
Russell 2000 Growth Index			0.01	2.83	-	-	-	25.84	
Over/Under			-12.30	-2.48	-	-	-	3.42	
Segall, Bryant & Hamill	94,451,251	1.69	4.92	17.76	-	-	-	39.03	Oct-20
Russell 2000 Value Index			4.36	28.27	-	-	-	53.65	
Over/Under			0.56	-10.51	-	-	-	-14.62	

- U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to 1/1/200.
-RhumbLine Advisers Russell 2000 Value and Russell 2000, Copeland, Principal, Granahan and Segall, Bryant Hamill have a mid-month inception date. Since inception return is calculated from the first full month of performance.
eV = eVestment
Benchmark composition as of 7/1/2021 unless otherwise noted.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

U.S. EQUITY (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
U.S. Equity	**5,601,535,430**	**100.00**	**9.41**	**26.22**	**25.20**	**17.43**	**16.11**	**9.72**	**Sep-01**
U.S. Equity Blend			*9.28*	*25.66*	*25.79*	*17.97*	*16.30*	*9.66*	
Over/Under			0.13	0.56	-0.59	-0.54	-0.19	0.06	
RhumbLine Advisers Russell 2000	360,964,032	6.44	2.18 (79)	14.81 (76)	20.03 (61)	12.05 (56)	-	10.43 (58)	Apr-15
Russell 2000 Index			*2.14 (79)*	*14.82 (76)*	*20.02 (61)*	*12.02 (56)*	-	*10.49 (58)*	
Over/Under			0.04	-0.01	0.01	0.03	-	-0.06	
eV US Small Cap Equity Median			*5.41*	*23.26*	*21.50*	*12.67*	-	*11.00*	
RhumbLine Advisers Russell 2000 Growth	28,939	0.00							
Rhumbline Advisers Russell 2000 Value	161,010,669	2.87	4.38 (86)	28.16 (47)	-	-	-	28.16 (47)	Jan-21
Russell 2000 Value Index			*4.36 (86)*	*28.27 (45)*	-	-	-	*28.27 (45)*	
Over/Under			0.02	-0.11	-	-	-	-0.11	
eV US Small-Mid Cap Value Equity Median			*6.76*	*28.13*	-	-	-	*28.13*	
EAM Investors	121,681,920	2.17	5.18 (19)	3.76 (81)	25.56 (62)	19.08 (55)	-	16.13 (71)	Oct-15
Russell 2000 Growth Index			*0.01 (66)*	*2.83 (83)*	*21.17 (86)*	*14.53 (87)*	-	*14.17 (85)*	
Over/Under			5.17	0.93	4.39	4.55	-	1.96	
eV US Small Cap Growth Equity Median			*1.81*	*10.09*	*27.47*	*19.44*	-	*17.81*	
Principal Global Investors	353,866,411	6.32	10.61 (7)	26.67 (33)	29.35 (15)	20.74 (18)	-	16.81 (10)	Aug-14
Russell Midcap Index			*6.44 (61)*	*22.58 (53)*	*23.29 (50)*	*15.10 (50)*	-	*12.57 (48)*	
Over/Under			4.17	4.09	6.06	5.64	-	4.24	
eV US Mid Cap Equity Median			*7.33*	*23.40*	*23.18*	*15.04*	-	*12.24*	
RhumbLine Advisers S&P 500	4,158,737,314	74.24	11.04 (19)	28.64 (26)	25.87 (36)	18.37 (35)	16.47 (30)		
S&P 500 Index			*11.03 (19)*	*28.71 (25)*	*26.07 (35)*	*18.47 (34)*	*16.55 (28)*		
Over/Under			0.01	-0.07	-0.20	-0.10	-0.08		
eV US Large Cap Equity Median			*8.83*	*25.72*	*23.20*	*16.30*	*14.85*	*8.34*	
Escrow Account	6,653	0.00							

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

U.S. EQUITY (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Copeland Capital Management	259,439,031	4.63	8.38 (13)	26.31 (38)	-	-	-	40.52 (60)	Oct-20
Russell 2000 Index			*2.14 (79)*	*14.82 (76)*	-	-	-	*38.94 (65)*	
Over/Under			6.24	11.49	-	-	-	1.58	
eV US Small Cap Equity Median			*5.41*	*23.26*	-	-	-	*43.95*	
Granahan Investment Management	91,349,210	1.63	-12.45 (100)	-0.41 (90)	-	-	-	28.48 (65)	Oct-20
Russell 2000 Growth Index			*0.01 (66)*	*2.83 (83)*	-	-	-	*25.84 (78)*	
Over/Under			-12.46	-3.24	-	-	-	2.64	
eV US Small Cap Growth Equity Median			*1.81*	*10.09*	-	-	-	*31.23*	
Segall, Bryant & Hamill	94,451,251	1.69	4.76 (79)	16.99 (95)	-	-	-	38.30 (91)	Oct-20
Russell 2000 Value Index			*4.36 (83)*	*28.27 (50)*	-	-	-	*53.65 (39)*	
Over/Under			0.40	-11.28	-	-	-	-15.35	
eV US Small Cap Value Equity Median			*6.49*	*28.26*	-	-	-	*51.10*	

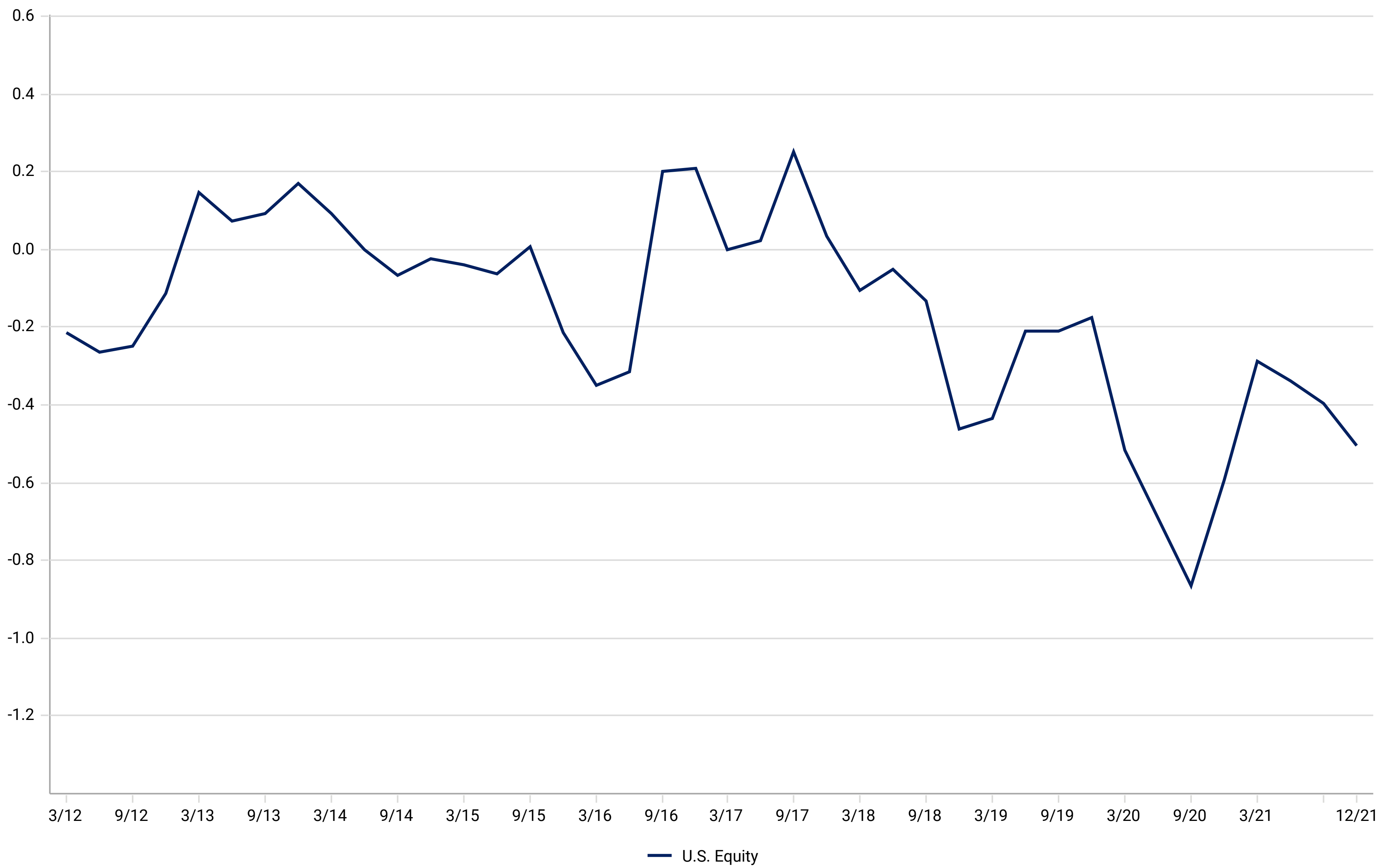
- U.S. Equity Blend = Russell 3000 from 1/1/2000 to present; 33.75% S&P 500/ 35% Russell 1000 Value/ 12.50% Russell 1000 Growth/ 12.50% Russell 2000 Value/ 6.25% Russell 2000 Growth prior to 1/1/200.
-RhumbLine Advisers Russell 2000 Value and Russell 2000, Copeland, Principal, Granahan and Segall, Bryant Hamill have a mid-month inception date. Since inception return is calculated from the first full month of performance.
eV = eVestment
Benchmark composition as of 7/1/2021 unless otherwise noted.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

U.S. EQUITY ROLLING 5 YEAR INFORMATION RATIO

Information Ratio



INVESTMENT MANAGER REPORT CARD

U.S. EQUITY

U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid $ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
Principal Global Investors	Jul-14	Mid Cap	✓	✓	✓	✓	✓	✓	✓	✓	✓	811.7	Performance compliant with LACERS' Manager Monitoring Policy
EAM Investors	Sep-15	Small Cap Growth	✓	✓	✓	✗	✓	✗	✓	✗	✓	839.4	Performance compliant with LACERS' Manager Monitoring Policy
Copeland	Oct-20	Small Cap Core	✓	✓	✓	✓	N/A	N/A	N/A	N/A	✓	810.8	Newly funded strategy
Granahan	Oct-20	Small Cap Growth	✗	✗	✗	✗	N/A	N/A	N/A	N/A	✓	605.3	Newly funded strategy
Segall Bryant & Hamill	Oct-20	Small Cap Value	✓	✗	✗	✗	N/A	N/A	N/A	N/A	✗	454.8	On Watch as of 2/9/21 due to organizational changes.
RhumbLine (Passive)	Dec-20	R2000 Value	✓	✗	✗	✓	N/A	N/A	N/A	N/A	✗	7.1	Performance compliant with LACERS' Manager Monitoring Policy
RhumbLine (Passive)	Feb-93	S&P 500	✓	✓	✗	✓	✗	✓	✗	✓	✓✓	214.2	Performance compliant with LACERS' Manager Monitoring Policy
RhumbLine (Passive)	Jun-15	R2000	✓	✓	✗	✓	✗	✓	✗	✓	✗	13.2	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2021.

* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return

NON-U.S. EQUITY MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

NON-U.S. EQUITY (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Non-U.S. Equity	**6,168,377,591**	**100.00**	**1.58**	**10.56**	**15.91**	**11.73**	**9.21**	**5.94**	**Nov-94**
MSCI AC World ex USA (Net)			*1.82*	*7.82*	*13.18*	*9.61*	*7.28*	*5.52*	
Over/Under			-0.24	2.74	2.73	2.12	1.93	0.42	
Developed ex-U.S.	**4,582,173,953**	**74.28**	**1.81**	**11.31**	**16.03**	**11.41**	**-**	**9.50**	**Jul-12**
MSCI EAFE (Net)			*2.69*	*11.26*	*13.54*	*9.55*	-	*8.14*	
Over/Under			-0.88	0.05	2.49	1.86	-	1.36	
Barrow Hanley	514,228,347	8.34	1.84	15.25	15.04	9.16	-	5.56	Nov-13
MSCI EAFE Value Index (Net)			*1.17*	*10.89*	*7.82*	*5.34*	-	*2.67*	
Over/Under			0.67	4.36	7.22	3.82	-	2.89	
Lazard Asset Management	617,975,450	10.02	-0.23	7.81	13.54	10.95	-	6.44	Nov-13
MSCI EAFE (Net)			*2.69*	*11.26*	*13.54*	*9.55*	-	*5.41*	
Over/Under			-2.92	-3.45	0.00	1.40	-	1.03	
MFS Institutional Advisors	625,436,382	10.14	4.72	11.03	17.71	14.64	-	8.99	Oct-13
MSCI World ex USA Growth NR USD			*4.27*	*11.57*	*19.11*	*13.37*	-	*8.09*	
Over/Under			0.45	-0.54	-1.40	1.27	-	0.90	
Oberweis Asset Mgmt	331,400,614	5.37	-3.81	4.79	30.06	19.28	-	12.32	Jan-14
MSCI EAFE Small Cap (Net)			*0.07*	*10.10*	*15.62*	*11.04*	-	*7.60*	
Over/Under			-3.88	-5.31	14.44	8.24	-	4.72	
SSgA World ex US IMI	2,149,996,538	34.86	2.78	12.88	15.09	10.43	8.64	6.24	Aug-93
MSCI World ex U.S. IMI Index (Net)			*2.71*	*12.40*	*14.38*	*9.83*	*8.12*	-	
Over/Under			0.07	0.48	0.71	0.60	0.52	-	
State Street EAFE SC	343,136,624	5.56	0.06	10.11	-	-	-	10.11	Jan-21
MSCI EAFE Small Cap (Net)			*0.07*	*10.10*	-	-	-	*10.10*	
Over/Under			-0.01	0.01	-	-	-	0.01	

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

NON-U.S. EQUITY (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Emerging Markets	**1,586,203,638**	**25.72**	**0.95**	**8.47**	**15.19**	**12.42**	**-**	**6.57**	**Jul-12**
MSCI Emerging Markets (Net)			*-1.31*	*-2.54*	*10.94*	*9.87*	-	*5.36*	
Over/Under			2.26	11.01	4.25	2.55	-	1.21	
Axiom Emerging Markets	394,377,824	6.39	-1.44	-3.57	17.27	13.61	-	8.09	May-14
MSCI Emerging Markets (Net)			*-1.31*	*-2.54*	*10.94*	*9.87*	-	*5.28*	
Over/Under			-0.13	-1.03	6.33	3.74	-	2.81	
MSCI Emerging Markets Growth (Net)			*-2.08*	*-8.41*	*14.60*	*12.55*	-	*7.31*	
Over/Under			0.64	4.84	2.67	1.06	-	0.78	
DFA Emerging Markets	459,064,926	7.44	0.49	12.55	9.36	8.92	-	3.45	Aug-14
MSCI Emerging Markets Value (Net)			*-0.41*	*4.00*	*7.09*	*7.02*	-	*1.96*	
Over/Under			0.90	8.55	2.27	1.90	-	1.49	
State Street Emerging Markets	367,553,260	5.96	-1.00	-2.56	-	-	-	-2.56	Jan-21
MSCI Emerging Markets (Net)			*-1.31*	*-2.54*	-	-	-	*-2.54*	
Over/Under			0.31	-0.02	-	-	-	-0.02	
Wasatch Global Investors	365,207,628	5.92	6.46	36.12	-	-	-	36.12	Jan-21
MSCI Emerging Markets Small Cap (Net)			*1.33*	*18.75*	-	-	-	*18.75*	
Over/Under			5.13	17.37	-	-	-	17.37	

- Barrow Hanley, Lazard Asset Management, Oberweis Asset Mgmt, State Street EAFE SC, State Street Emerging Markets and Wasatch Global Investors have a mid-month inception date. Since inception return is calculated from the first full month of performance.
- Since inception return sourced from SSgA.

eV = eVestment

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

NON-U.S. EQUITY (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Non-U.S. Equity	**6,168,377,591**	**100.00**	**1.50 (55)**	**10.21 (49)**	**15.51 (56)**	**11.34 (53)**	**8.85 (59)**	**6.88 (53)**	**Jun-01**
MSCI AC World ex USA (Net)			*1.82 (50)*	*7.82 (65)*	*13.18 (74)*	*9.61 (72)*	*7.28 (83)*	*6.00 (79)*	
Over/Under			-0.32	2.39	2.33	1.73	1.57	0.88	
eV All ACWI ex-US Equity Median			*1.81*	*10.11*	*16.70*	*11.57*	*9.43*	*7.12*	
Developed ex-U.S.	**4,582,173,953**	**74.28**	**1.74**	**11.03**	**15.69**	**11.07**	**-**	**9.20**	**Jul-12**
MSCI EAFE (Net)			*2.69*	*11.26*	*13.54*	*9.55*	-	*8.14*	
Over/Under			-0.95	-0.23	2.15	1.52	-	1.06	
Barrow Hanley	514,228,347	8.34	1.72 (41)	14.71 (20)	14.50 (10)	8.64 (13)	-	5.06 (30)	Nov-13
MSCI EAFE Value Index (Net)			*1.17 (62)*	*10.89 (54)*	*7.82 (91)*	*5.34 (91)*	-	*2.67 (87)*	
Over/Under			0.55	3.82	6.68	3.30	-	2.39	
eV EAFE Value Equity Median			*1.47*	*11.19*	*10.62*	*7.00*	-	*4.18*	
Lazard Asset Management	617,975,450	10.02	-0.35 (86)	7.30 (79)	12.98 (63)	10.37 (42)	-	5.91 (53)	Nov-13
MSCI EAFE (Net)			*2.69 (44)*	*11.26 (53)*	*13.54 (59)*	*9.55 (56)*	-	*5.41 (64)*	
Over/Under			-3.04	-3.96	-0.56	0.82	-	0.50	
eV All EAFE Equity Median			*2.38*	*11.37*	*14.05*	*9.78*	-	*5.99*	
MFS Institutional Advisors	625,436,382	10.14	4.61 (21)	10.58 (31)	17.24 (95)	14.14 (37)	-	8.50 (48)	Oct-13
MSCI World ex USA Growth NR USD			*4.27 (22)*	*11.57 (26)*	*19.11 (56)*	*13.37 (69)*	-	*8.09 (60)*	
Over/Under			0.34	-0.99	-1.87	0.77	-	0.41	
eV EAFE All Cap Growth Median			*2.63*	*9.04*	*19.49*	*13.97*	-	*8.38*	
Oberweis Asset Mgmt	331,400,614	5.37	-4.01 (97)	3.92 (86)	29.03 (1)	18.30 (4)	-	11.41 (1)	Jan-14
MSCI EAFE Small Cap (Net)			*0.07 (59)*	*10.10 (65)*	*15.62 (48)*	*11.04 (49)*	-	*7.60 (49)*	
Over/Under			-4.08	-6.18	13.41	7.26	-	3.81	
eV EAFE Small Cap Equity Median			*0.34*	*12.57*	*15.40*	*10.98*	-	*7.44*	

Los Angeles City Employees' Retirement System-LACERS Master Trust

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NON-U.S. EQUITY (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
SSgA World ex US IMI	2,149,996,538	34.86	2.78 (47)	12.86 (41)	15.07 (44)	10.41 (46)	8.62 (61)	6.28 (54)	Aug-98
MSCI World ex U.S. IMI Index (Net)			*2.71 (49)*	*12.40 (51)*	*14.38 (51)*	*9.83 (53)*	*8.12 (76)*	*5.39 (86)*	
Over/Under			0.07	0.46	0.69	0.58	0.50	0.89	
eV EAFE Core Equity Median			*2.58*	*12.40*	*14.41*	*10.13*	*8.97*	*6.44*	
State Street EAFE SC	343,136,624	5.56	0.05 (59)	10.07 (65)	-	-	-	10.07 (65)	Jan-21
MSCI EAFE Small Cap (Net)			*0.07 (59)*	*10.10 (65)*	-	-	-	*10.10 (65)*	
Over/Under			-0.02	-0.03	-	-	-	-0.03	
eV EAFE Small Cap Equity Median			*0.34*	*12.57*	-	-	-	*12.57*	
Emerging Markets	**1,586,203,638**	**25.72**	**0.83**	**7.94**	**14.63**	**11.87**	**-**	**5.96**	**Jul-12**
MSCI Emerging Markets (Net)			*-1.31*	*-2.54*	*10.94*	*9.87*	-	*5.36*	
Over/Under			2.14	10.48	3.69	2.00	-	0.60	
Axiom Emerging Markets	394,377,824	6.39	-1.62 (64)	-4.28 (73)	16.50 (23)	12.85 (20)	-	7.38 (24)	May-14
MSCI Emerging Markets (Net)			*-1.31 (57)*	*-2.54 (66)*	*10.94 (66)*	*9.87 (53)*	-	*5.28 (59)*	
Over/Under			-0.31	-1.74	5.56	2.98	-	2.10	
eV Emg Mkts Equity Median			*-0.86*	*0.41*	*12.51*	*10.11*	-	*5.51*	
MSCI Emerging Markets Growth (Net)			*-2.08 (69)*	*-8.41 (87)*	*14.60 (33)*	*12.55 (24)*	-	*7.31 (24)*	
Over/Under			0.46	4.13	1.90	0.30	-	0.07	
DFA Emerging Markets	459,064,926	7.44	0.37 (28)	12.01 (17)	8.83 (87)	8.39 (78)	-	2.95 (88)	Aug-14
MSCI Emerging Markets Value (Net)			*-0.41 (44)*	*4.00 (34)*	*7.09 (95)*	*7.02 (92)*	-	*1.96 (96)*	
Over/Under			0.78	8.01	1.74	1.37	-	0.99	
eV Emg Mkts Equity Median			*-0.86*	*0.41*	*12.51*	*10.11*	-	*4.69*	
State Street Emerging Markets	367,553,260	5.96	-1.01 (54)	-2.60 (66)	-	-	-	-2.60 (66)	Jan-21
MSCI Emerging Markets (Net)			*-1.31 (57)*	*-2.54 (66)*	-	-	-	*-2.54 (66)*	
Over/Under			0.30	-0.06	-	-	-	-0.06	
eV Emg Mkts Equity Median			*-0.86*	*0.41*	-	-	-	*0.41*	
Wasatch Global Investors	365,207,628	5.92	6.27 (1)	35.30 (1)	-	-	-	35.30 (1)	Jan-21
MSCI Emerging Markets Small Cap (Net)			*1.33 (52)*	*18.75 (32)*	-	-	-	*18.75 (32)*	
Over/Under			4.94	16.55	-	-	-	16.55	
eV Emg Mkts Small Cap Equity Median			*1.47*	*15.45*	-	-	-	*15.45*	

Los Angeles City Employees' Retirement System-LACERS Master Trust

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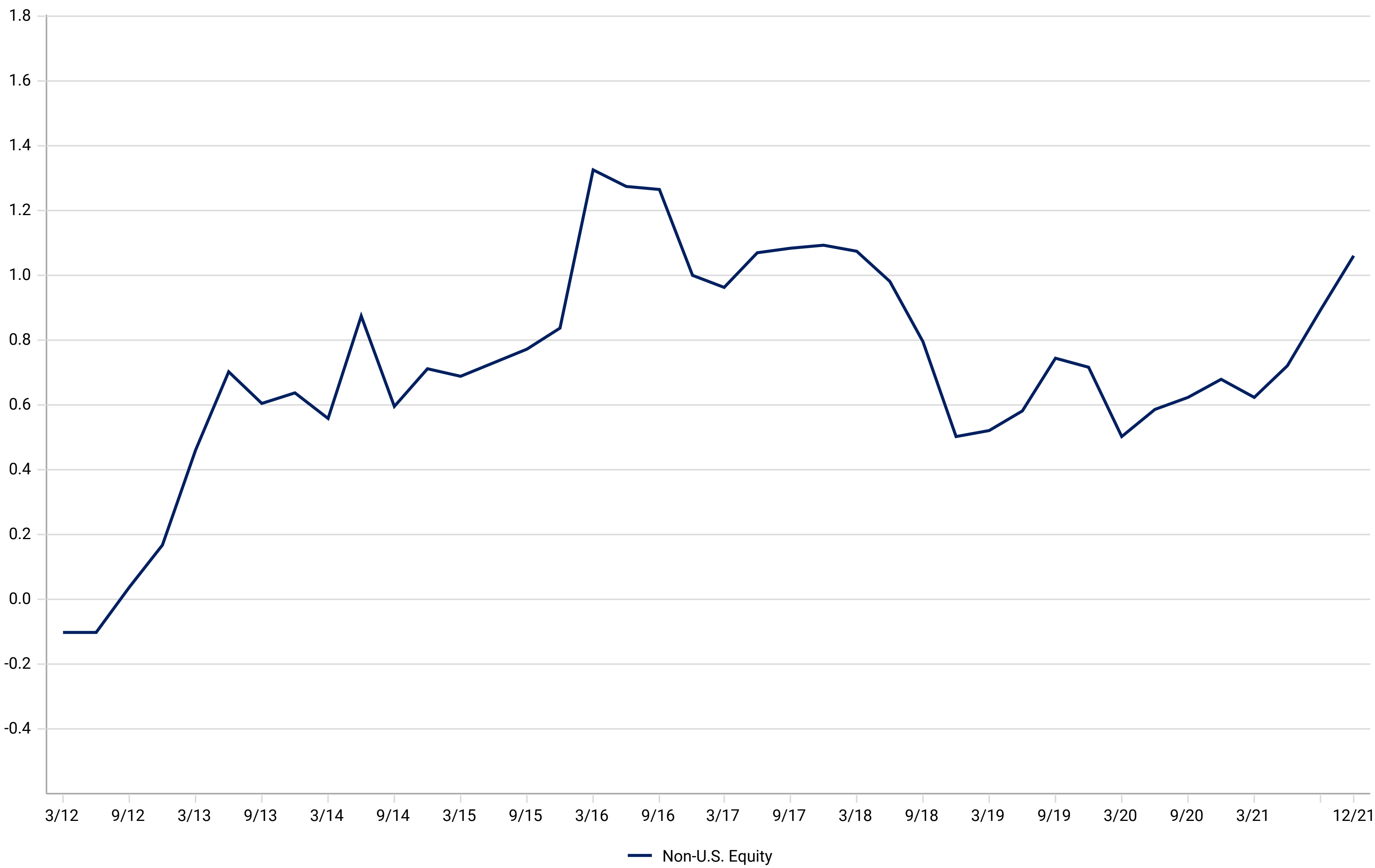
NON-U.S. EQUITY ROLLING 5 YEAR INFORMATION RATIO

Information Ratio



INVESTMENT MANAGER REPORT CARD

NON-U.S. EQUITY

Non-U.S. Equity Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid $ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
SSgA (Passive)	Dec-20	Emerging Markets	✓	×	×	×	N/A	N/A	N/A	N/A	×	86.1	Newly funded strategy
Axiom International	Mar-14	Emerging Markets	×	×	×	×	✓	✓	✓	✓	✓	2,708.7	On Watch in August 2020 due to benchmark change, Watch status extended in October 2020 due to CIO change, Watch status extended in October 2021 due to departure of President.
DFA Emerging Markets	Jul-14	Emerging Markets	✓	✓	✓	✓	✓	×	✓	×	✓	1,948.4	Performance compliant with LACERS' Manager Monitoring Policy
Wasatch	Dec-20	Emerging Markets Small Cap	✓	✓	✓	✓	N/A	N/A	N/A	N/A	✓	1,139.1	Newly funded strategy
Oberweis Asset Mgt.	Jan-14	Non-U.S. Developed	×	×	×	×	✓	✓	✓	✓	✓	2,856.8	Performance compliant with LACERS' Manager Monitoring Policy
Barrow, Hanley, Mewhinney & Strauss	Nov-13	Non-U.S. Developed	✓	✓	✓	✓	✓	✓	✓	✓	✓	2,351.1	On Watch in August 2020 due to organizational change, Watch status extended in August 2021 due to organizational change and AUM Strategy Concentration.
Lazard Asset Mgt.	Nov-13	Non-U.S. Developed	×	×	×	×	×	×	✓	✓	✓	2,946.6	On Watch since August 2021 due to performance.
MFS Institutional Advisors	Oct-13	Non-U.S. Developed	✓	✓	×	✓	×	×	✓	×	✓	2,419.3	Performance compliant with LACERS' Manager Monitoring Policy
SsgA (Passive)	Dec-20	Non-U.S. Developed Small Cap	×	×	×	×	N/A	N/A	N/A	N/A	×	69.7	Newly funded strategy
SsgA (Passive)	Aug-93	Non-U.S. Developed	✓	✓	✓	✓	✓	✓	✓	✓	✓✓	401.7	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2021.

* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
×	Underperformed
=	Equal to
✓✓	Gross Return

NEPC

CORE FIXED INCOME MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

CORE FIXED INCOME (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Core Fixed Income	**3,749,597,741**	**100.00**	**0.05**	**-0.98**	**5.63**	**4.11**	**-**	**3.58**	**Jul-12**
Core Fixed Income Blend			*0.01*	*-1.55*	*4.79*	*3.57*	-	*2.90*	
Over/Under			0.04	0.57	0.84	0.54	-	0.68	
Loomis Sayles & Co. Core Fixed Income	655,877,457	17.49	0.40	-0.70	6.37	4.75	4.32	8.75	Jul-80
Loomis Custom Benchmark			*0.01*	*-1.55*	*4.79*	*3.57*	*3.04*	*7.29*	
Over/Under			0.39	0.85	1.58	1.18	1.28	1.46	
SSgA U.S. Aggregate Bond	1,156,385,658	30.84	-0.02	-1.55	4.82	3.60	-	3.16	Aug-14
Blmbg. U.S. Aggregate Index			*0.01*	*-1.55*	*4.79*	*3.57*	-	*3.13*	
Over/Under			-0.03	0.00	0.03	0.03	-	0.03	
Baird Advisors Core Fixed Income	646,249,316	17.24	0.01	-	-	-	-	0.24	Jul-21
Blmbg. U.S. Aggregate Index			*0.01*	-	-	-	-	*0.06*	
Over/Under			0.00	-	-	-	-	0.18	
Garcia Hamilton & Associates	427,862,571	11.41	0.03	-	-	-	-	0.00	Jul-21
Blmbg. U.S. Aggregate Index			*0.01*	-	-	-	-	*0.06*	
Over/Under			0.02	-	-	-	-	-0.06	
JP Morgan Investment Management	429,814,436	11.46	-0.06	-	-	-	-	0.11	Jul-21
Blmbg. U.S. Aggregate Index			*0.01*	-	-	-	-	*0.06*	
Over/Under			-0.07	-	-	-	-	0.05	
Income Research & Management	433,408,241	11.56	-0.13	-	-	-	-	0.06	Jul-21
Blmbg. U.S. Aggregate Index			*0.01*	-	-	-	-	*0.06*	
Over/Under			-0.14	-	-	-	-	0.00	

Baird Advisors Core Fixed Income, Garcia Hamilton & Associates, JP Morgan Investment Management and Income Research & Management have a mid-month inception date. Since inception return is calculated from the first full month of performance.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

CORE FIXED INCOME (NET)

	Allocation		Performance (%)							
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Core Fixed Income	**3,749,597,741**	**100.00**	**0.02**	**-1.06**	**5.53**	**4.01**	**-**	**3.47**	**Jul-12**
Core Fixed Income Blend			*0.01*	*-1.55*	*4.79*	*3.57*	-	*2.90*	
Over/Under			0.01	0.49	0.74	0.44	-	0.57	
Loomis Sayles & Co. Core Fixed Income	655,877,457	17.49	0.33 (3)	-0.83 (22)	6.24 (5)	4.62 (3)	4.18 (5)	8.68 (-)	Jul-80
Loomis Custom Benchmark			*0.01 (23)*	*-1.55 (54)*	*4.79 (77)*	*3.57 (74)*	*3.04 (70)*	*7.29 (-)*	
Over/Under			0.32	0.72	1.45	1.05	1.14	1.39	
eV US Core Fixed Inc Median			*-0.11*	*-1.46*	*5.21*	*3.81*	*3.25*	-	
SSgA U.S. Aggregate Bond	1,156,385,658	30.84	-0.02 (32)	-1.57 (55)	4.78 (78)	3.56 (74)	-	3.12 (73)	Aug-14
Blmbg. U.S. Aggregate Index			*0.01 (23)*	*-1.55 (54)*	*4.79 (77)*	*3.57 (74)*	-	*3.13 (73)*	
Over/Under			-0.03	-0.02	-0.01	-0.01	-	-0.01	
eV US Core Fixed Inc Median			*-0.11*	*-1.46*	*5.21*	*3.81*	-	*3.31*	
Baird Advisors Core Fixed Income	646,249,316	17.24	-0.02 (32)	-	-	-	-	0.21 (15)	Jul-21
Blmbg. U.S. Aggregate Index			*0.01 (23)*	-	-	-	-	*0.06 (29)*	
Over/Under			-0.03	-	-	-	-	0.15	
eV US Core Fixed Inc Median			*-0.11*	-	-	-	-	*-0.10*	
Garcia Hamilton & Associates	427,862,571	11.41	0.00 (27)	-	-	-	-	-0.03 (41)	Jul-21
Blmbg. U.S. Aggregate Index			*0.01 (23)*	-	-	-	-	*0.06 (29)*	
Over/Under			-0.01	-	-	-	-	-0.09	
eV US Core Fixed Inc Median			*-0.11*	-	-	-	-	*-0.10*	
JP Morgan Investment Management	429,814,436	11.46	-0.09 (48)	-	-	-	-	0.08 (27)	Jul-21
Blmbg. U.S. Aggregate Index			*0.01 (23)*	-	-	-	-	*0.06 (29)*	
Over/Under			-0.10	-	-	-	-	0.02	
eV US Core Fixed Inc Median			*-0.11*	-	-	-	-	*-0.10*	
Income Research & Management	433,408,241	11.56	-0.16 (66)	-	-	-	-	0.03 (34)	Jul-21
Blmbg. U.S. Aggregate Index			*0.01 (23)*	-	-	-	-	*0.06 (29)*	
Over/Under			-0.17	-	-	-	-	-0.03	
eV US Core Fixed Inc Median			*-0.11*	-	-	-	-	*-0.10*	

Baird Advisors Core Fixed Income, Garcia Hamilton & Associates, JP Morgan Investment Management and Income Research & Management have a mid-month inception date. Since inception return is calculated from the first full month of performance.

Los Angeles City Employees' Retirement System-LACERS Master Trust

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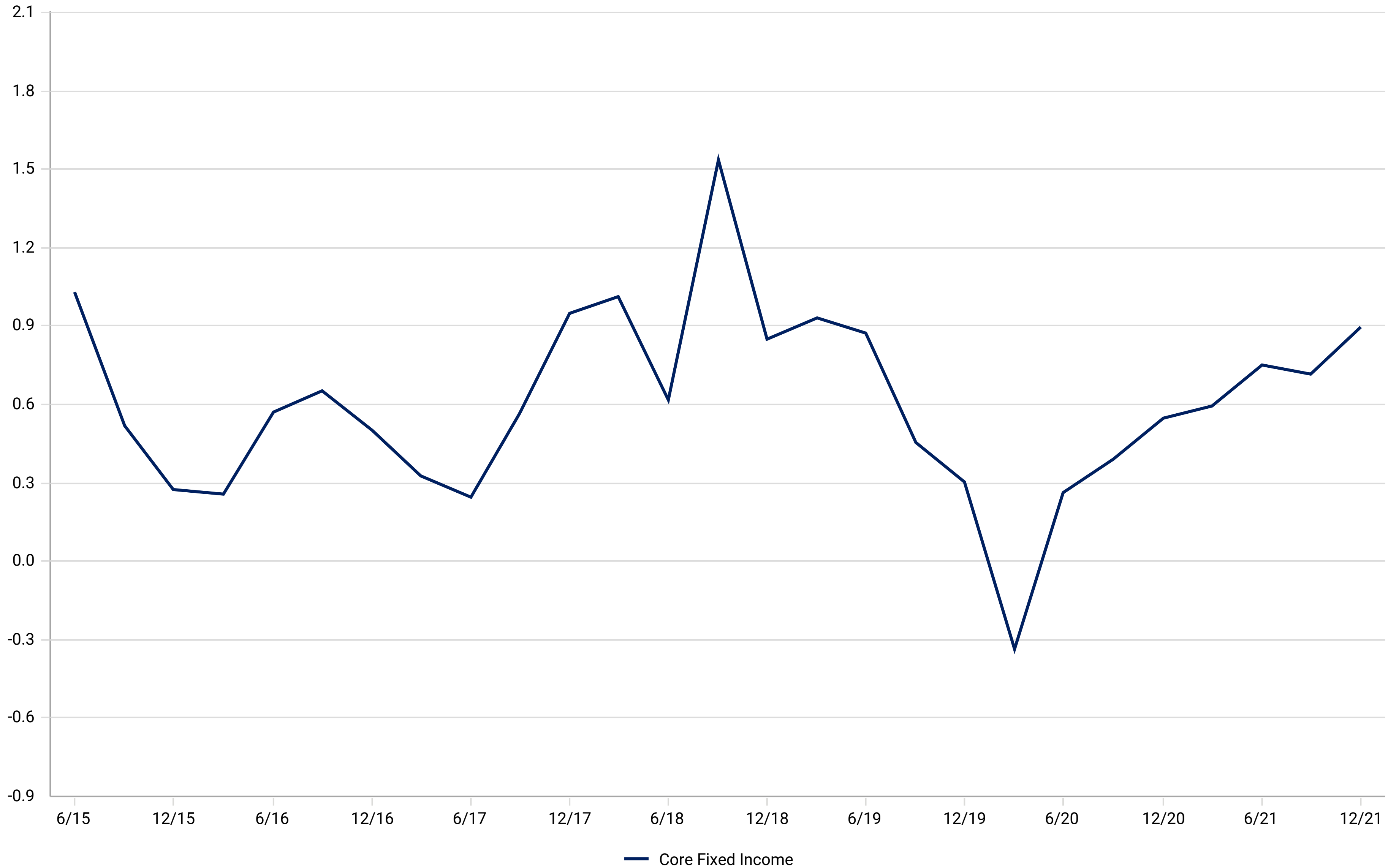
CORE FIXED INCOME 3 YEAR INFORMATION RATIO

Information Ratio



INVESTMENT MANAGER REPORT CARD

CORE FIXED INCOME

Core Fixed Income Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid $ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
Loomis Sayles	Jul-80	Core	✓	✓	✓	✓	✓	✓	✓	✓	✓✓	1,062.4	Performance compliant with LACERS' Manager Monitoring Policy
Baird Advisors	Jul-21	Core	✗	✓	N/A	N/A	N/A	N/A	N/A	N/A	✓	23.5	Newly funded strategy
Garcia Hamilton	Jul-21	Core	✗	✓	N/A	N/A	N/A	N/A	N/A	N/A	✗	12.7	Newly funded strategy
IR&M	Jul-21	Core	✗	✗	N/A	N/A	N/A	N/A	N/A	N/A	✗	N/A	Newly funded strategy
J.P. Morgan	Jul-21	Core	✗	✓	N/A	N/A	N/A	N/A	N/A	N/A	✓	14.2	Newly funded strategy
SSgA (Passive)	Aug-14	Core	✗	✓	✗	✗	✗	✗	✗	✗	✗	243.1	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

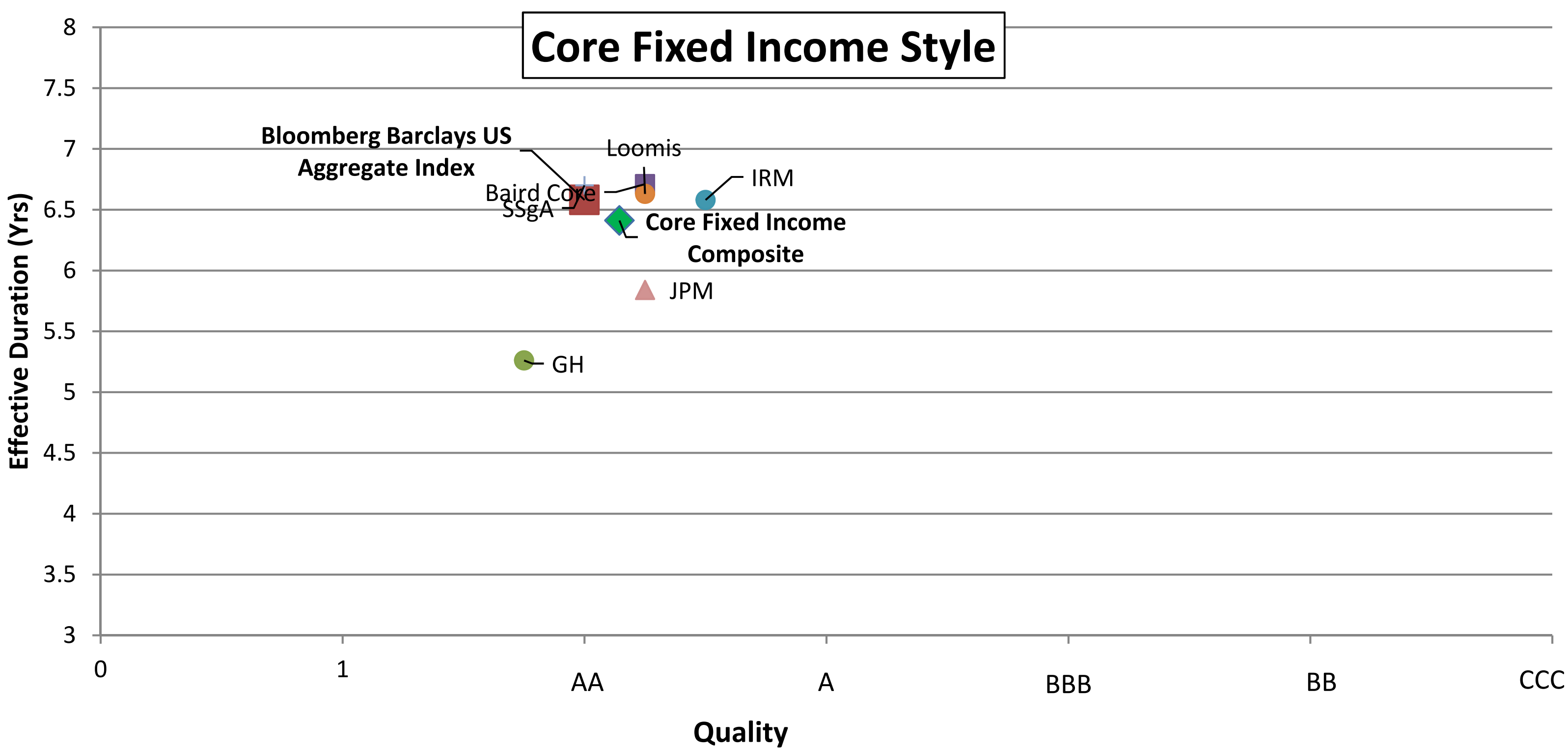
- Annual Management Fee Paid as of fiscal year ending June 30, 2021.

* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return

CORE FIXED INCOME

STYLE ANALYSIS



- LACERS Core Fixed Income Composite has a slightly lower duration (interest rate risk) than its benchmark.
- The Core Fixed Income Composite has slightly lower average quality rating than its benchmark.

CREDIT OPPORTUNITIES MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

CREDIT OPPORTUNITIES (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Credit Opportunities	**1,899,455,260**	**100.00**	**-0.53**	**0.46**	**6.51**	**5.27**	**-**	**5.23**	**Jul-13**
Credit Opportunities Blend			*-0.49*	*1.03*	*7.21*	*5.37*	-	*5.58*	
Over/Under			-0.04	-0.57	-0.70	-0.10	-	-0.35	
PGIM Blended	493,301,705	25.97	-1.38	-	-	-	-	-3.92	Feb-21
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			*-1.49*	-	-	-	-	*-4.28*	
Over/Under			0.11	-	-	-	-	0.36	
Wellington	489,460,444	25.77	-1.51	-	-	-	-	-3.75	Feb-21
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			*-1.49*	-	-	-	-	*-4.28*	
Over/Under			-0.02	-	-	-	-	0.53	
Bain Capital Senior Loan Fund, LP*	245,174,066	12.91	1.01	7.27	6.65	5.02	-	4.69	Jul-15
Credit Suisse Leveraged Loan Index			*0.71*	*5.40*	*5.43*	*4.32*	-	*4.30*	
Over/Under			0.30	1.87	1.22	0.70	-	0.39	
DDJ Capital Management	300,870,170	15.84	-0.03	5.77	-	-	-	8.65	Nov-20
50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse Leveraged Loan Index			*0.70*	*5.34*	-	-	-	*8.74*	
Over/Under			-0.73	0.43	-	-	-	-0.09	
Loomis Sayles & Co. High Yield	303,113,679	15.96	0.41	4.57	-	-	-	9.93	Nov-20
Blmbg. U.S. High Yield - 2% Issuer Cap			*0.69*	*5.26*	-	-	-	*9.77*	
Over/Under			-0.28	-0.69	-	-	-	0.16	
Benefit Street Partners LLC*	42,336,190	2.23	3.64	3.72	-	-	-	3.43	Dec-20
Credit Suisse Leveraged Loan Qtr Lag			*1.13*	*8.46*	-	-	-	*8.47*	
Over/Under			2.51	-4.74	-	-	-	-5.04	
Crescent*	199,006	0.01	-	-	-	-	-	0.00	Dec-21
Credit Suisse Leveraged Loan Qtr Lag			-	-	-	-	-	*0.65*	
Over/Under			-	-	-	-	-	-0.65	
Monroe*	25,000,000	1.32	-	-	-	-	-	0.00	Dec-21
Credit Suisse Leveraged Loan Qtr Lag			-	-	-	-	-	*0.65*	
Over/Under			-	-	-	-	-	-0.65	

- Credit Opportunities Blend = 20.7% Bloomberg US High Yield 2% Issuer Cap + 20.7% Credit Suisse Leveraged Loan Index + 55% Emerging Markets Debt Blend + 3.6% Credit Suisse Leveraged Loan Index (One Quarter Lagged).
PGIM Blended, Wellington, DDJ Capital Management, Loomis Sayles & Co and High Yield have a mid-month inception date. Since inception return is calculated from the first full month of performance.
Benchmark composition as of 7/1/2021 unless otherwise noted.
eV= eVestment Alliance
* Net of fee return due to investment vehicle.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

CREDIT OPPORTUNITIES (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Credit Opportunities	**1,899,455,260**	**100.00**	**-0.63**	**0.18**	**6.20**	**4.95**	**-**	**4.90**	**Jul-13**
Credit Opportunities Blend			*-0.49*	*1.03*	*7.21*	*5.37*	-	*5.58*	
Over/Under			-0.14	-0.85	-1.01	-0.42	-	-0.68	
PGIM Blended	493,301,705	25.97	-1.46 (53)	-	-	-	-	-4.12 (69)	Feb-21
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			*-1.49 (54)*	-	-	-	-	*-4.28 (71)*	
Over/Under			0.03	-	-	-	-	0.16	
eV All Emg Mkts Fixed Inc Median			*-1.43*	-	-	-	-	*-1.74*	
Wellington	489,460,444	25.77	-1.63 (58)	-	-	-	-	-4.04 (69)	Feb-21
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			*-1.49 (54)*	-	-	-	-	*-4.28 (71)*	
Over/Under			-0.14	-	-	-	-	0.24	
eV All Emg Mkts Fixed Inc Median			*-1.43*	-	-	-	-	*-1.74*	
Bain Capital Senior Loan Fund, LP	245,174,066	12.91	1.01 (7)	7.27 (9)	6.65 (2)	5.02 (7)	-	4.69 (10)	Jul-15
Credit Suisse Leveraged Loan Index			*0.71 (36)*	*5.40 (33)*	*5.43 (30)*	*4.32 (19)*	-	*4.30 (22)*	
Over/Under			0.30	1.87	1.22	0.70	-	0.39	
eV US Float-Rate Bank Loan Fixed Inc Median			*0.63*	*4.74*	*4.91*	*3.77*	-	*3.80*	
DDJ Capital Management	300,870,170	15.84	-0.15 (98)	5.31 (43)	-	-	-	8.24 (69)	Nov-20
50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse Leveraged Loan Index			*0.70 (44)*	*5.34 (43)*	-	-	-	*8.74 (59)*	
Over/Under			-0.85	-0.03	-	-	-	-0.50	
eV US High Yield Fixed Inc Median			*0.63*	*5.05*	-	-	-	*9.14*	
Loomis Sayles & Co. High Yield	303,113,679	15.96	0.23 (90)	4.24 (73)	-	-	-	9.63 (41)	Nov-20
Blmbg. U.S. High Yield - 2% Issuer Cap			*0.69 (46)*	*5.26 (44)*	-	-	-	*9.77 (40)*	
Over/Under			-0.46	-1.02	-	-	-	-0.14	
eV US High Yield Fixed Inc Median			*0.63*	*5.05*	-	-	-	*9.14*	
Benefit Street Partners LLC	42,336,190	2.23	3.64	3.72	-	-	-	3.43	Dec-20
Credit Suisse Leveraged Loan Qtr Lag			*1.13*	*8.46*	-	-	-	*8.47*	
Over/Under			2.51	-4.74	-	-	-	-5.04	
Crescent	199,006	0.01	-	-	-	-	-	0.00	Dec-21
Credit Suisse Leveraged Loan Qtr Lag			-	-	-	-	-	*0.65*	
Over/Under			-	-	-	-	-	-0.65	
Monroe	25,000,000	1.32	-	-	-	-	-	0.00	Dec-21
Credit Suisse Leveraged Loan Qtr Lag			-	-	-	-	-	*0.65*	
Over/Under			-	-	-	-	-	-0.65	

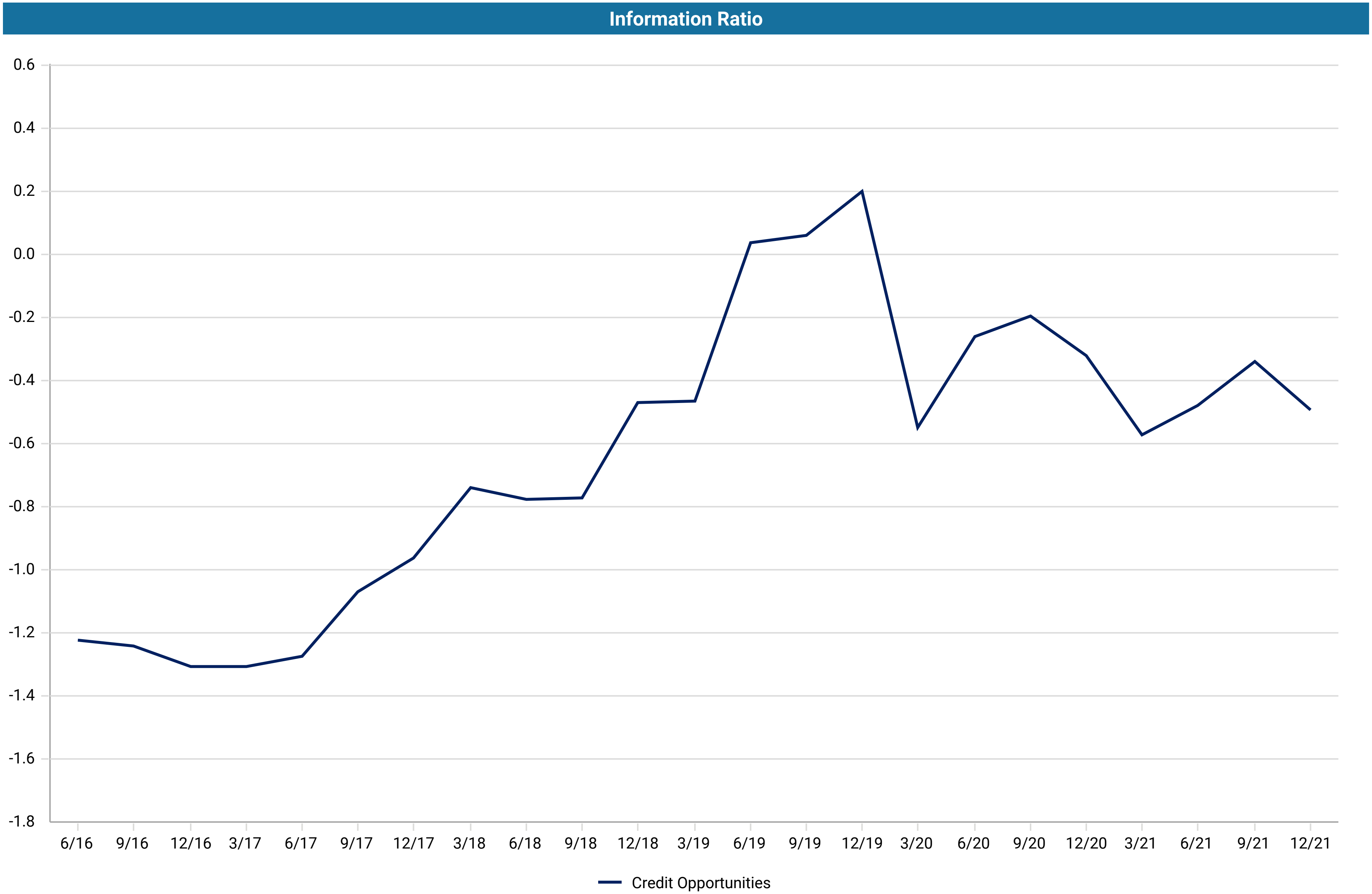
- Credit Opportunities Blend = 20.7% Bloomberg US High Yield 2% Issuer Cap + 20.7% Credit Suisse Leveraged Loan Index + 55% Emerging Markets Debt Blend + 3.6% Credit Suisse Leveraged Loan Index (One Quarter Lagged).
- PGIM Blended, Wellington, DDJ Capital Management, Loomis Sayles & Co and High Yield have a mid-month inception date. Since inception return is calculated from the first full month of performance.

Benchmark composition as of 7/1/2021 unless otherwise noted.
eV= eVestment Alliance

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

CREDIT OPPORTUNITIES ROLLING 3 YEAR INFORMATION RATIO



INVESTMENT MANAGER REPORT CARD

CREDIT OPPORTUNITIES

Credit Opportunities Managers	Inception Date	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid $ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
PGIM	Feb-21	Emerging Market Debt Blended	✓	✗	N/A	N/A	N/A	N/A	N/A	N/A	✓	612.8	Newly funded strategy
Wellington	Feb-21	Emerging Market Debt Blended	✗	✗	N/A	N/A	N/A	N/A	N/A	N/A	✓	882.3	Newly funded strategy
Bain	Jun-15	Bank Loans	✓	✓	✓	✓	✓	✓	✓	✓	✓	876.9	Performance compliant with LACERS' Manager Monitoring Policy
Benefit Street Partners	Dec-20	Private Credit	✓	N/A	✗	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly funded strategy
Crescent	Dec-21	Private Credit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly funded strategy
Monroe	Dec-21	Private Credit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Newly funded strategy
Loomis Sayles	Nov-20	High Yield	✗	✗	✗	✗	N/A	N/A	N/A	N/A	✗	654.2	Newly funded strategy
DDJ	Nov-20	High Yield/Bank Loan	✗	✗	✗	✓	N/A	N/A	N/A	N/A	✗	861.6	On Watch since December 2021 due to organizational change

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2021.

* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
✗	Underperformed
=	Equal to
✓✓	Gross Return

REAL ASSETS MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

REAL ASSETS (GROSS)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Assets	**2,813,888,691**	**100.00**	**5.42**	**14.72**	**8.65**	**6.88**	**7.87**	**6.48**	**Dec-94**
Real Assets Policy Benchmark			7.75	18.81	10.74	9.27	7.75	8.25	
Over/Under			-2.33	-4.09	-2.09	-2.39	0.12	-1.77	
Public Real Assets	**1,827,915,707**	**64.96**	**5.49**	**16.29**	**11.57**	**6.87**	**-**	**4.59**	**Jul-14**
Public Real Assets Blend			7.48	21.34	11.89	6.51	-	3.18	
Over/Under			-1.99	-5.05	-0.32	0.36	-	1.41	
TIPS	**1,306,837,130**	**46.44**	**2.11**	**5.84**	**8.79**	**5.63**	**-**	**3.83**	**Aug-14**
Blmbg. U.S. TIPS			2.36	5.96	8.44	5.34	-	3.71	
Over/Under			-0.25	-0.12	0.35	0.29	-	0.12	
DFA US TIPS	1,306,837,130	46.44	2.11	5.84	8.79	5.63	-	3.93	Aug-14
Blmbg. U.S. TIPS			2.36	5.96	8.44	5.34	-	3.71	
Over/Under			-0.25	-0.12	0.35	0.29	-	0.22	
REITS	**521,078,573**	**18.52**	**15.06**	**42.61**	**22.86**	**14.21**	**-**	**12.92**	**May-15**
FTSE NAREIT All Equity REITs			16.17	41.30	19.93	12.46	-	11.23	
Over/Under			-1.11	1.31	2.93	1.75	-	1.69	
CenterSquare US Real Estate	521,078,573	18.52	15.06	42.61	22.86	14.21	-	12.92	May-15
FTSE NAREIT All Equity REITs			16.17	41.30	19.93	12.46	-	11.23	
Over/Under			-1.11	1.31	2.93	1.75	-	1.69	
Private Real Estate	**967,932,463**	**34.40**	**5.36**	**13.03**	**4.75**	**6.24**	**8.41**	**5.77**	**Jul-01**
Real Estate Blend			8.18	23.13	10.07	9.57	10.99	9.39	
Over/Under			-2.82	-10.10	-5.32	-3.33	-2.58	-3.62	
Timber	**18,040,520**	**0.64**	**0.43**	**3.16**	**2.82**	**2.71**	**5.23**	**8.56**	**Oct-99**

1 - Real Assets Policy Benchmark = 41.67% Bloomberg US TIPS Index + 25% FTSE NAREIT ALL Equity REIT Index + 33.33% Real Estate Blended Benchmark
2 - Public Real Assets Blend = 62.5% Bloomberg US TIPS Index + 37.5% FTSE NAREIT ALL Equity REIT Index
3 - Portfolio has a mid-month inception date. Since inception return is calculated from the first full month of performance.
4 - Real Estate Blend = NCREIF-ODCE + 80bps 7/1/2014 to present; NCREIF Property Index 1 Qtr Lag plus 100bps 7/1/2012 - 6/30/2014; NCREIF Property Index Inception - 6/30/2012
Benchmark composition as of 7/1/2021 unless otherwise noted.
DFA and CenterSquare have mid-month inception dates. Since inception return is calculated from the first full month of performance.

Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

REAL ASSETS (NET)

	Allocation		Performance (%)						
	Market Value ($)	% of Portfolio	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Real Assets	**2,813,888,691**	**100.00**	**5.39**	**14.58**	**8.49**	**6.72**	**7.72**	**5.42**	**Jun-01**
Real Assets Policy Benchmark			*7.75*	*18.81*	*10.74*	*9.27*	*7.75*	*6.92*	
Over/Under			-2.36	-4.23	-2.25	-2.55	-0.03	-1.50	
Public Real Assets	**1,827,915,707**	**64.96**	**5.46**	**16.10**	**11.37**	**6.65**	**-**	**4.39**	**Jul-14**
Public Real Assets Blend			*7.48*	*21.34*	*11.89*	*6.51*	-	*3.18*	
Over/Under			-2.02	-5.24	-0.52	0.14	-	1.21	
TIPS	**1,306,837,130**	**46.44**	**2.10**	**5.79**	**8.74**	**5.58**	**-**	**3.77**	**Aug-14**
Blmbg. U.S. TIPS			*2.36*	*5.96*	*8.44*	*5.34*	-	*3.71*	
Over/Under			-0.26	-0.17	0.30	0.24	-	0.06	
DFA US TIPS	1,306,837,130	46.44	2.10 (55)	5.79 (32)	8.74 (13)	5.58 (12)	-	3.87 (22)	Aug-14
Blmbg. U.S. TIPS			*2.36 (8)*	*5.96 (23)*	*8.44 (36)*	*5.34 (46)*	-	*3.71 (25)*	
Over/Under			-0.26	-0.17	0.30	0.24	-	0.16	
eV US TIPS / Inflation Fixed Inc Median			*2.15*	*5.60*	*8.33*	*5.28*	-	*3.54*	
REITS	**521,078,573**	**18.52**	**14.96**	**42.12**	**22.39**	**13.75**	**-**	**12.46**	**May-15**
FTSE NAREIT All Equity REITs			*16.17*	*41.30*	*19.93*	*12.46*	-	*11.23*	
Over/Under			-1.21	0.82	2.46	1.29	-	1.23	
CenterSquare US Real Estate	521,078,573	18.52	14.96 (61)	42.12 (41)	22.39 (25)	13.75 (18)	-	12.46 (13)	May-15
FTSE NAREIT All Equity REITs			*16.17 (32)*	*41.30 (59)*	*19.93 (55)*	*12.46 (40)*	-	*11.23 (37)*	
Over/Under			-1.21	0.82	2.46	1.29	-	1.23	
eV US REIT Median			*15.54*	*41.94*	*20.33*	*12.08*	-	*10.67*	
Private Real Estate	**967,932,463**	**34.40**	**5.36**	**13.03**	**4.75**	**6.24**	**8.41**	**5.77**	**Jul-01**
Real Estate Blend			*8.18*	*23.13*	*10.07*	*9.57*	*10.99*	*9.39*	
Over/Under			-2.82	-10.10	-5.32	-3.33	-2.58	-3.62	
Timber	**18,040,520**	**0.64**	**0.43**	**3.16**	**2.82**	**2.71**	**5.23**	**7.57**	**Sep-01**

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2 - Public Real Assets Blend = 62.5% Bloomberg US TIPS Index + 37.5% FTSE NAREIT ALL Equity REIT Index
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Benchmark composition as of 7/1/2021 unless otherwise noted.
DFA and CenterSquare have mid-month inception dates. Since inception return is calculated from the first full month of performance.

INVESTMENT MANAGER REPORT CARD

REAL ASSETS

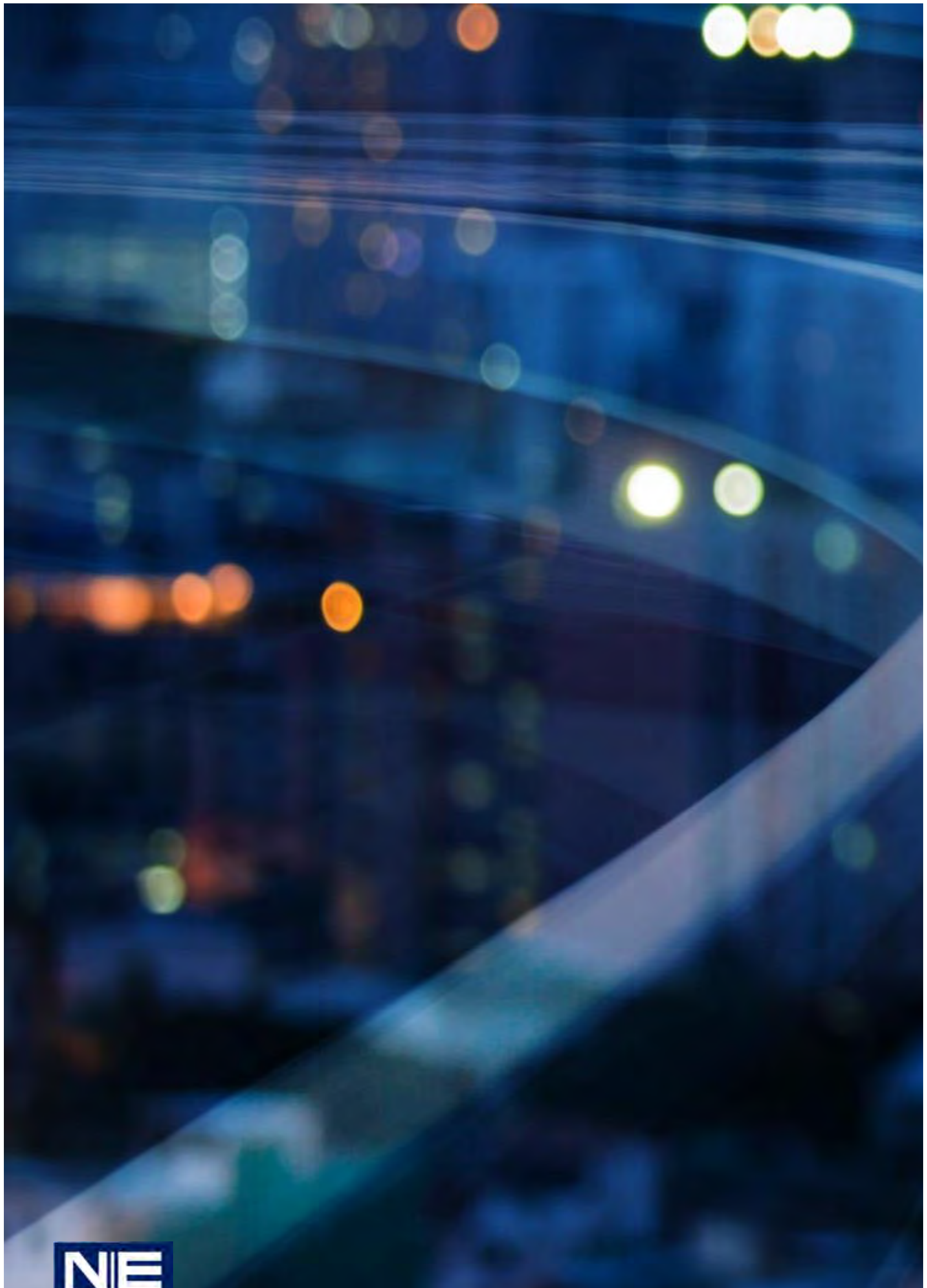
Real Assets Managers	nception Dat	Mandate	Current Quarter (Net)		One Year (Net)		Three Years (Net)		Five Years (Net)		Since Inception (Net)	Annual Mgt Fee Paid $ (000)	Comments
			Index	Universe	Index	Universe	Index	Universe	Index	Universe	Index		
DFA	Jul-14	U.S. TIPS	×	×	×	✓	✓	✓	✓	✓	✓	420.3	Performance compliant with LACERS' Manager Monitoring Policy
CenterSquare	Apr-15	REITS	×	×	✓	✓	✓	✓	✓	✓	✓	1,100.5	Performance compliant with LACERS' Manager Monitoring Policy

Note: Managers are placed on Watch List for concerns with organization, process and performance. Managers are normally on the Watch List for 12 months though may be longer if manager issues remain but not severe enough to warrant termination recommendation.

- Annual Management Fee Paid as of fiscal year ending June 30, 2021.

* Where net of fees performance is not available gross of fee returns are evaluated.

Legend	
✓	Outperformed
×	Underperformed
=	Equal to
✓✓	Gross Return



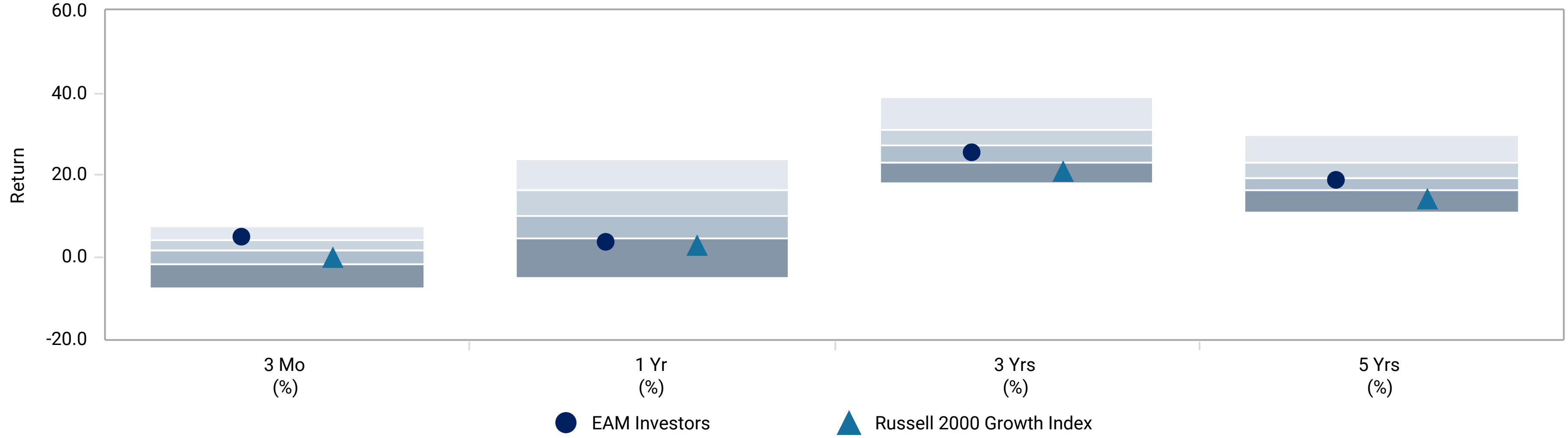
U.S. EQUITY MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

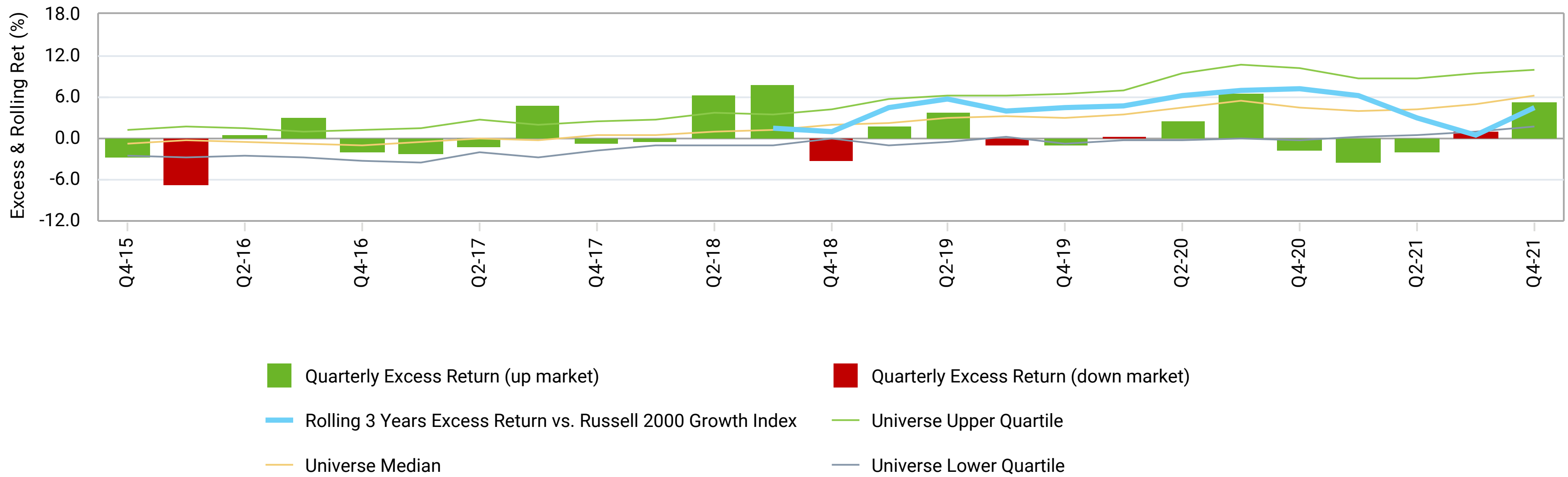
December 31, 2021

EAM INVESTORS

eV US Small Cap Growth Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

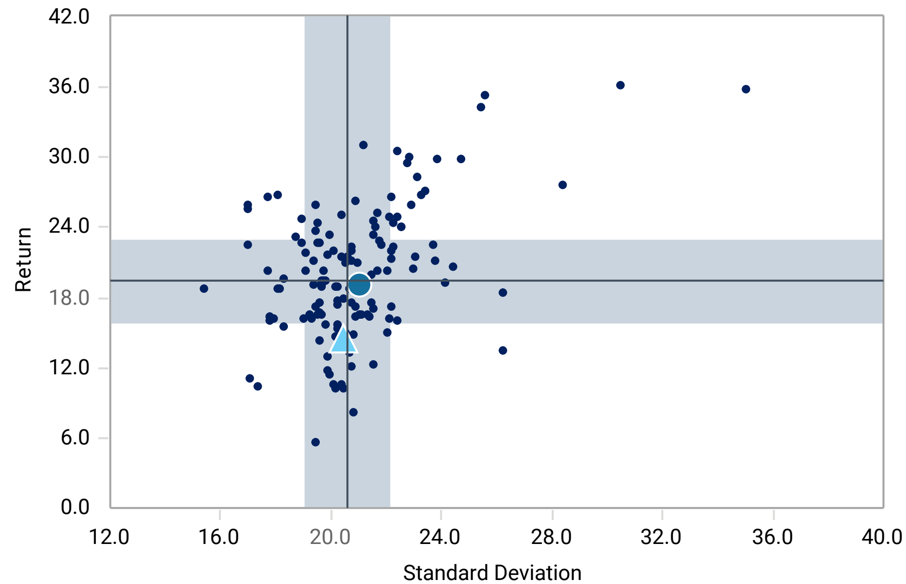


Los Angeles City Employees' Retirement System-LACERS Master Trust

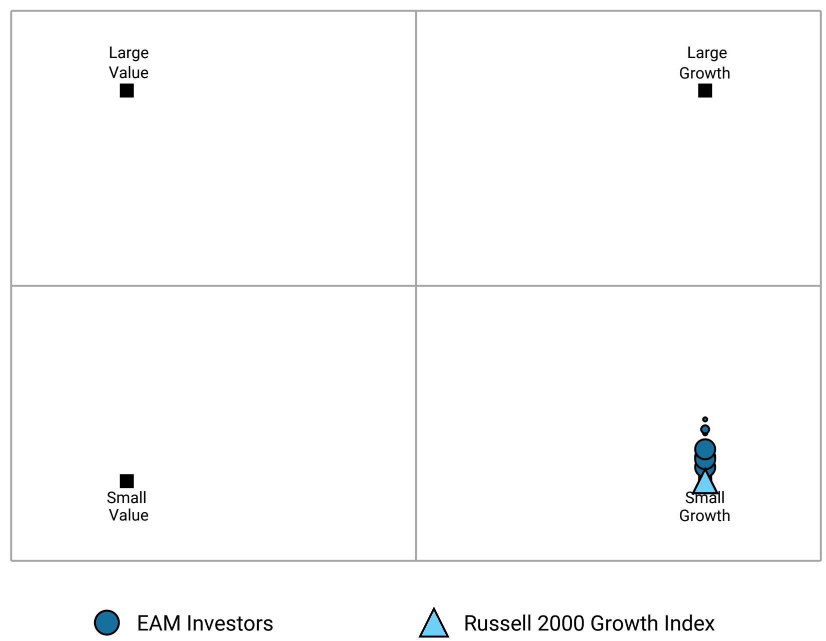
December 31, 2021

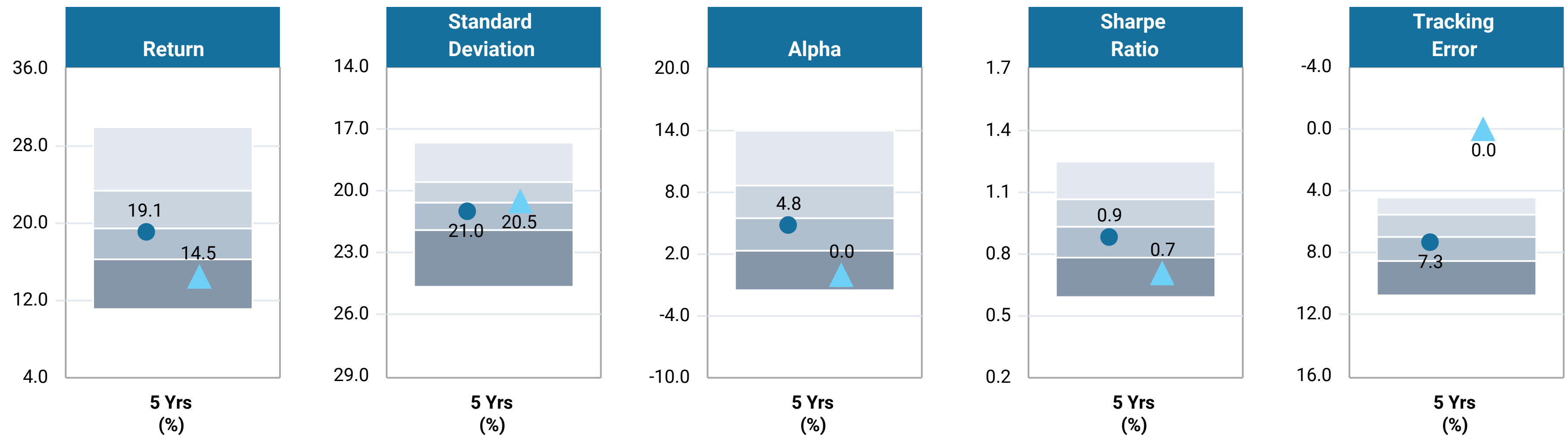
EAM INVESTORS

5 Years Return vs. Standard Deviation



Rolling 3 Years Style Map



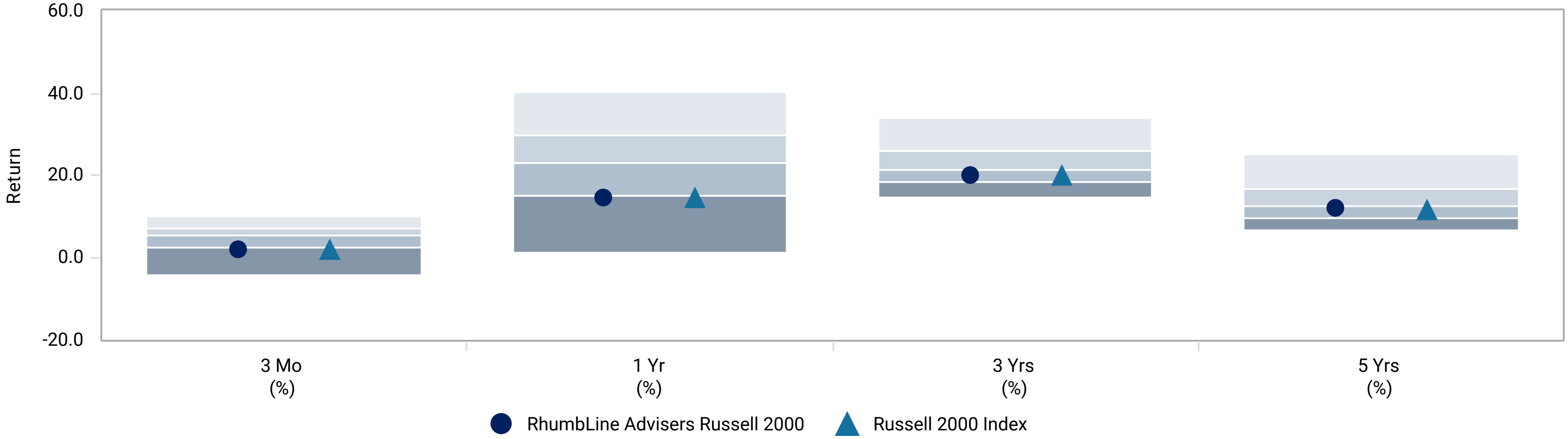


Los Angeles City Employees' Retirement System-LACERS Master Trust

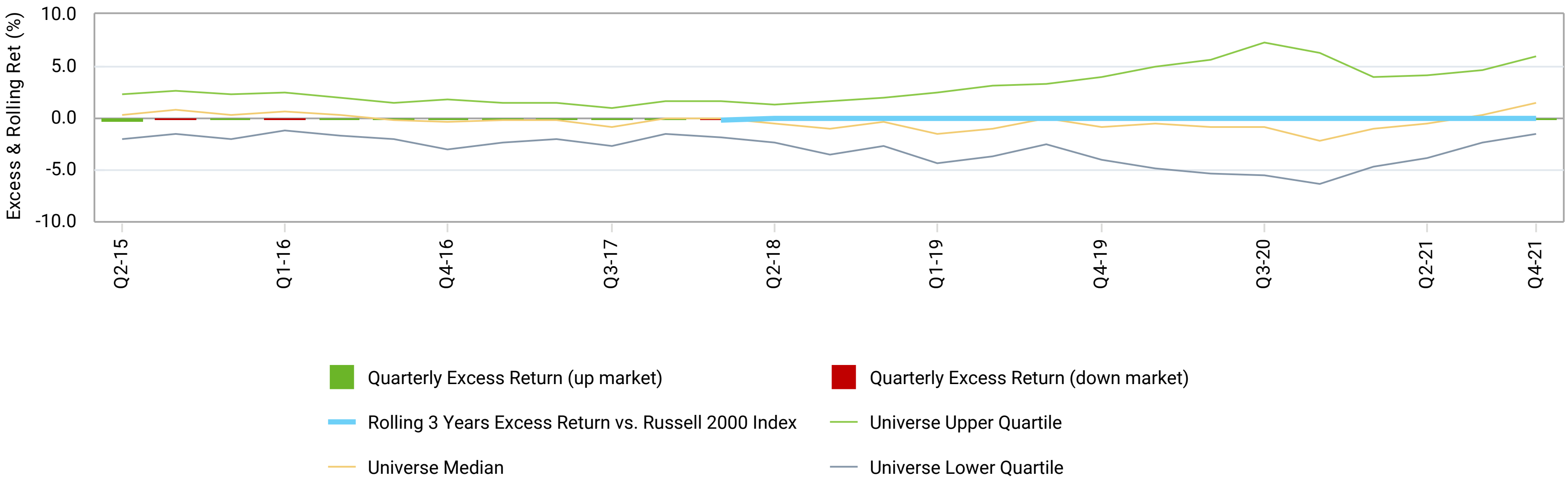
December 31, 2021

RHUMBLINE ADVISORS RUSSELL 2000

eV US Small Cap Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

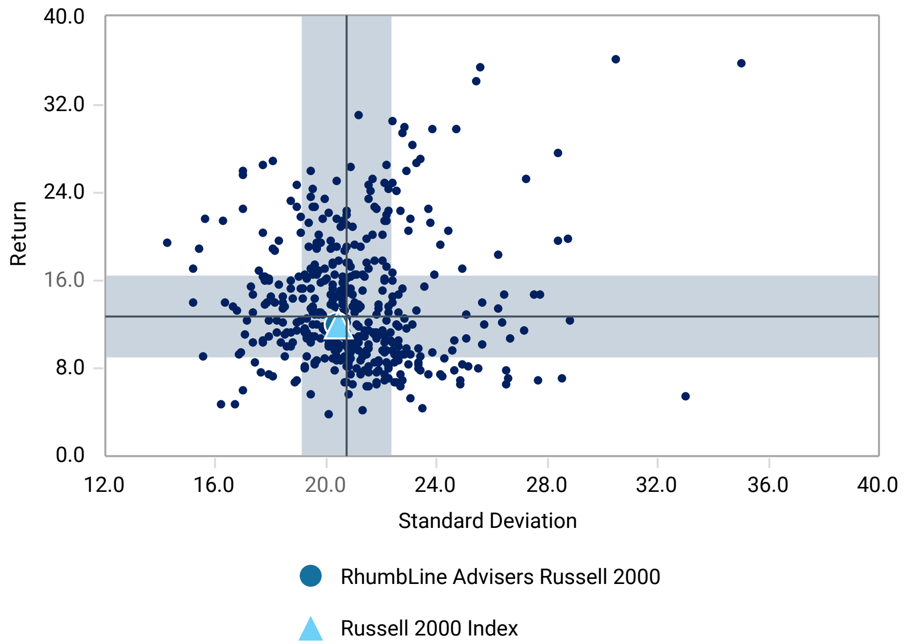


Los Angeles City Employees' Retirement System-LACERS Master Trust

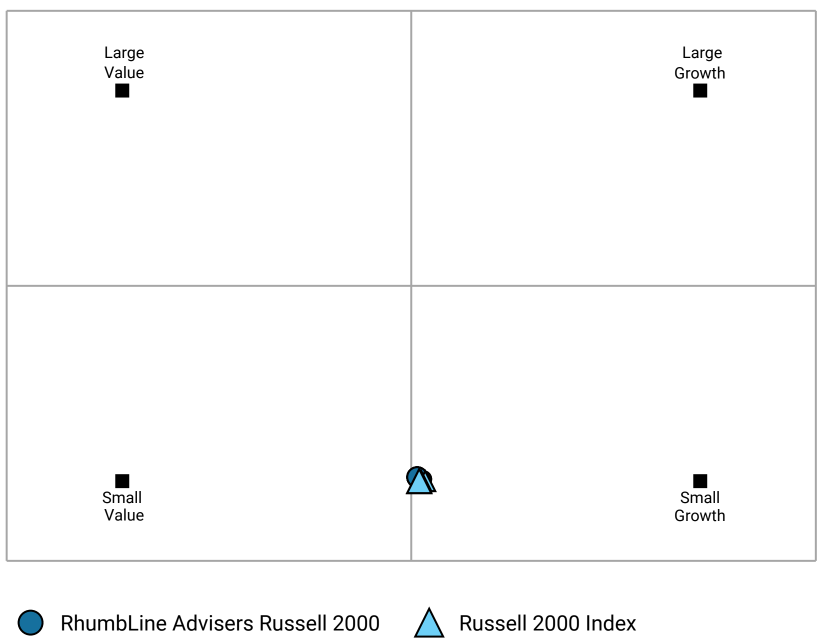
December 31, 2021

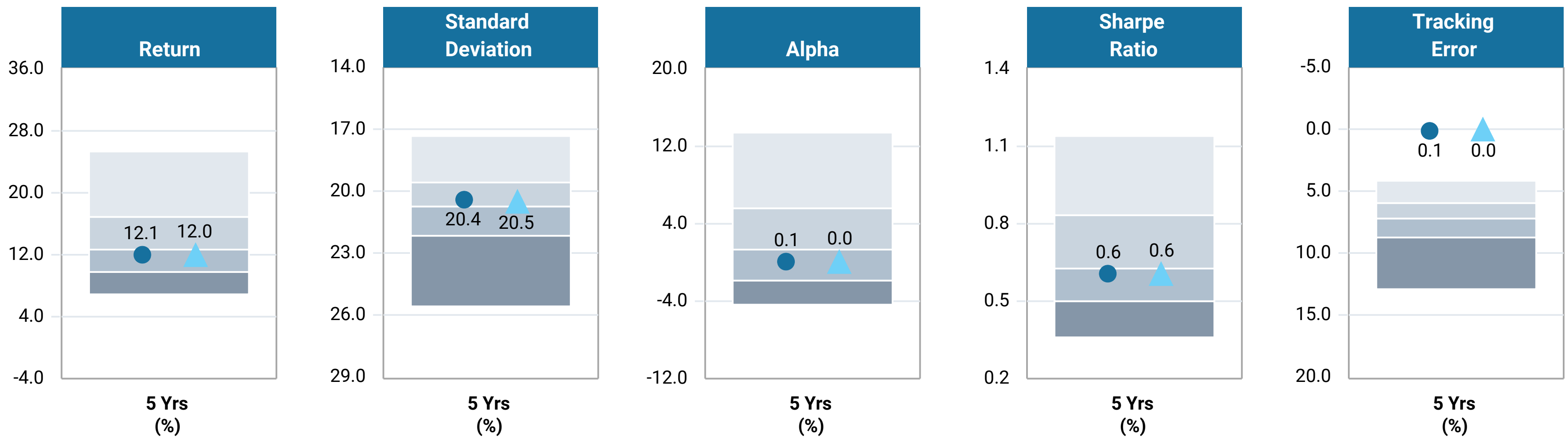
RHUMBLINE ADVISORS RUSSELL 2000

5 Years Return vs. Standard Deviation



Rolling 3 Years Style Map

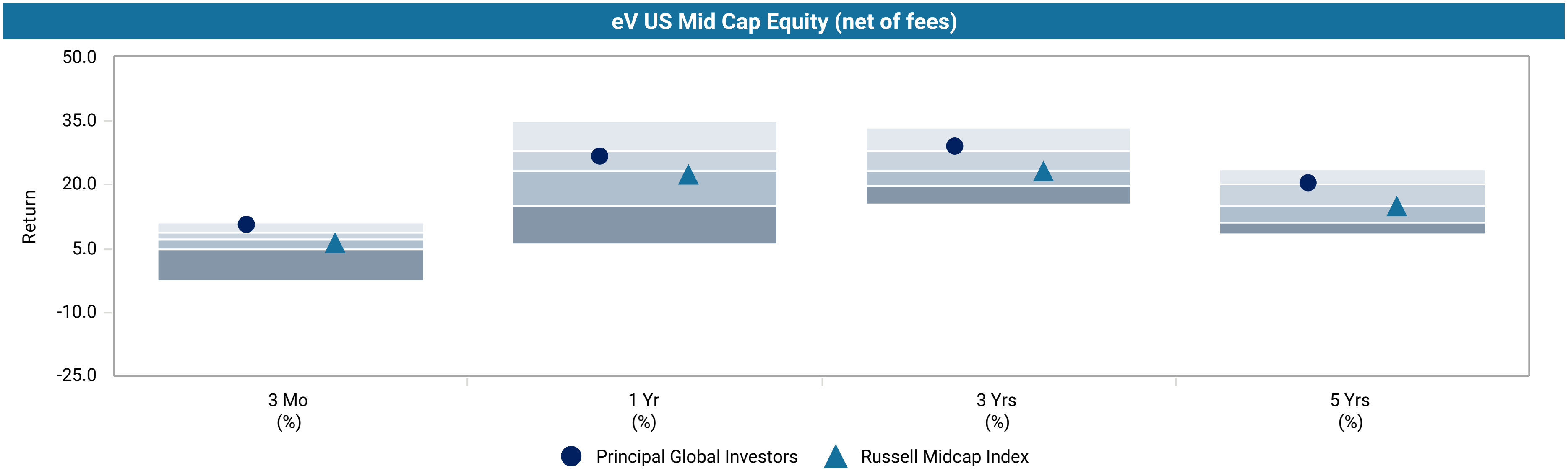


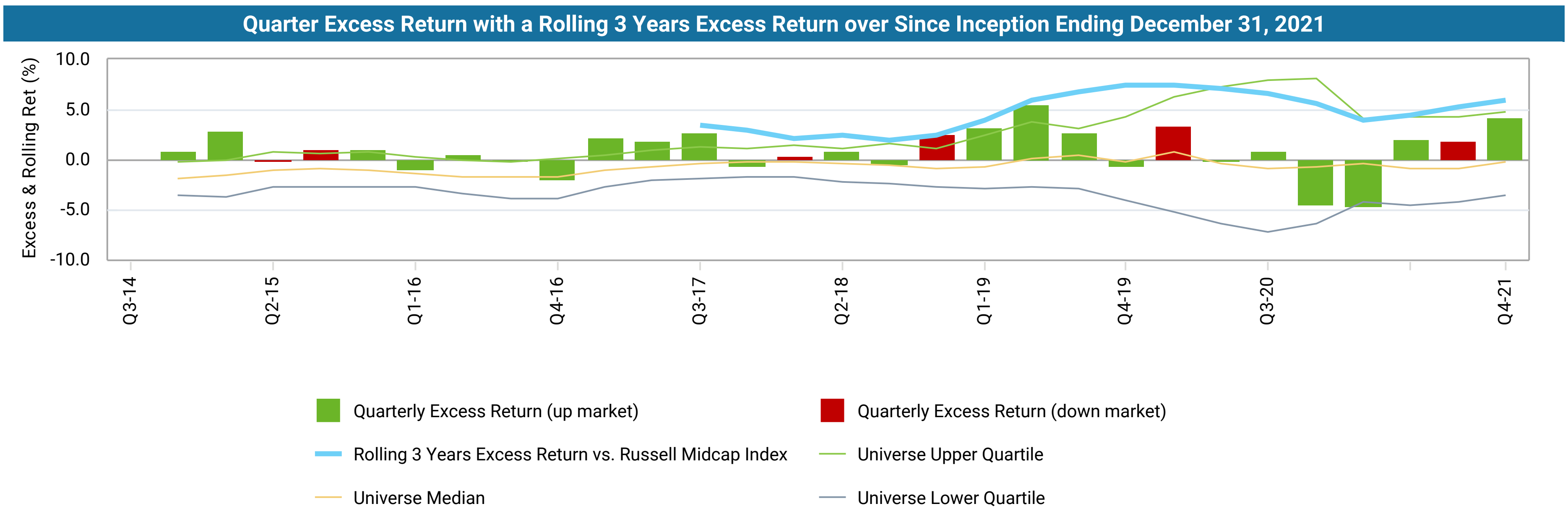


Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

PRINCIPAL GLOBAL INVESTORS



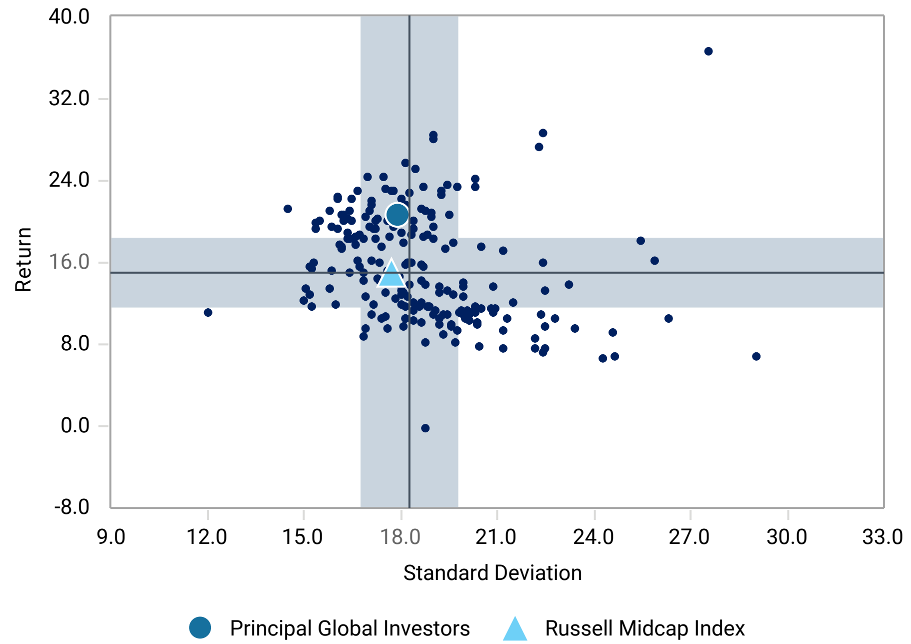


Los Angeles City Employees' Retirement System-LACERS Master Trust

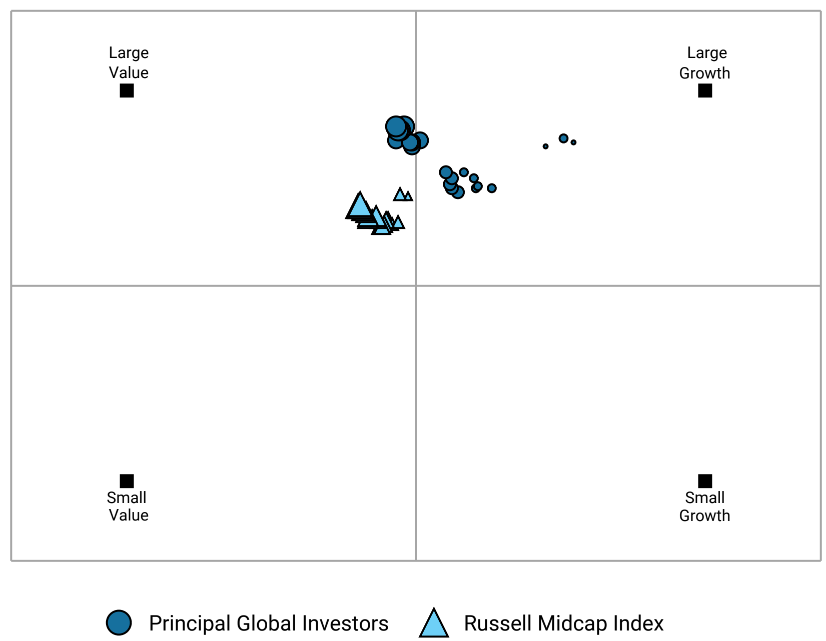
December 31, 2021

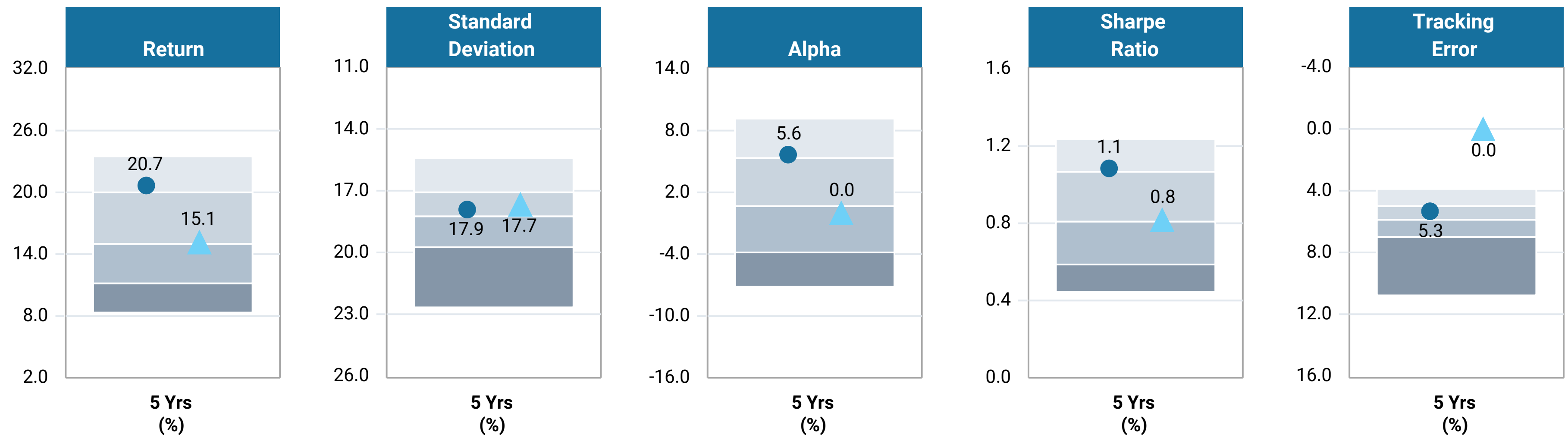
PRINCIPAL GLOBAL INVESTORS

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



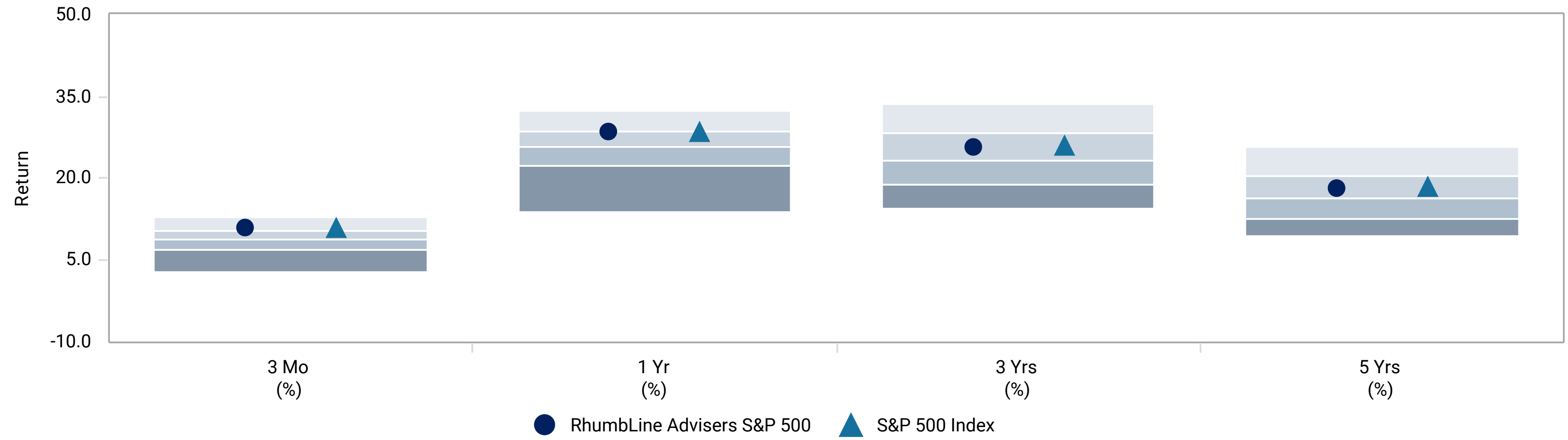


Los Angeles City Employees' Retirement System-LACERS Master Trust

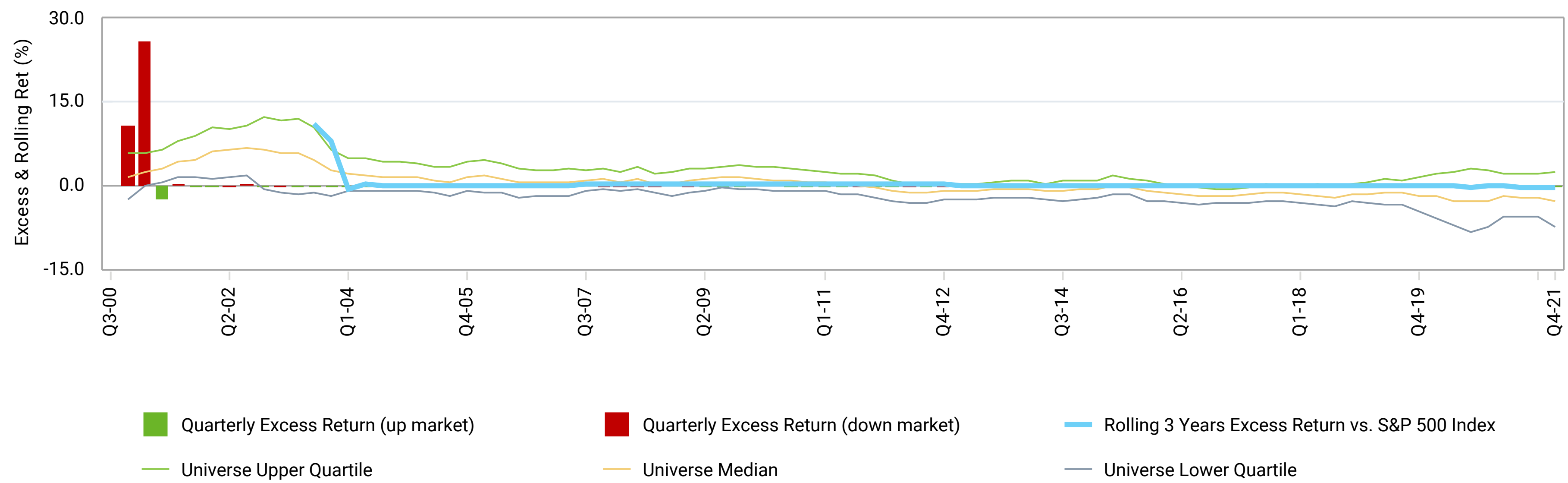
December 31, 2021

RHUMBLINE ADVISORS S&P 500

eV US Large Cap Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

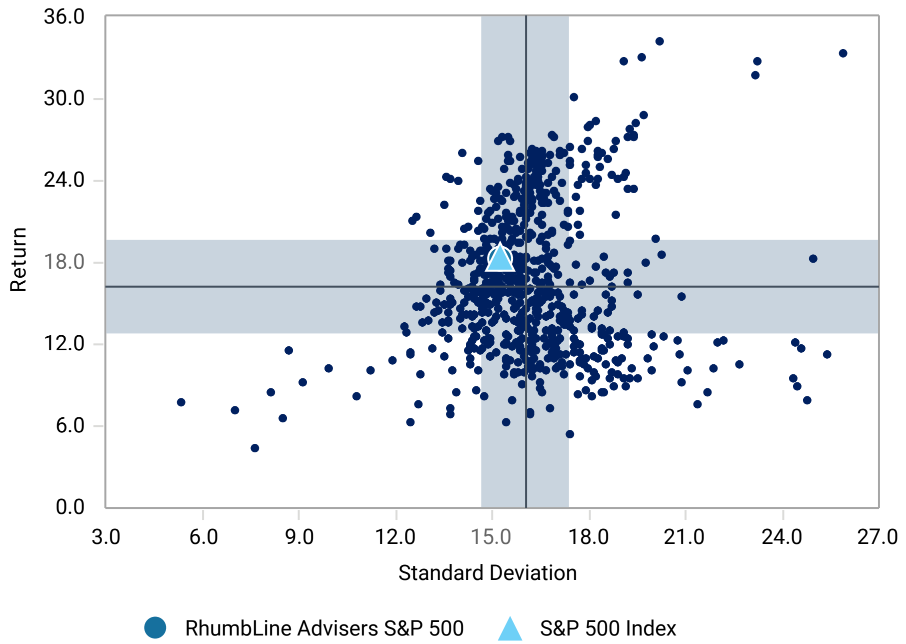


Los Angeles City Employees' Retirement System-LACERS Master Trust

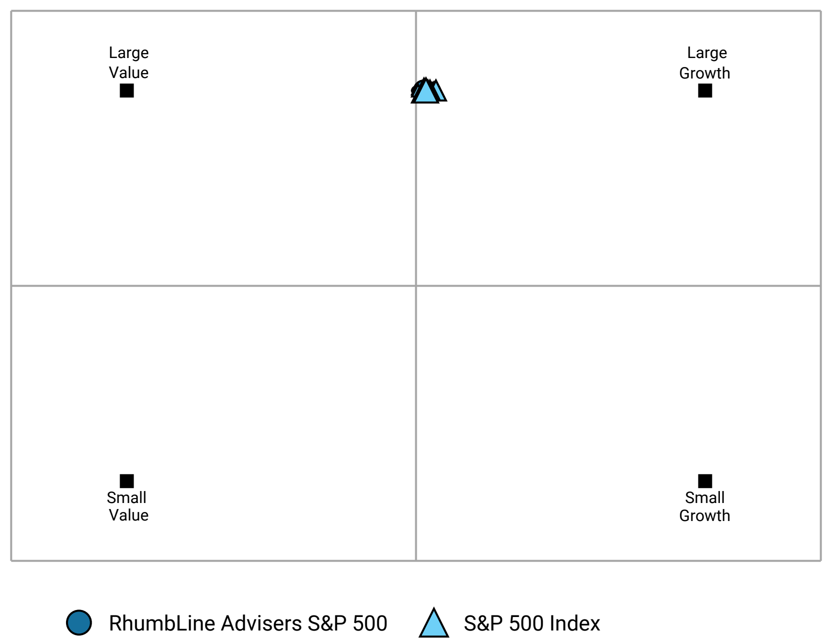
December 31, 2021

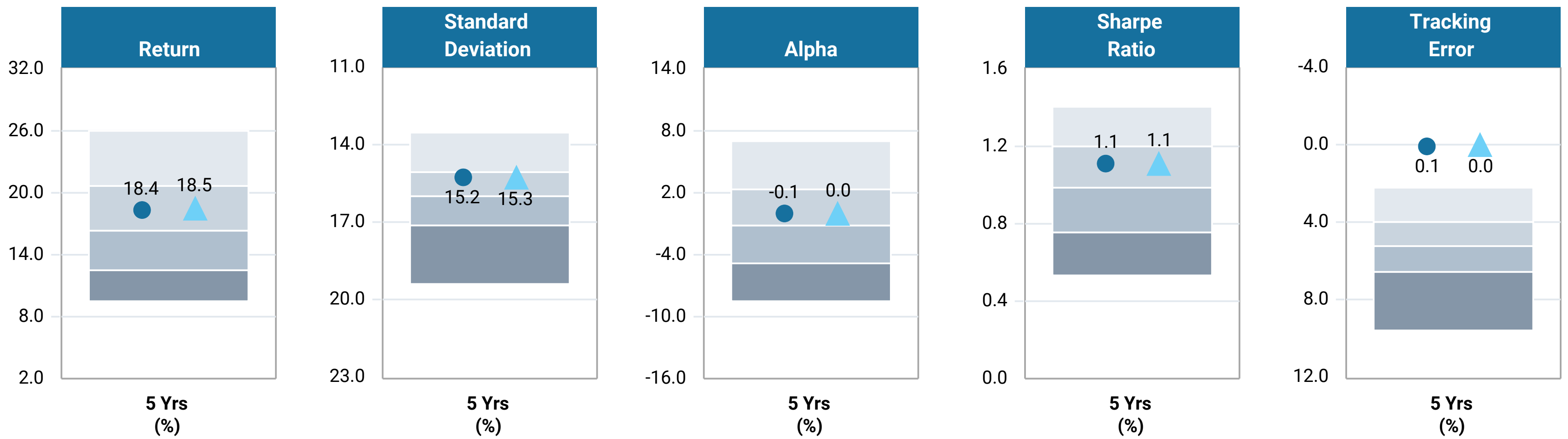
RHUMBLINE ADVISORS S&P 500

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



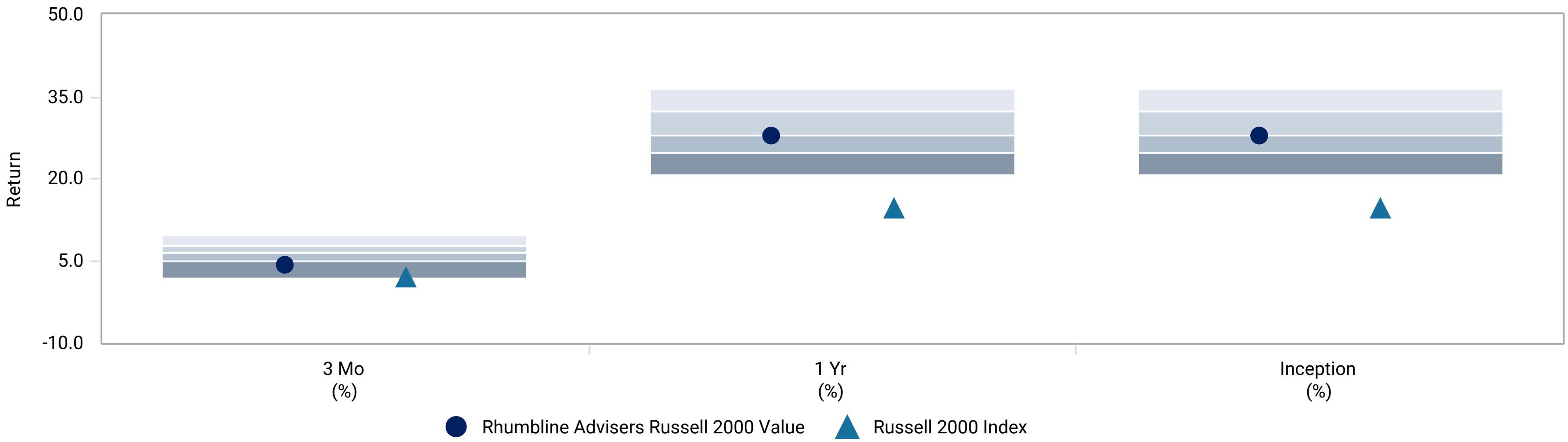


Los Angeles City Employees' Retirement System-LACERS Master Trust

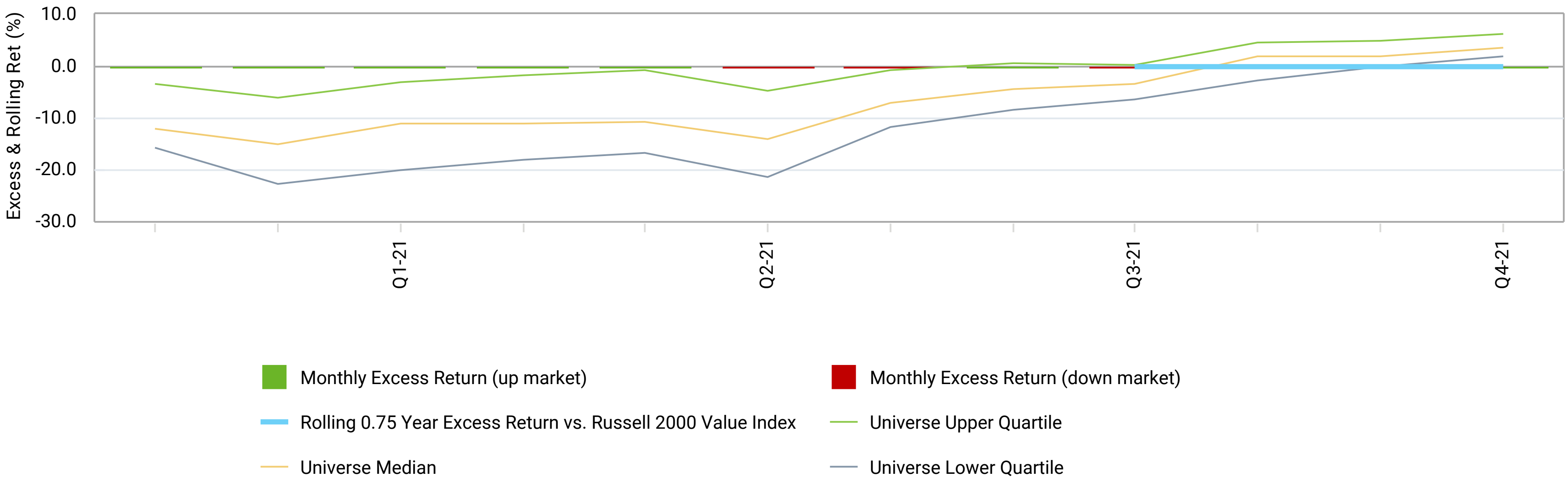
December 31, 2021

RHUMBLINE ADVISERS RUSSELL 2000 VALUE

eV US Small-Mid Cap Value Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

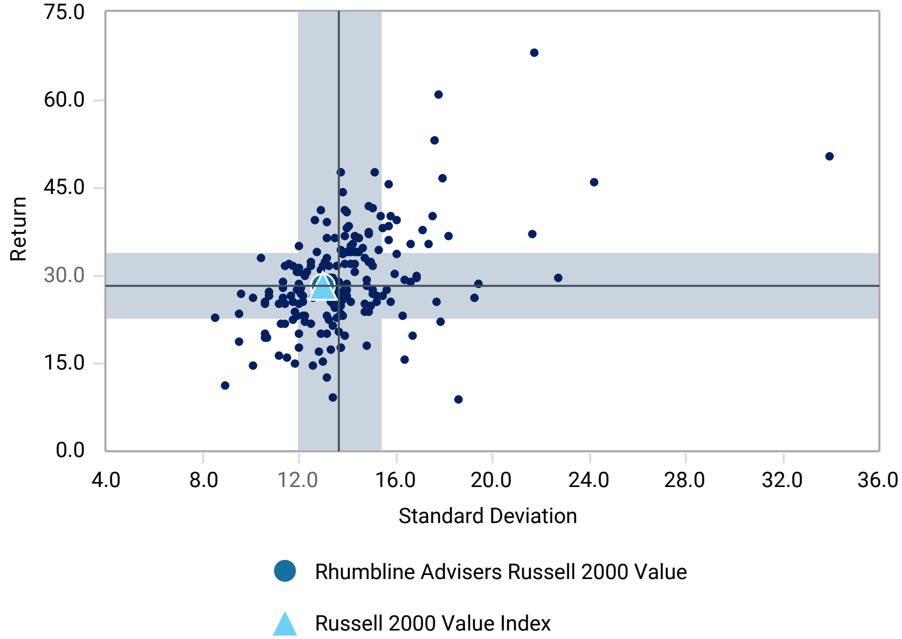


Los Angeles City Employees' Retirement System-LACERS Master Trust

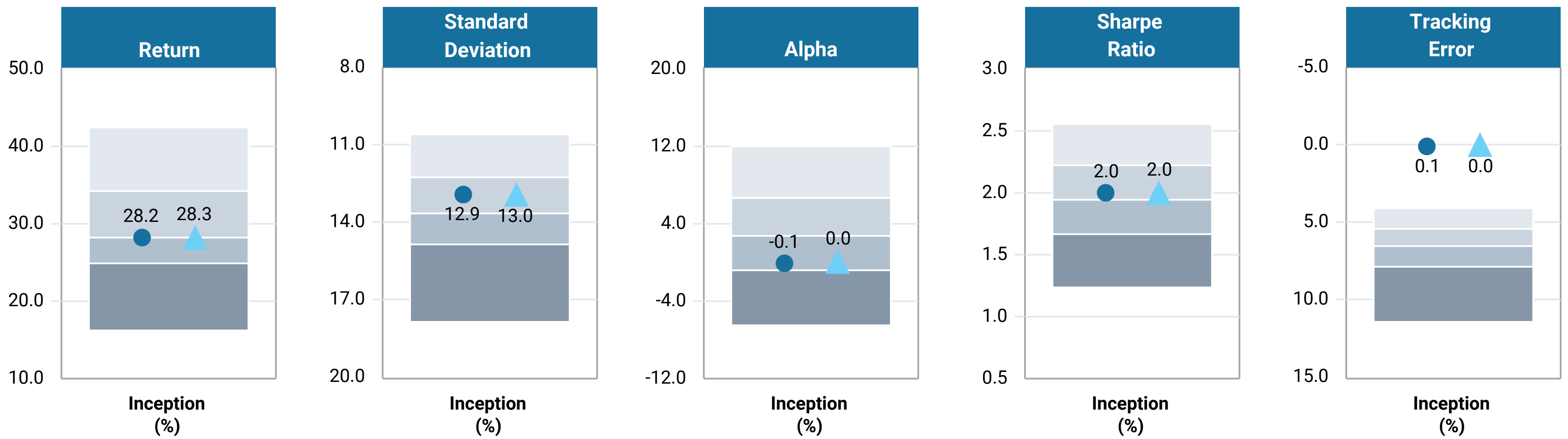
December 31, 2021

RHUMBLINE ADVISERS RUSSELL 2000 VALUE

Since Inception Return vs. Standard Deviation



Rolling 0.75 Year Style Map

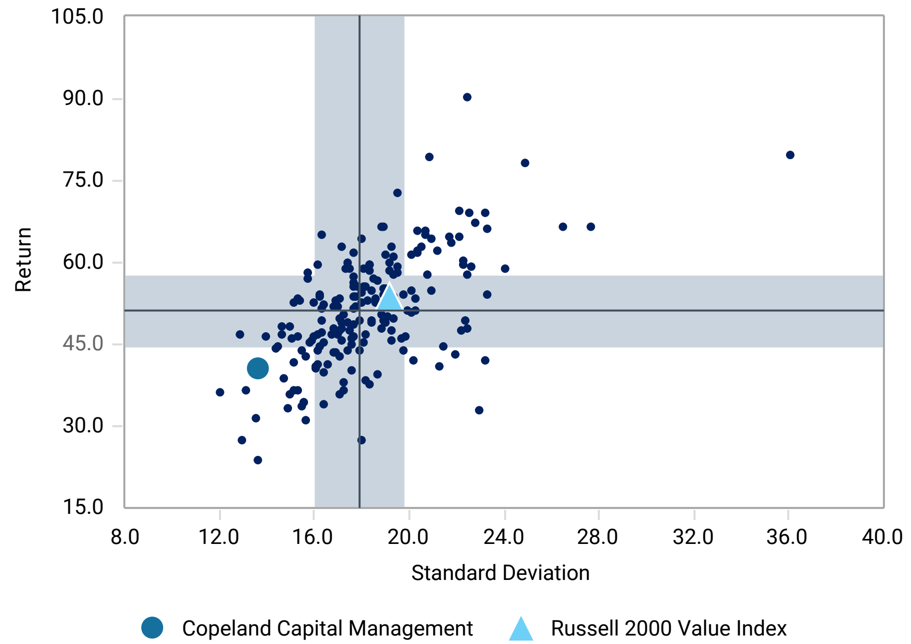


Los Angeles City Employees' Retirement System-LACERS Master Trust

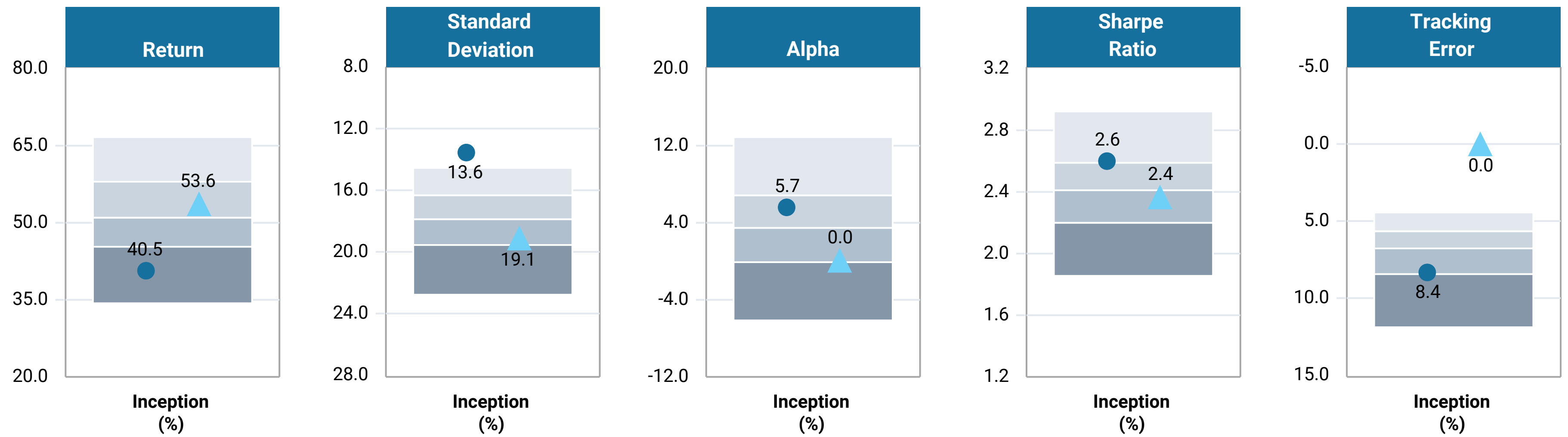
December 31, 2021

COPELAND CAPITAL MANAGEMENT

Since Inception Return vs. Standard Deviation



Rolling 0.75 Year Style Map

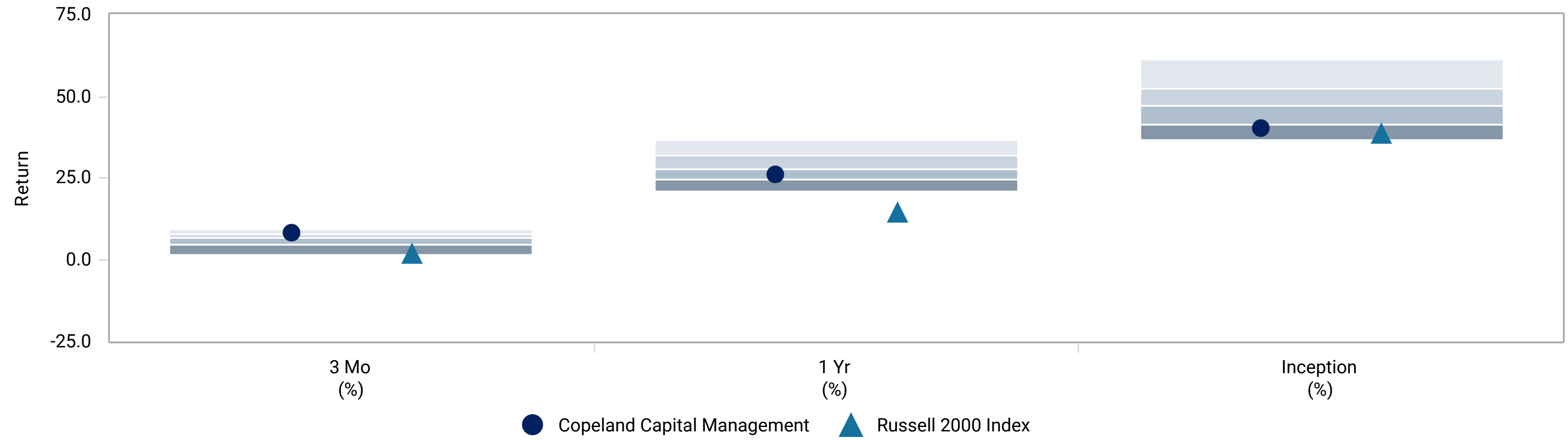


Los Angeles City Employees' Retirement System-LACERS Master Trust

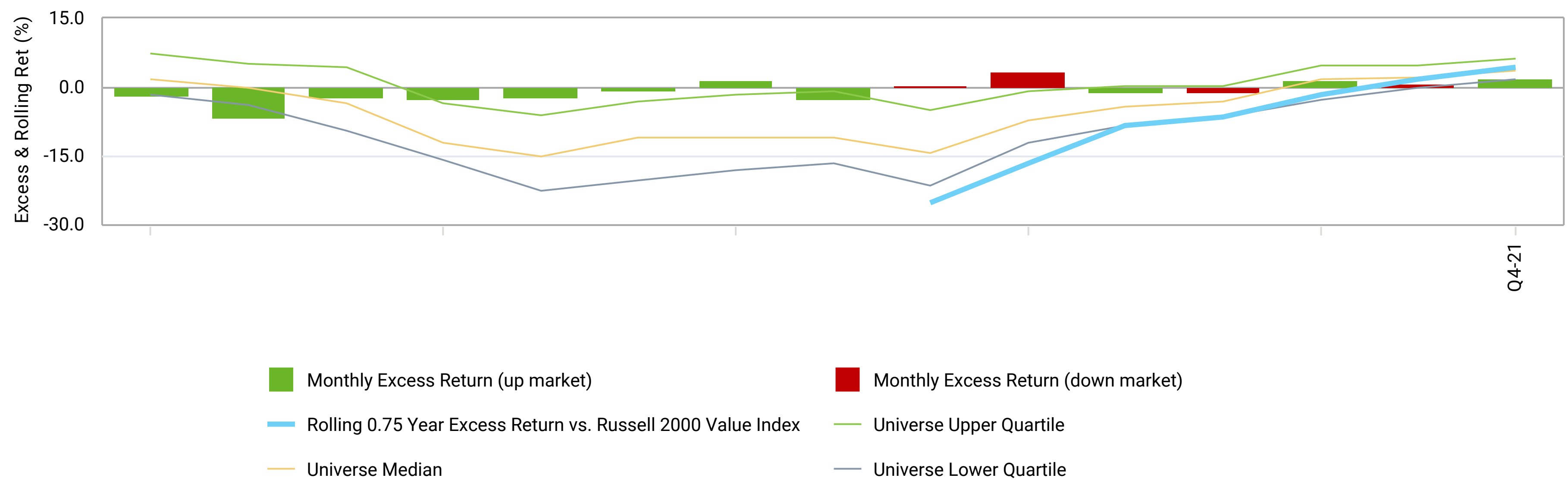
December 31, 2021

COPELAND CAPITAL MANAGEMENT

eV US Small-Mid Cap Value Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

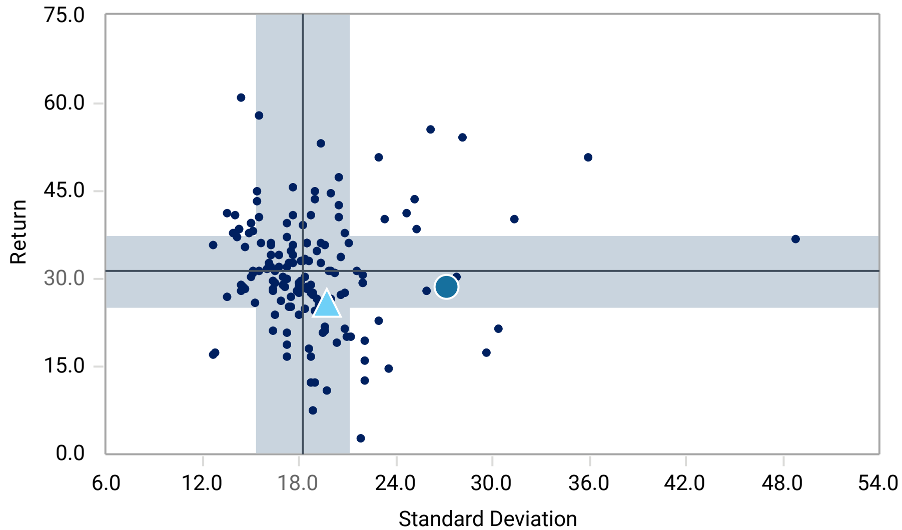


Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

GRANAHAN INVESTMENT MANAGEMENT

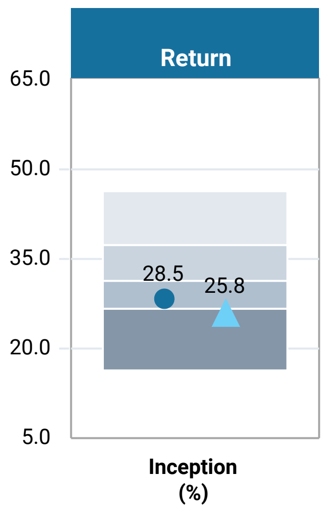
Since Inception Return vs. Standard Deviation

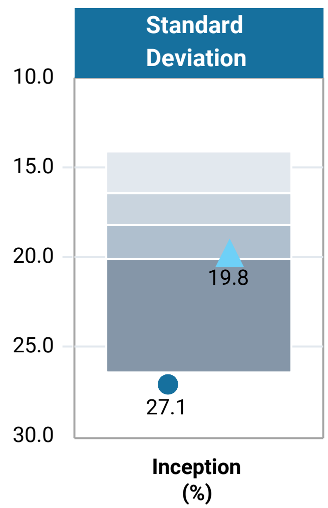


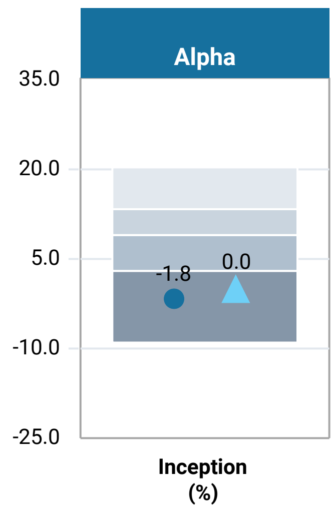
Granahan Investment Management
Russell 2000 Growth Index

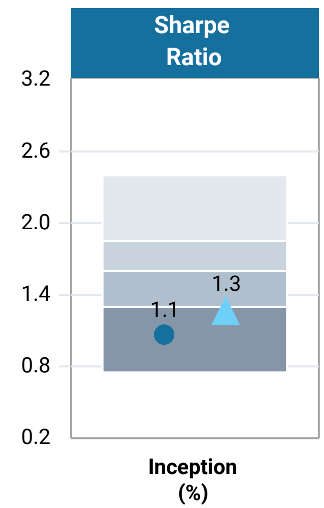
Rolling 0.75 Year Style Map

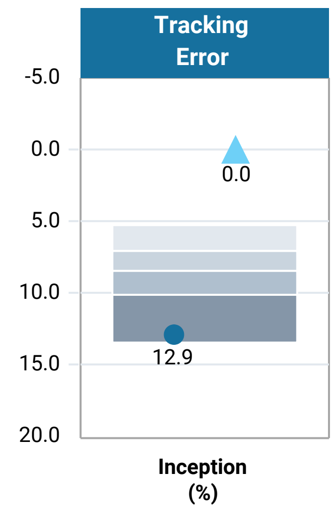
Granahan Investment Management
Russell 2000 Growth Index









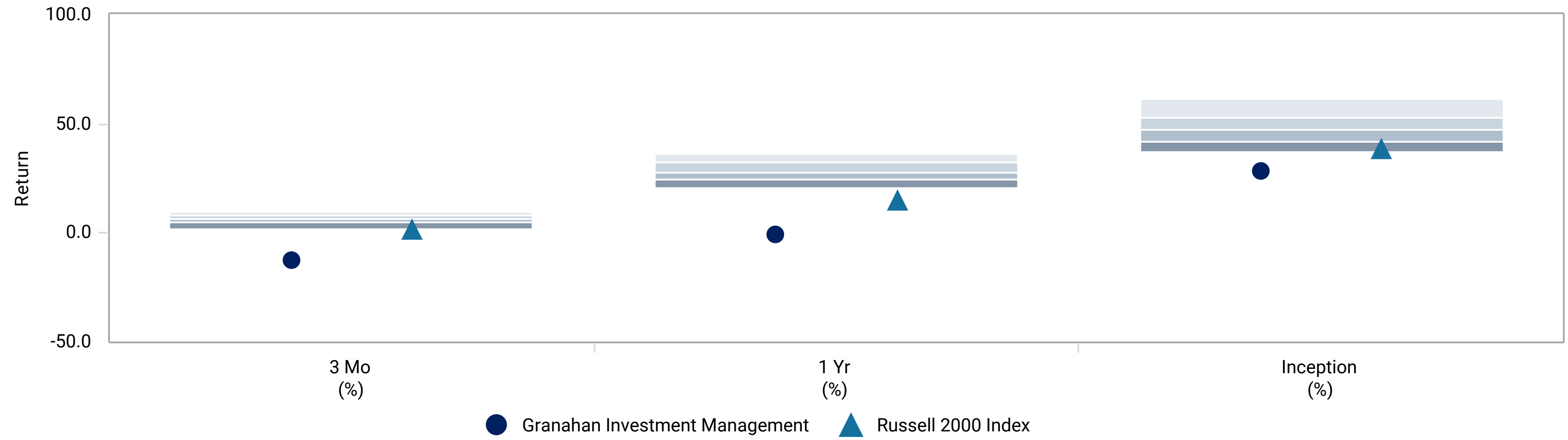


Los Angeles City Employees' Retirement System-LACERS Master Trust

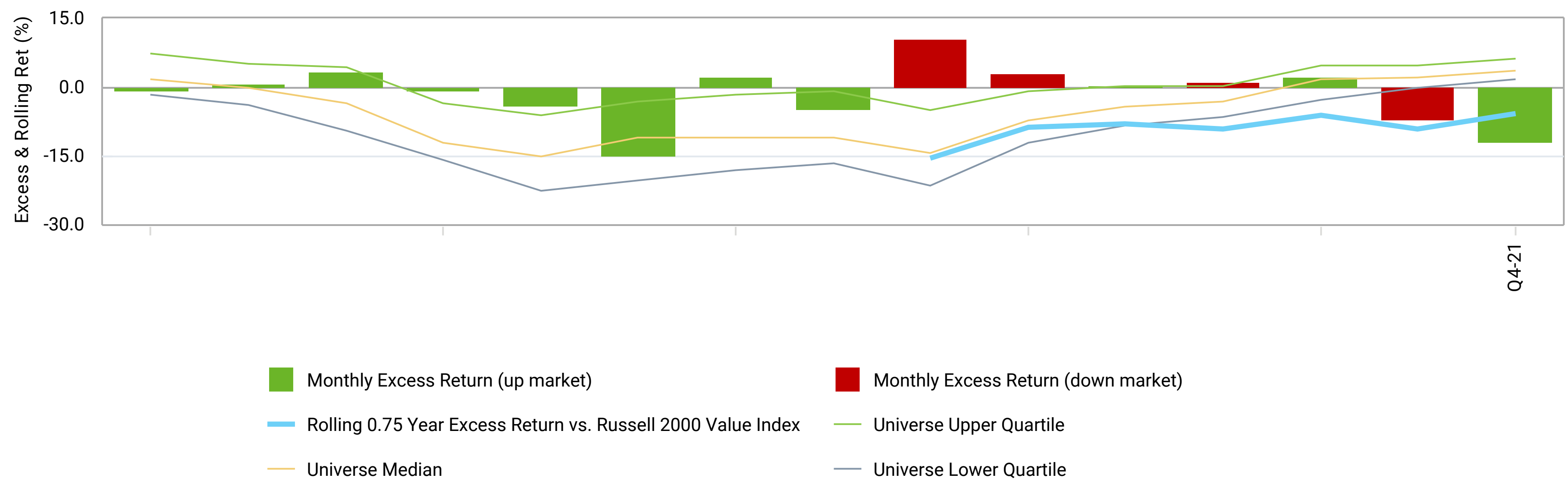
December 31, 2021

GRANAHAN INVESTMENT MANAGEMENT

eV US Small-Mid Cap Value Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

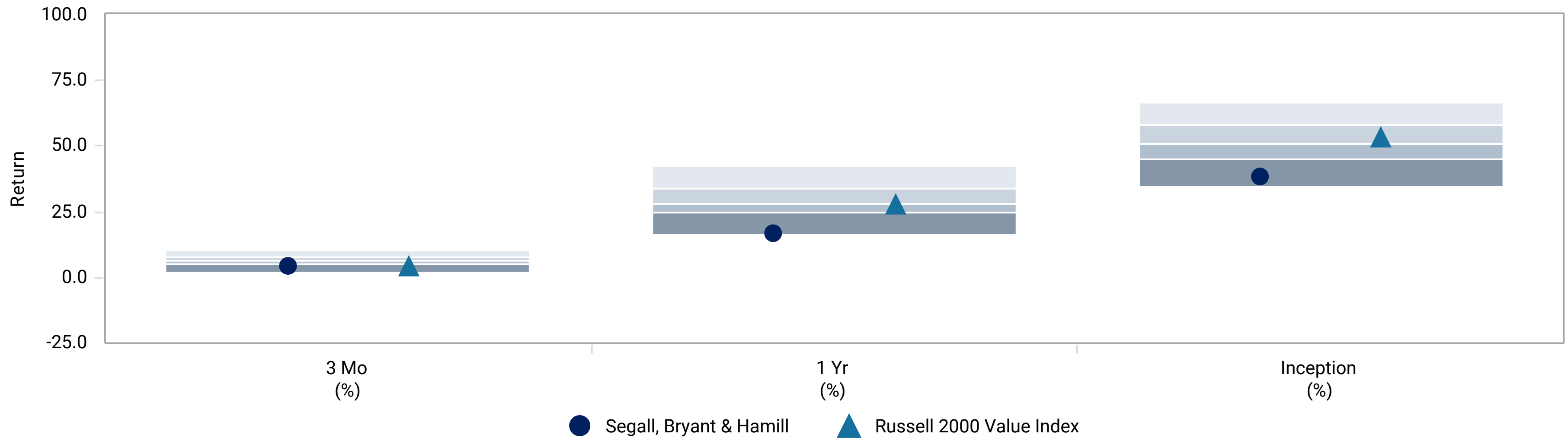


Los Angeles City Employees' Retirement System-LACERS Master Trust

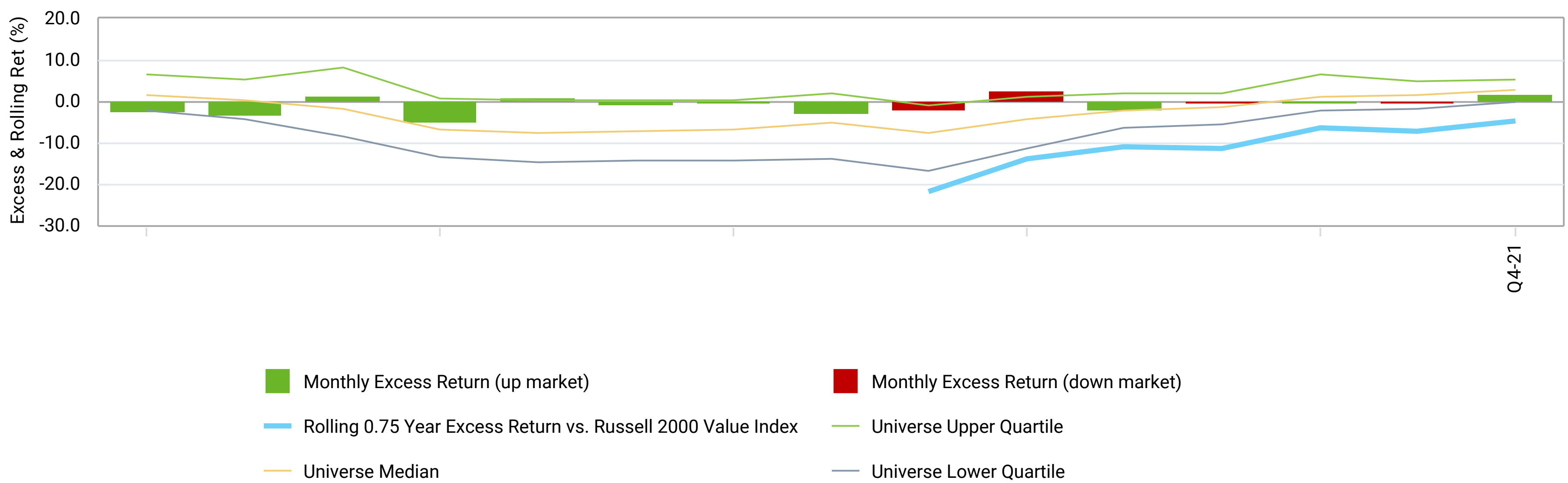
December 31, 2021

SEGALL, BRYANT & HAMILL

eV US Small Cap Value Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

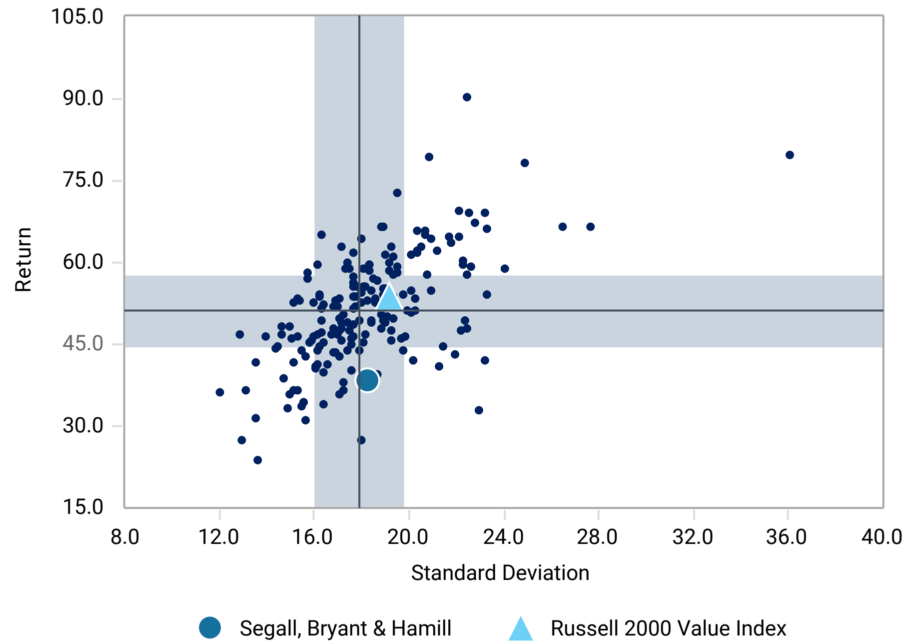


Los Angeles City Employees' Retirement System-LACERS Master Trust

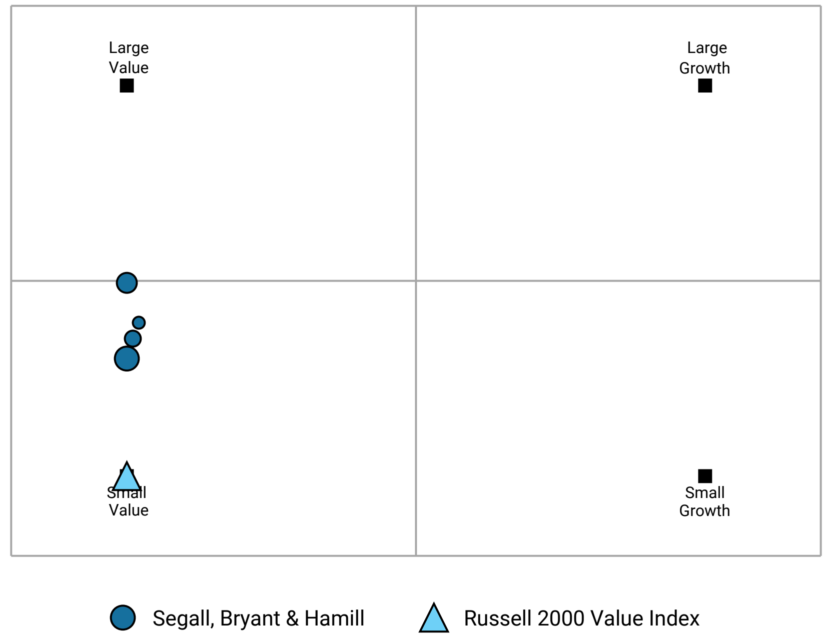
December 31, 2021

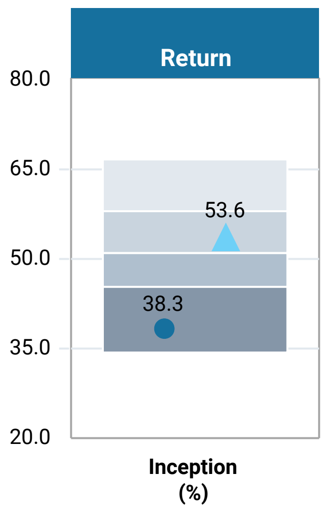
SEGALL, BRYANT & HAMILL

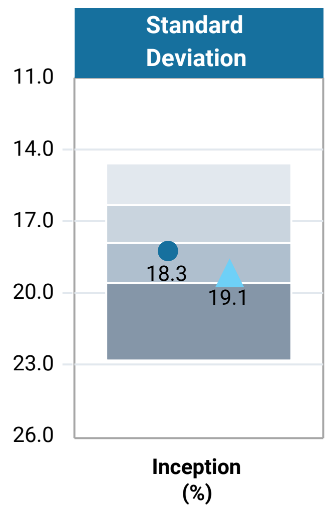
Since Inception Return vs. Standard Deviation

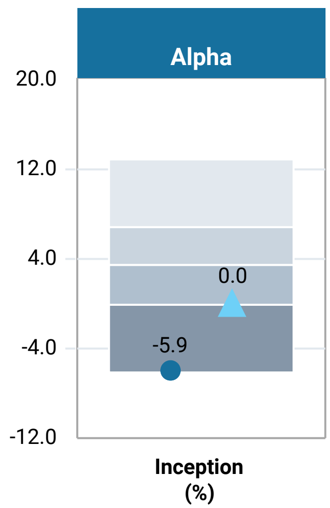


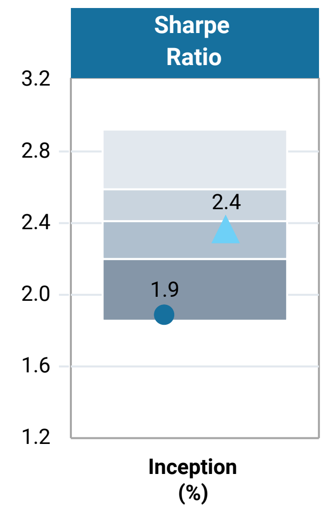
Rolling 0.75 Year Style Map

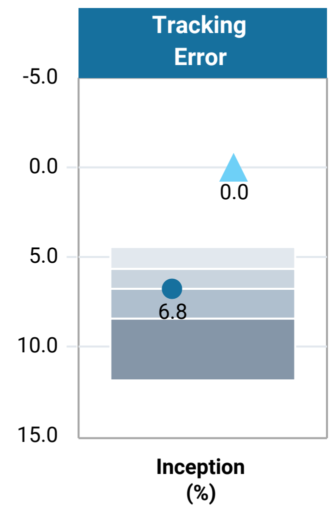


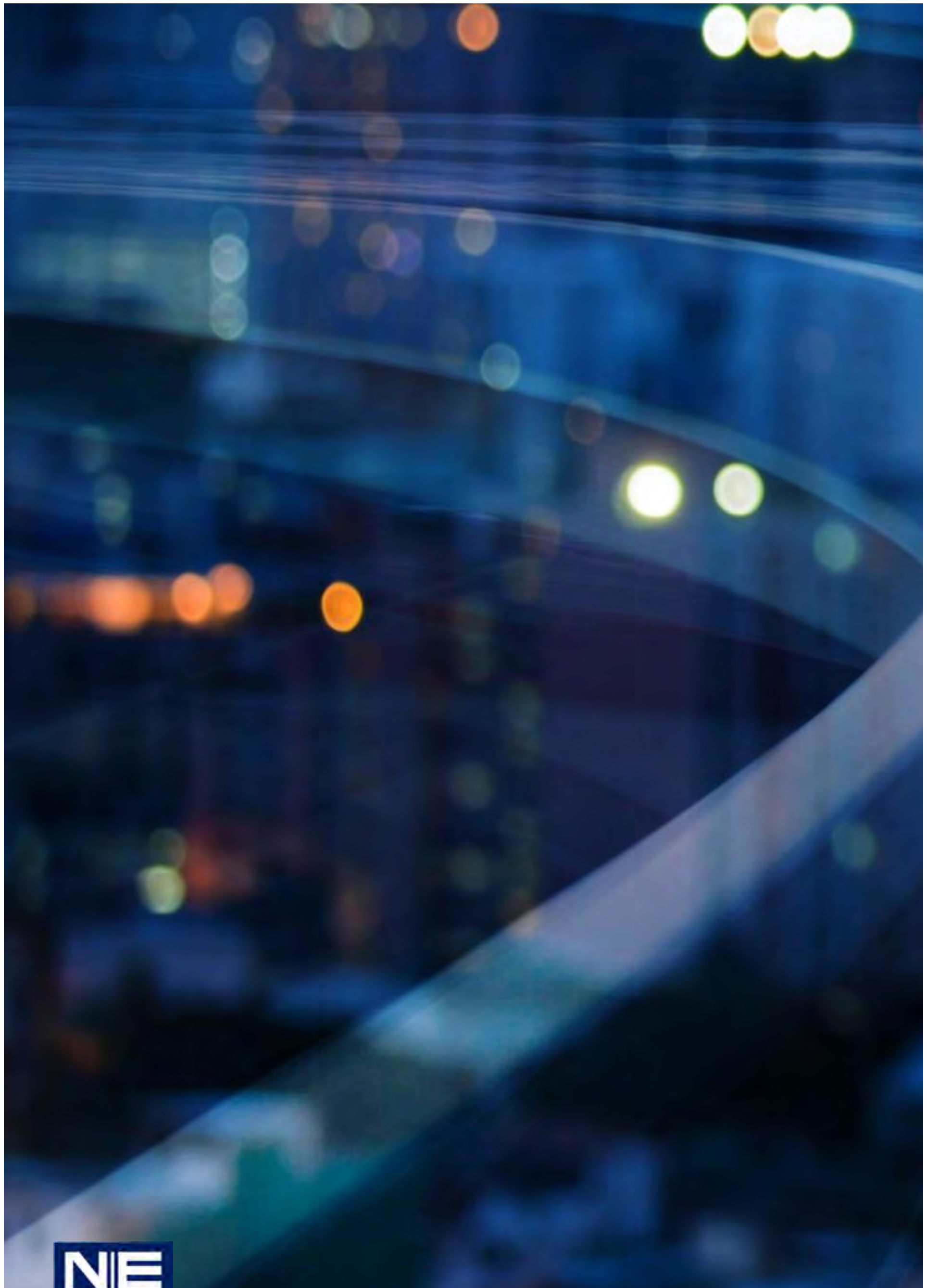












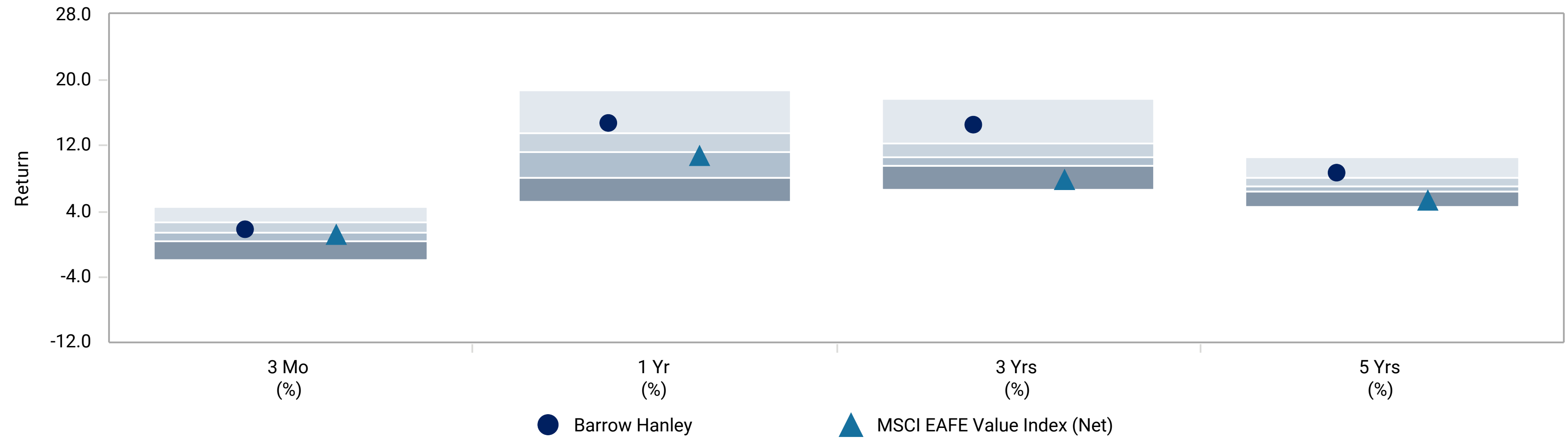
NON-U.S. EQUITY MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

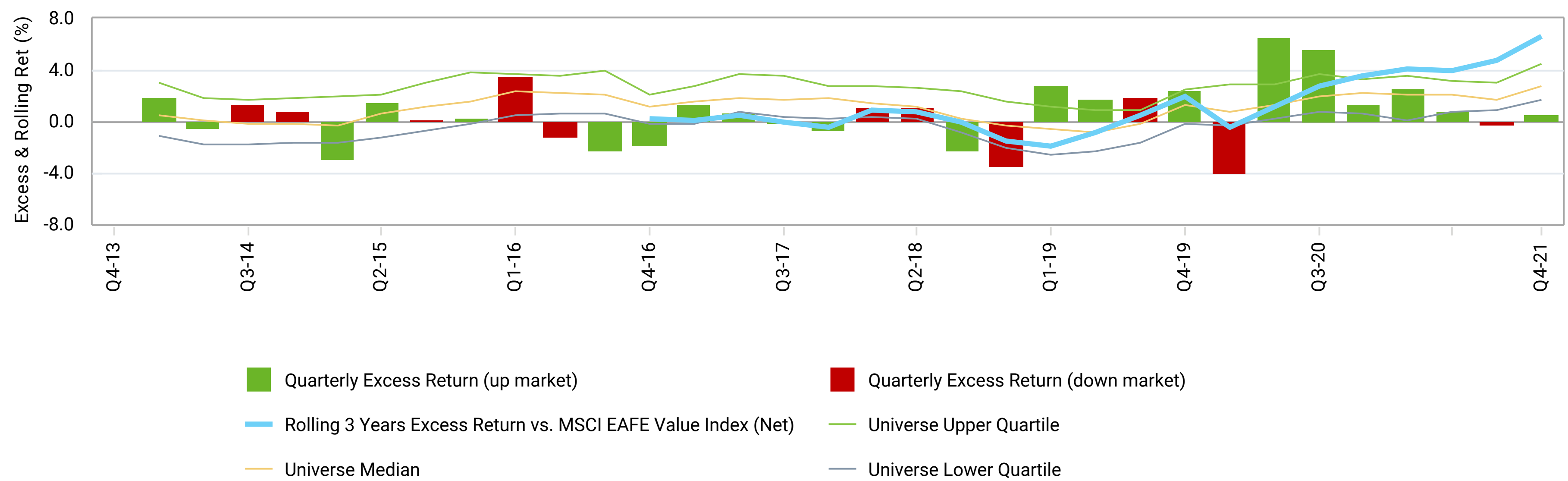
December 31, 2021

BARROW HANLEY

eV EAFE Value Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

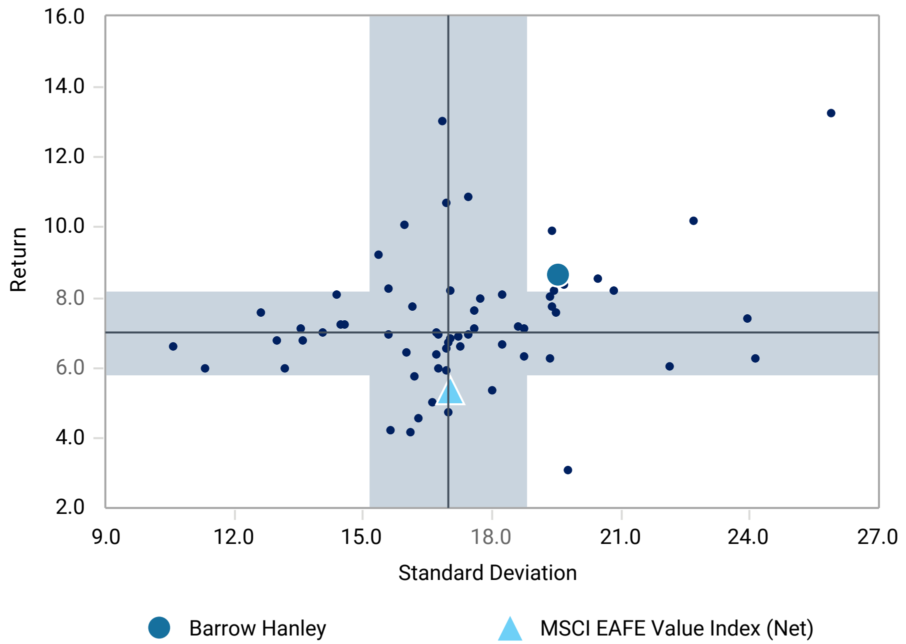


Los Angeles City Employees' Retirement System-LACERS Master Trust

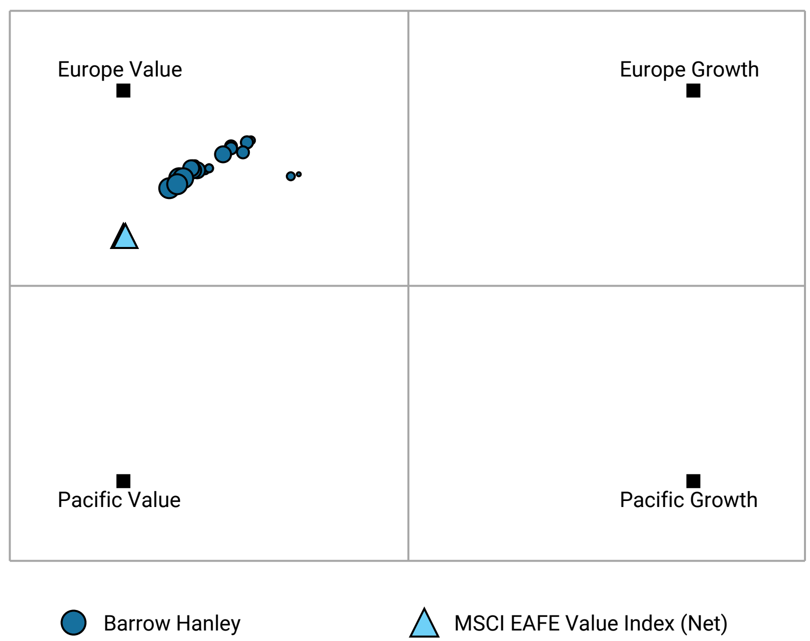
December 31, 2021

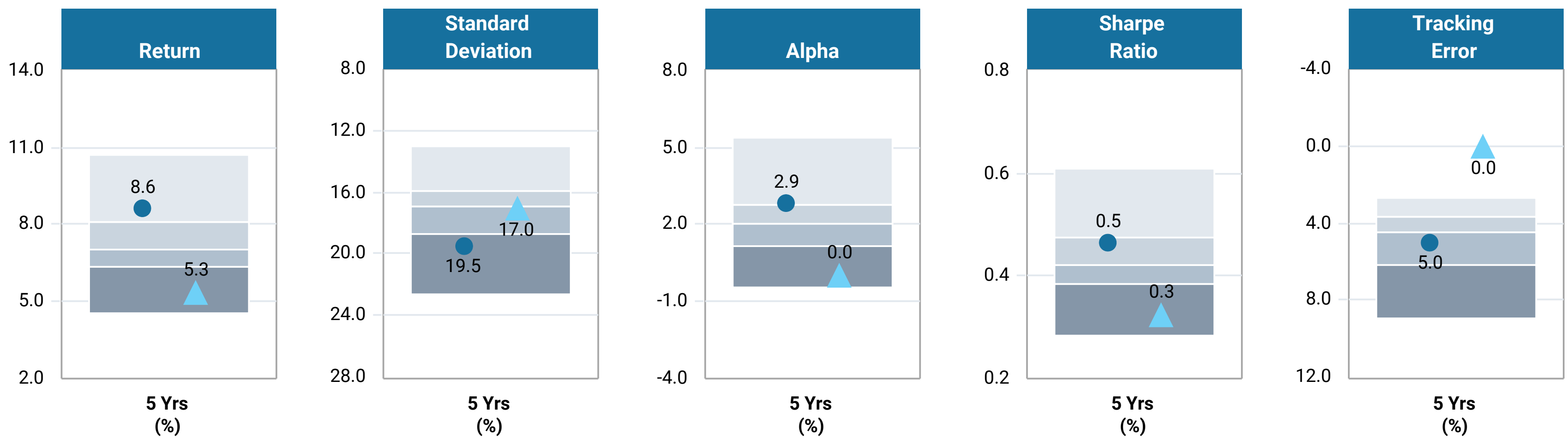
BARROW HANLEY

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



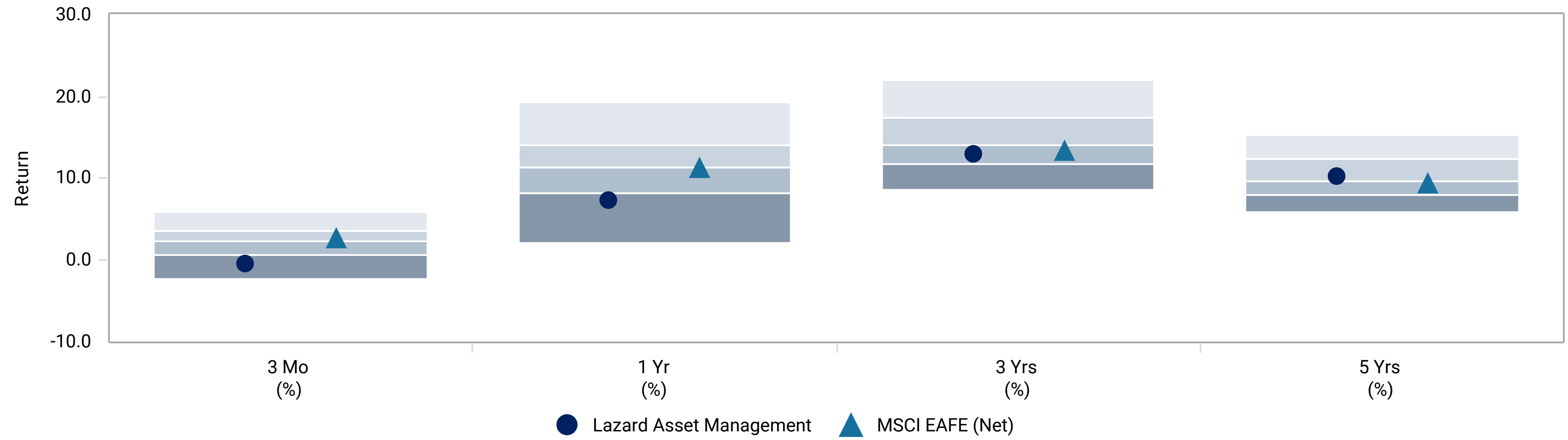


Los Angeles City Employees' Retirement System-LACERS Master Trust

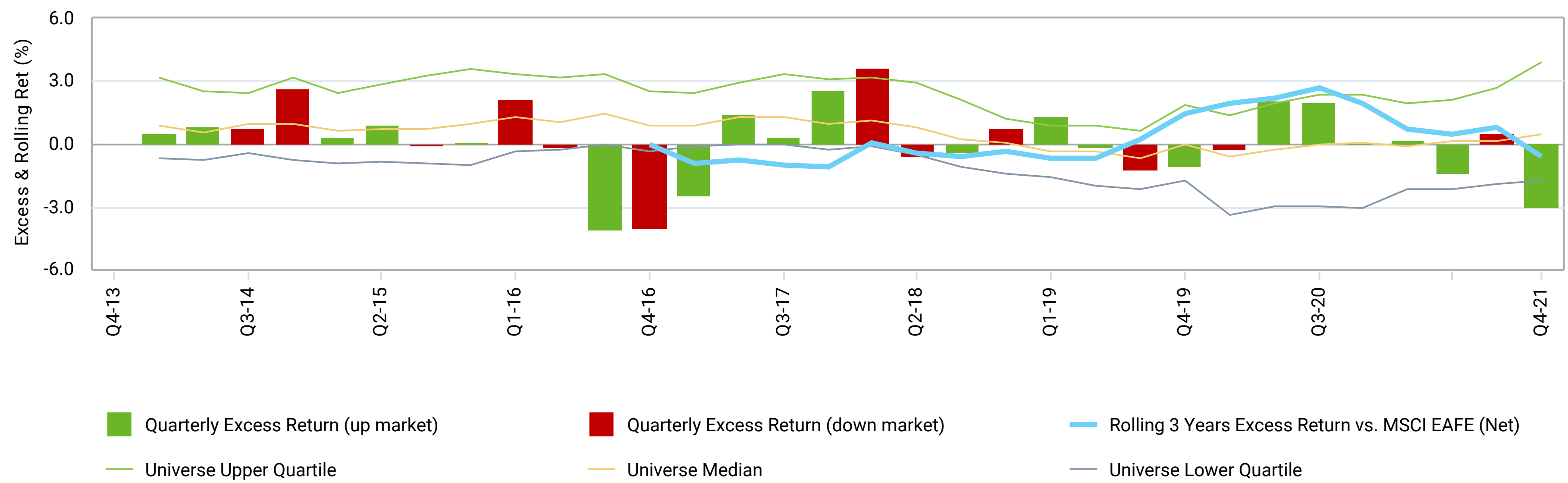
December 31, 2021

LAZARD ASSET MANAGEMENT

eV All EAFE Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

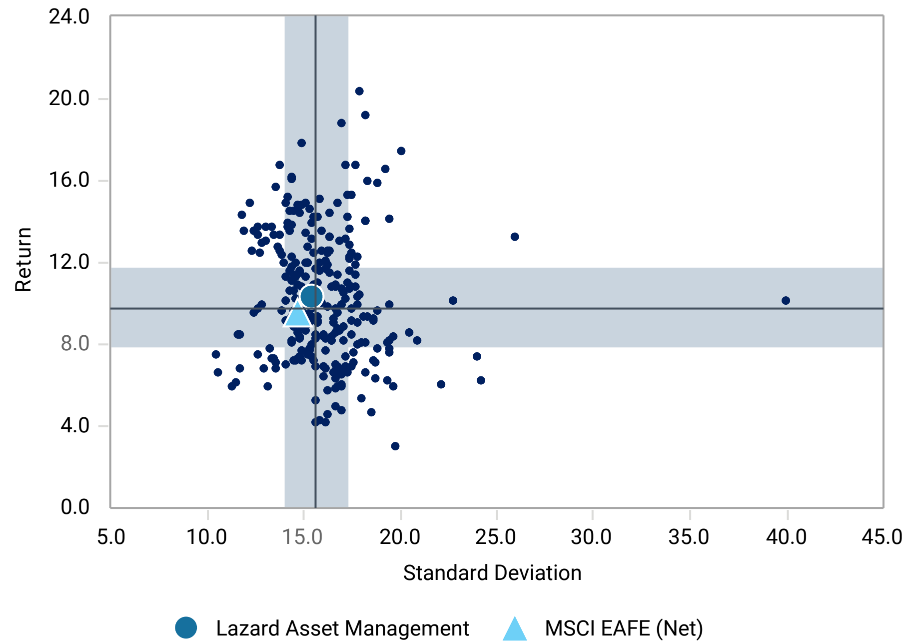


Los Angeles City Employees' Retirement System-LACERS Master Trust

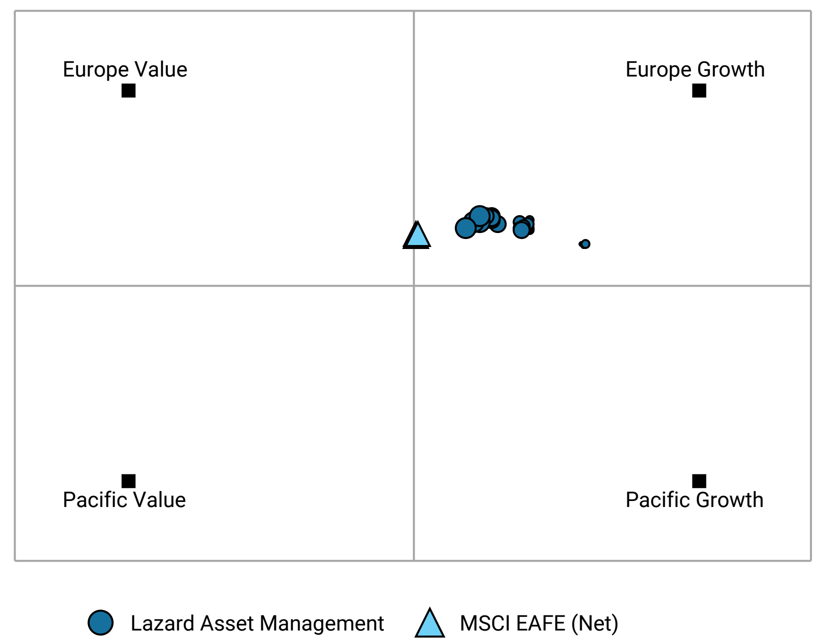
December 31, 2021

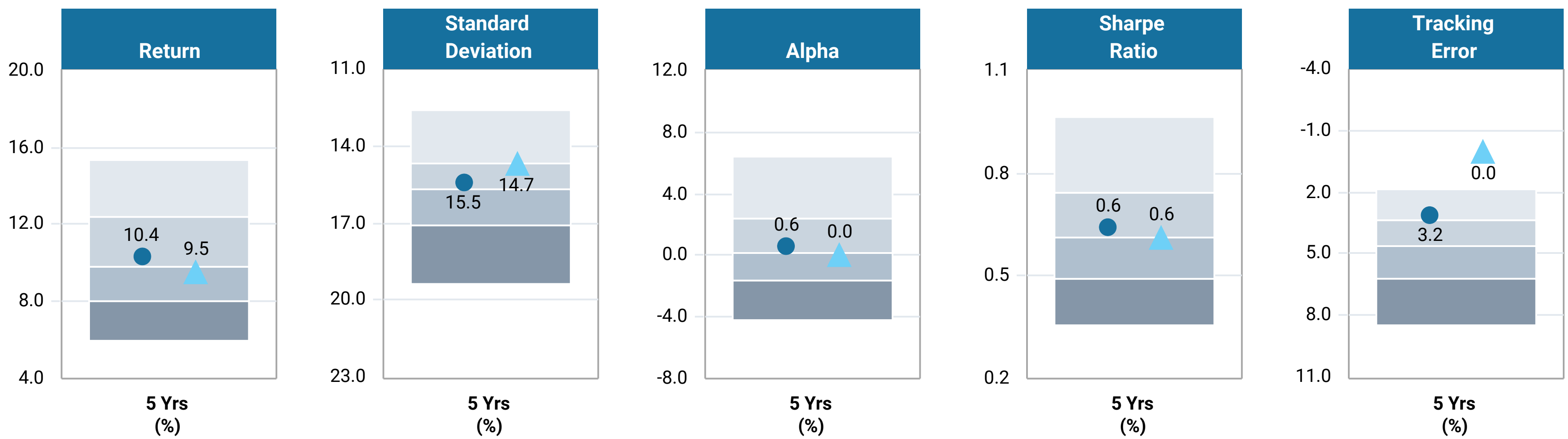
LAZARD ASSET MANAGEMENT

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



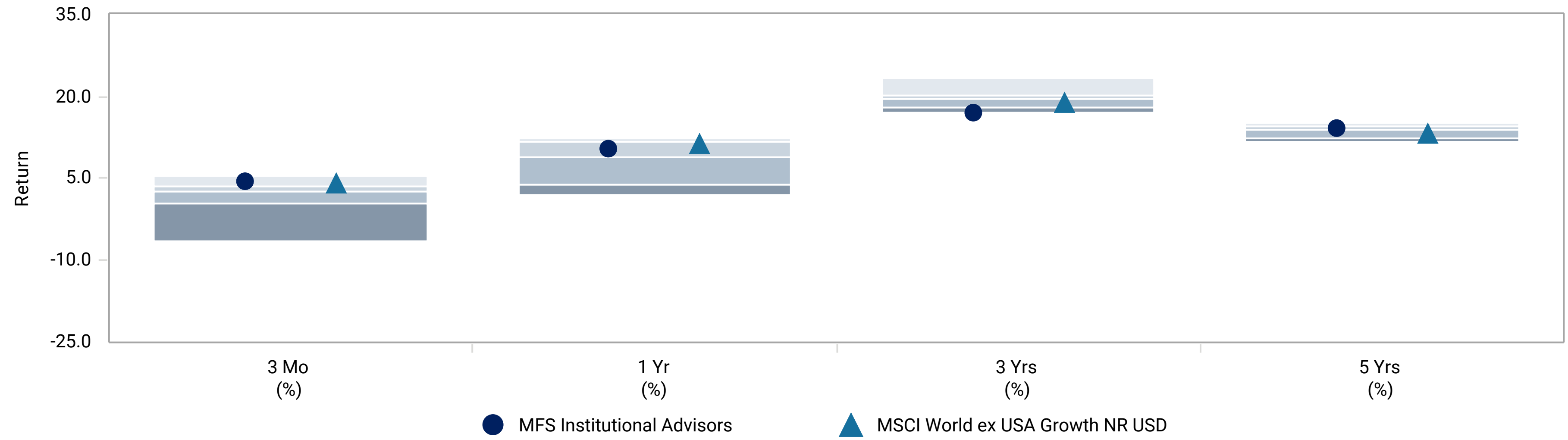


Los Angeles City Employees' Retirement System-LACERS Master Trust

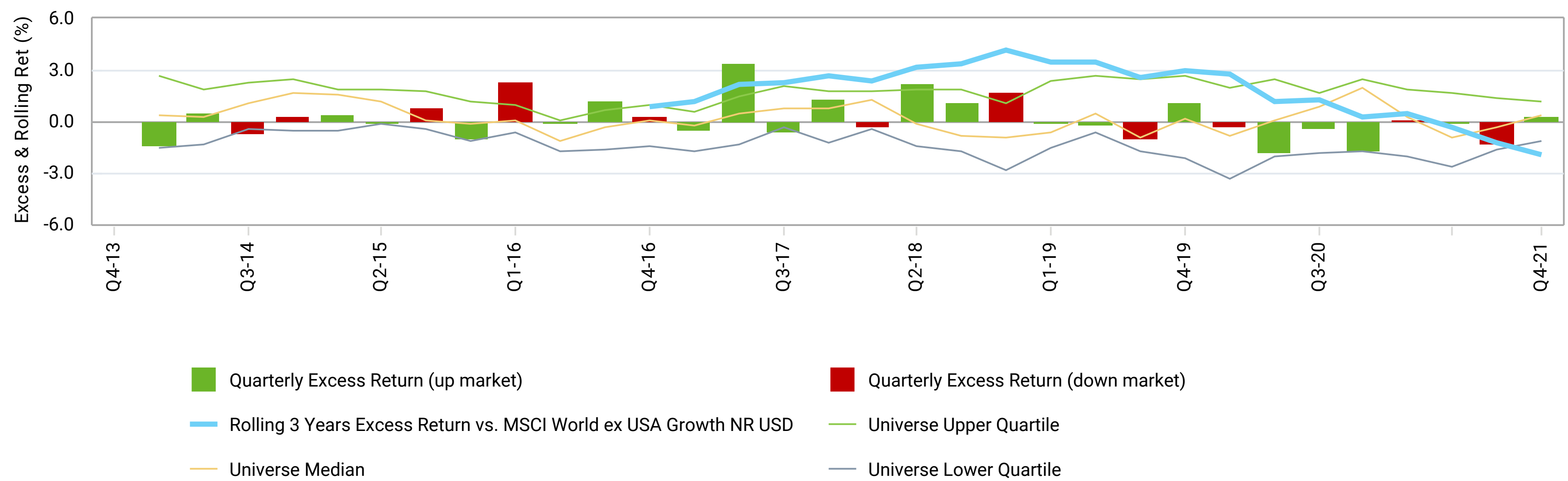
December 31, 2021

MFS INSTITUTIONAL ADVISORS

eV EAFE All Cap Growth (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

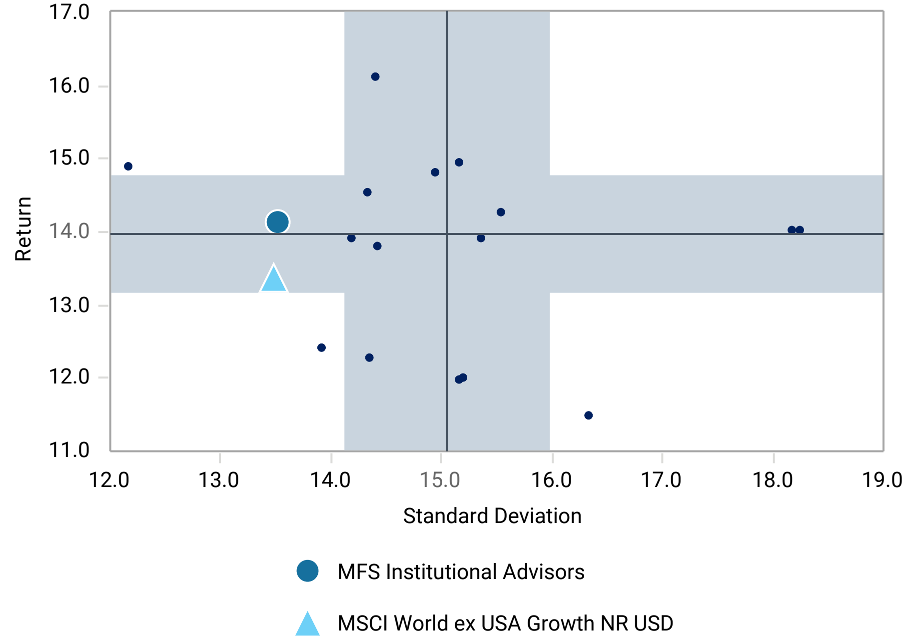


Los Angeles City Employees' Retirement System-LACERS Master Trust

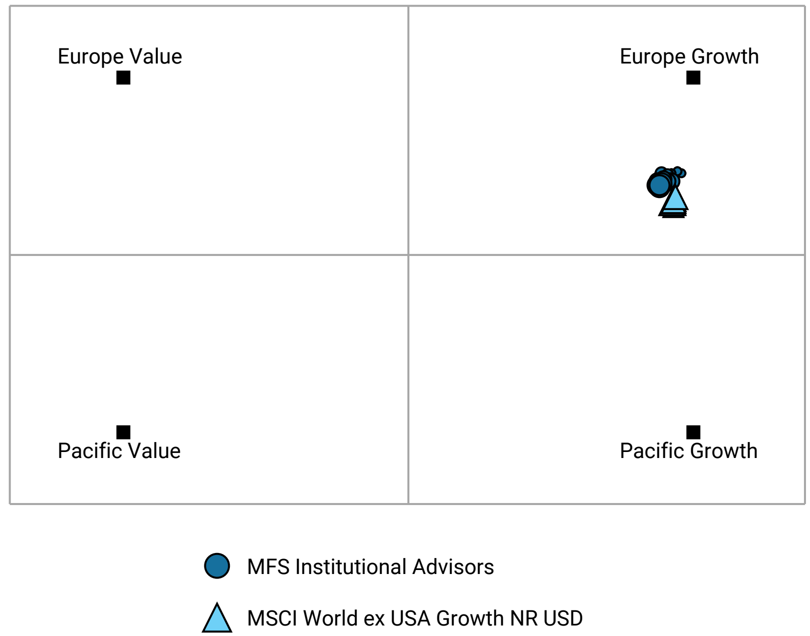
December 31, 2021

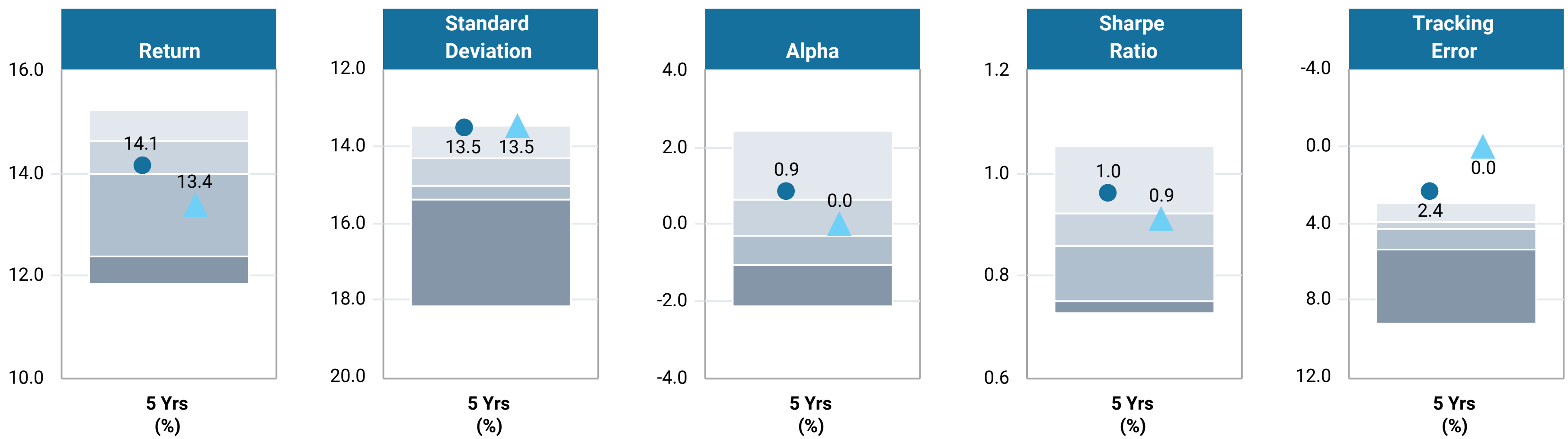
MFS INSTITUTIONAL ADVISORS

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



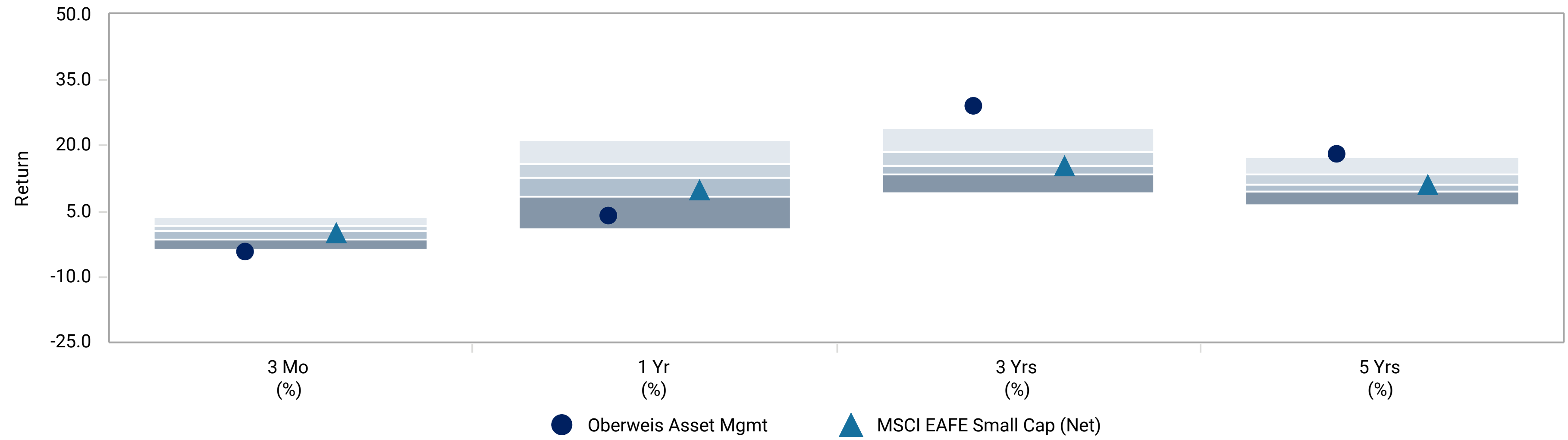


Los Angeles City Employees' Retirement System-LACERS Master Trust

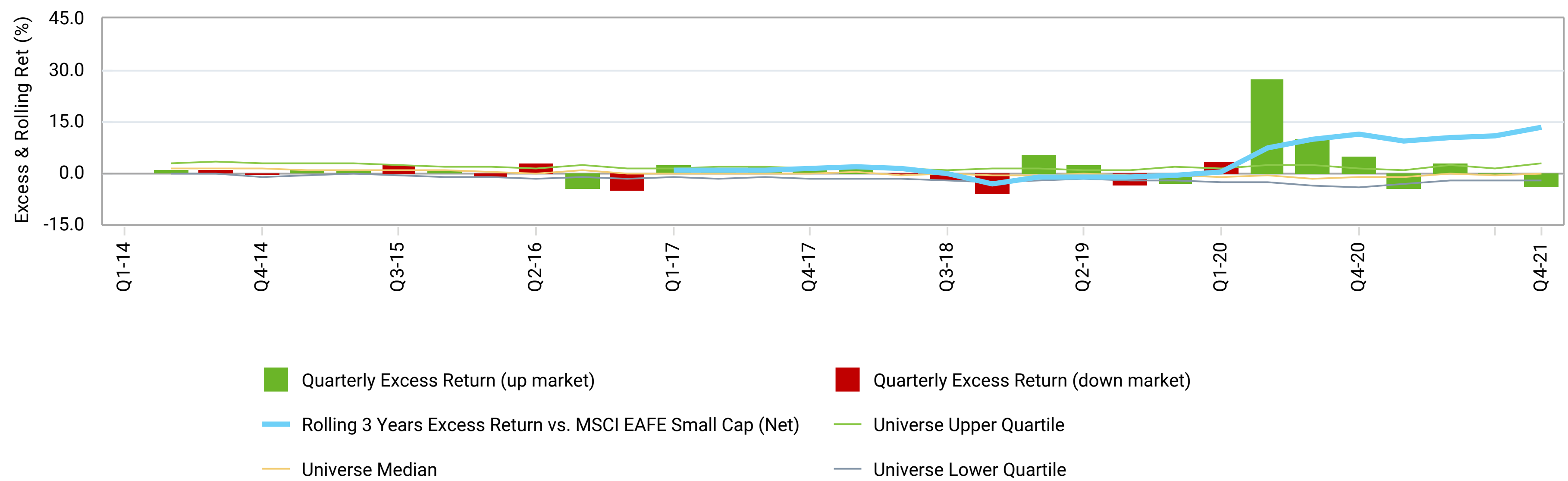
December 31, 2021

OBERWEIS ASSET MGMT

eV EAFE Small Cap Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

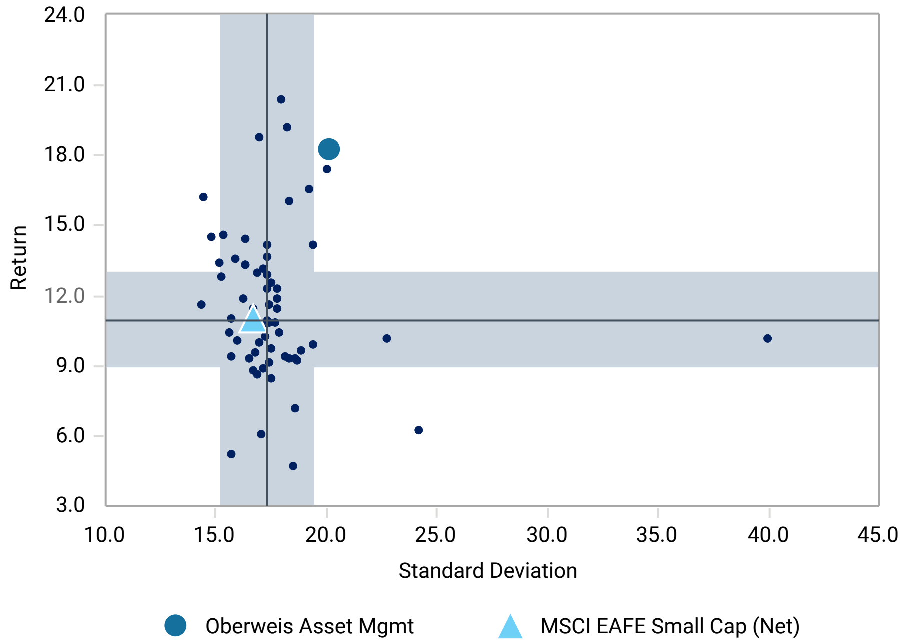


Los Angeles City Employees' Retirement System-LACERS Master Trust

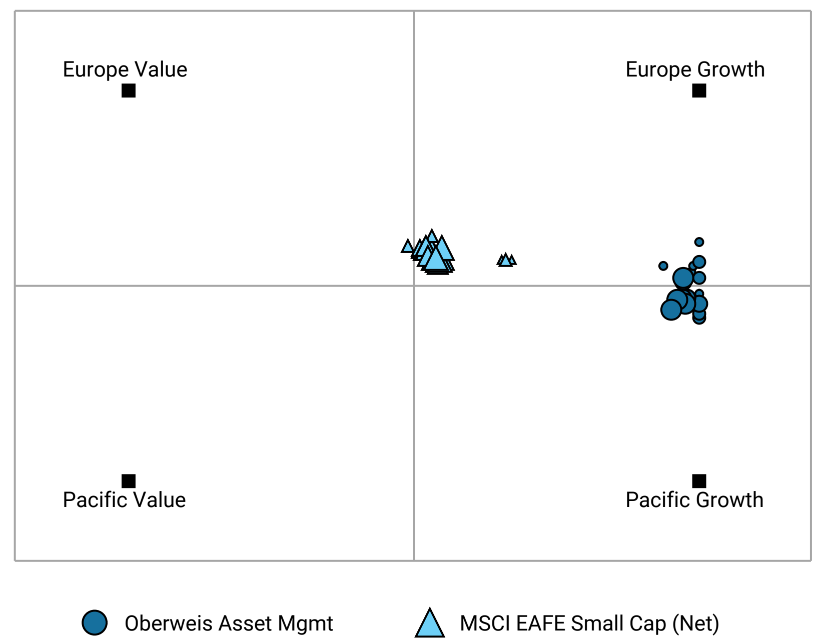
December 31, 2021

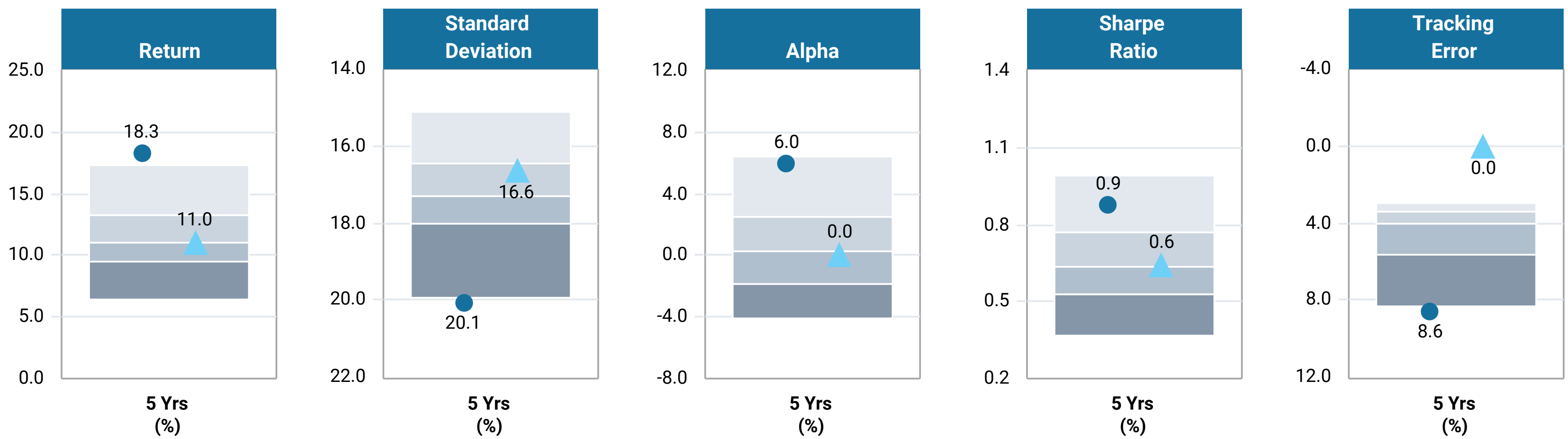
OBERWEIS ASSET MGMT

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



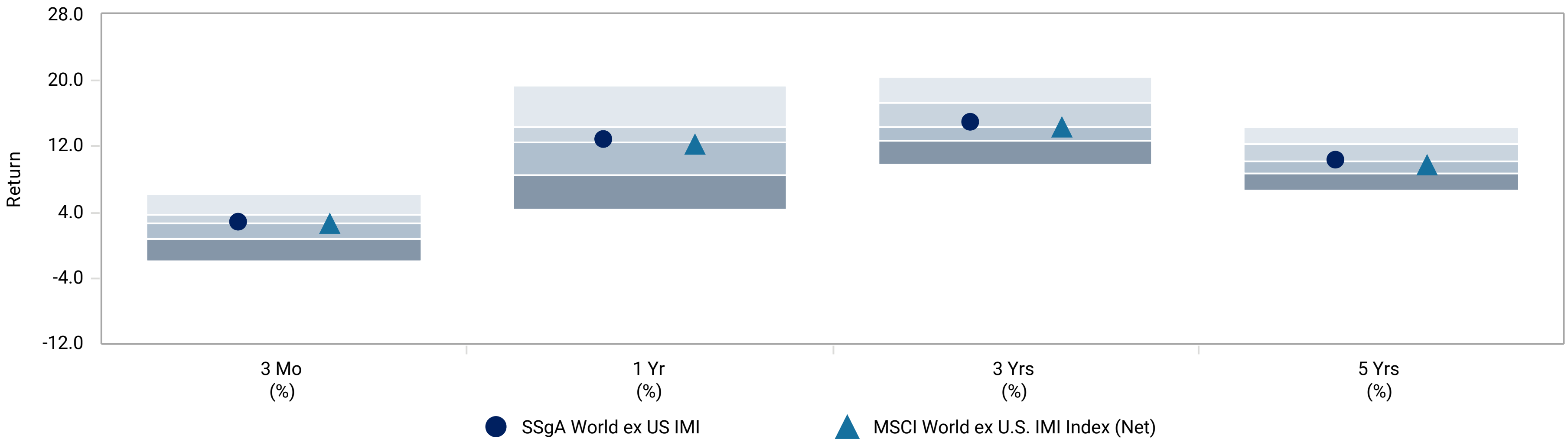


Los Angeles City Employees' Retirement System-LACERS Master Trust

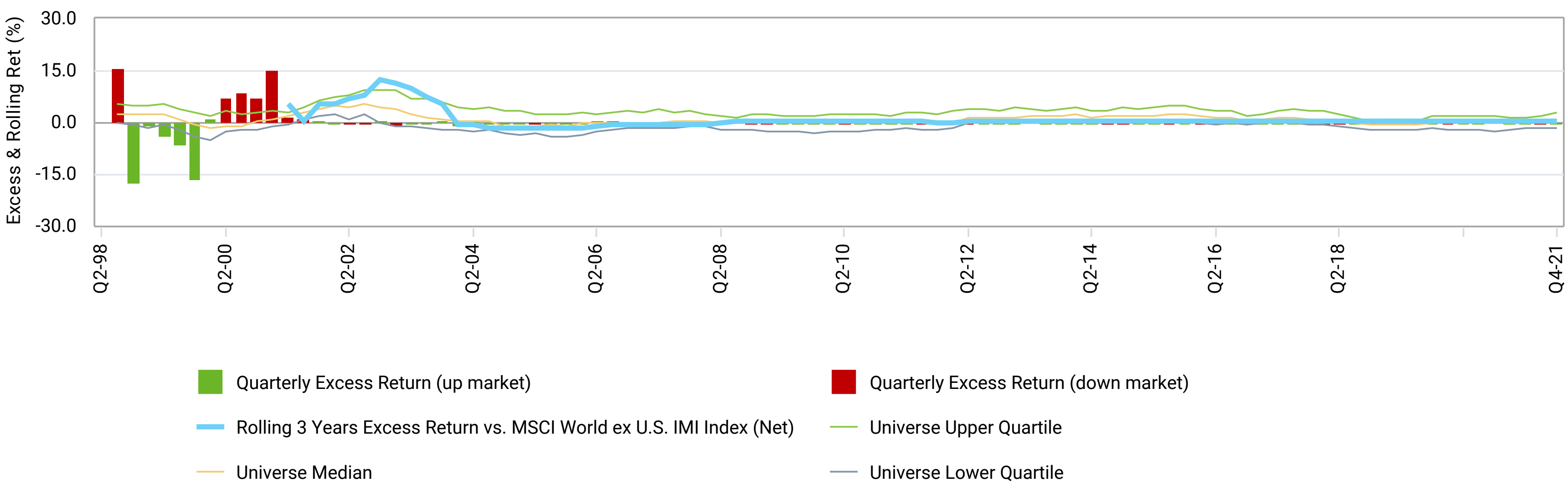
December 31, 2021

SSGA WORLD EX US IMI

eV EAFE Core Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

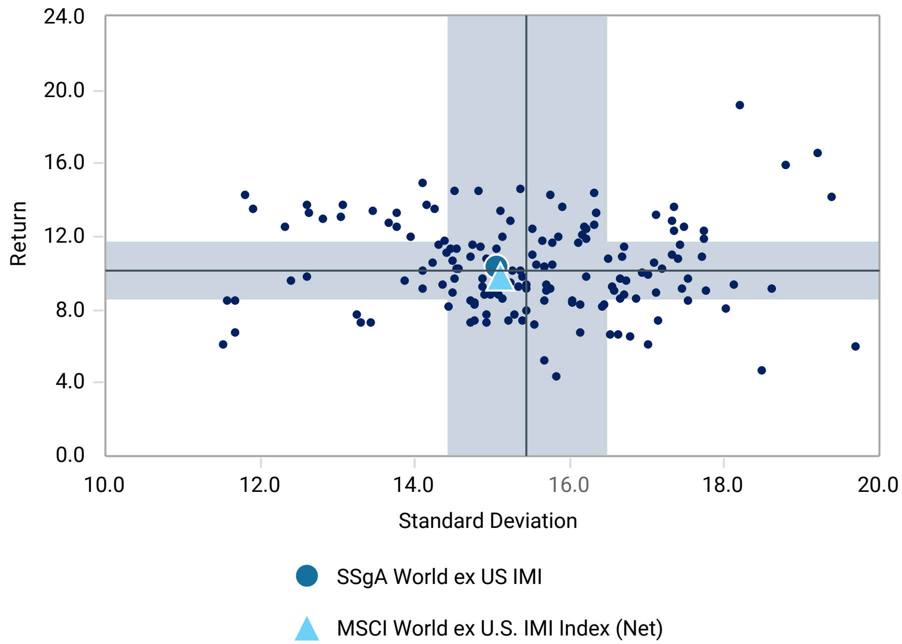


Los Angeles City Employees' Retirement System-LACERS Master Trust

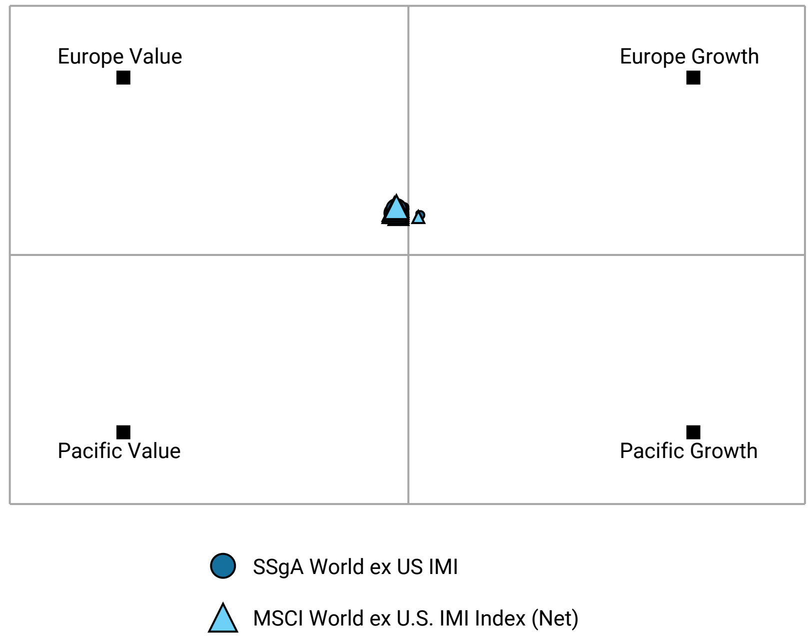
December 31, 2021

SSGA WORLD EX US IMI

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map

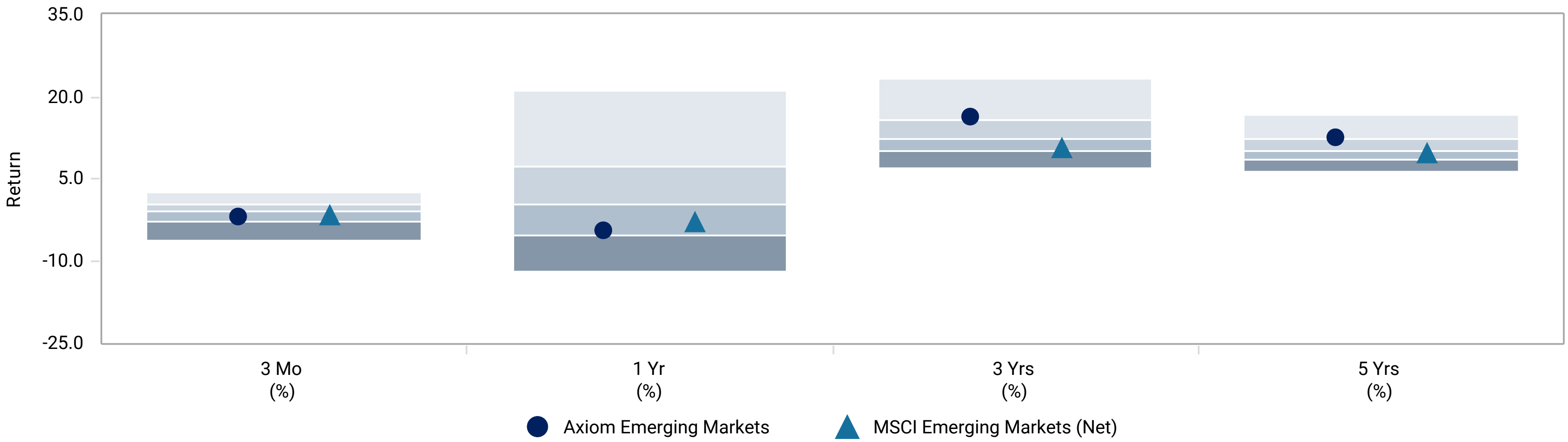


Los Angeles City Employees' Retirement System-LACERS Master Trust

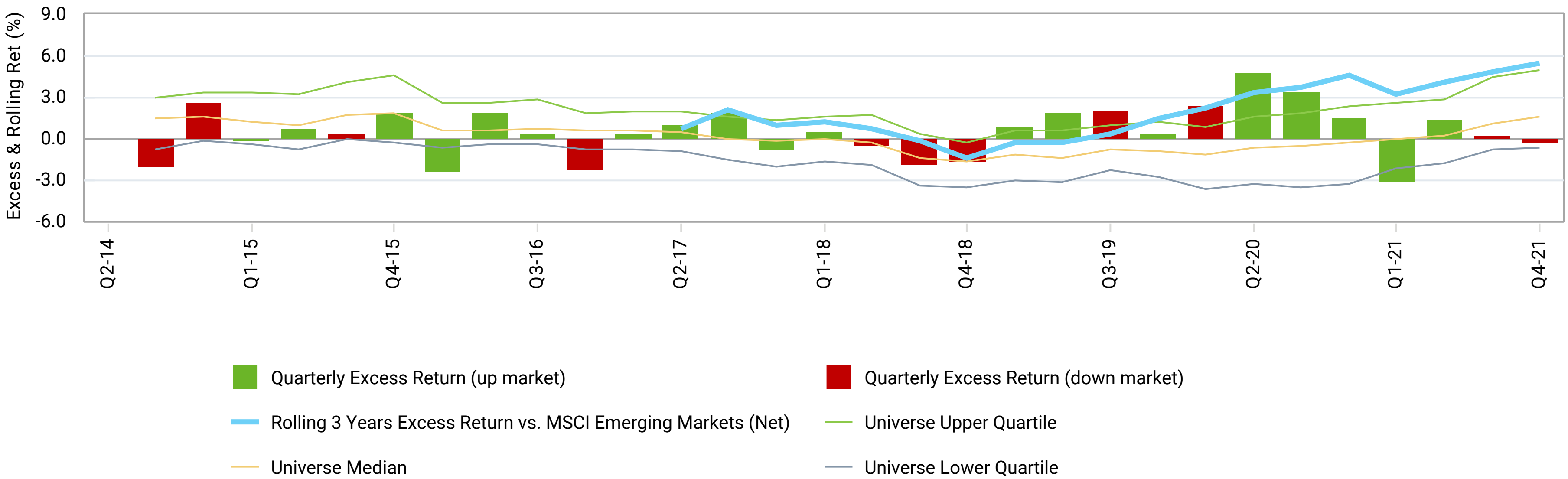
December 31, 2021

AXIOM EMERGING MARKETS

eV Emg Mkts Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

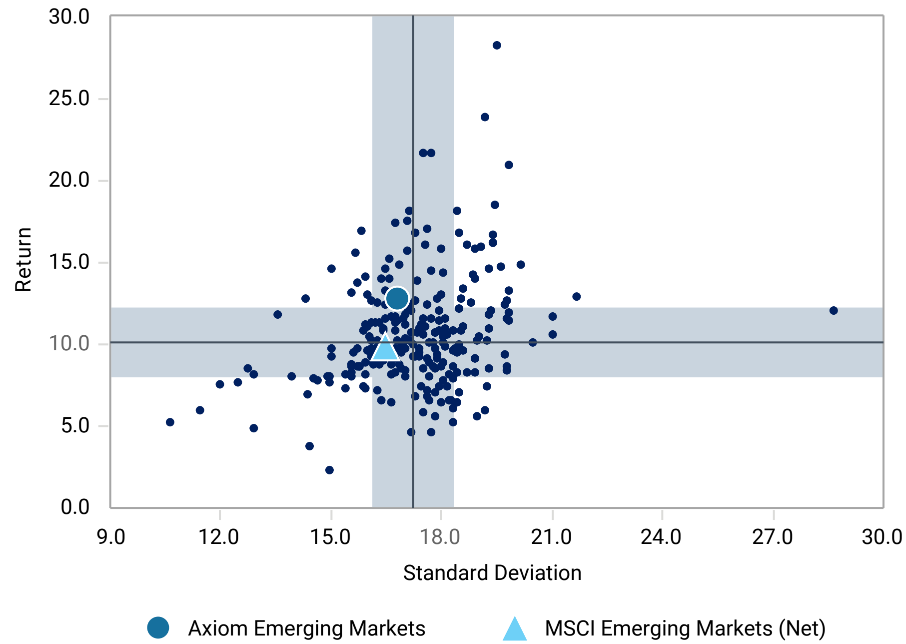


Los Angeles City Employees' Retirement System-LACERS Master Trust

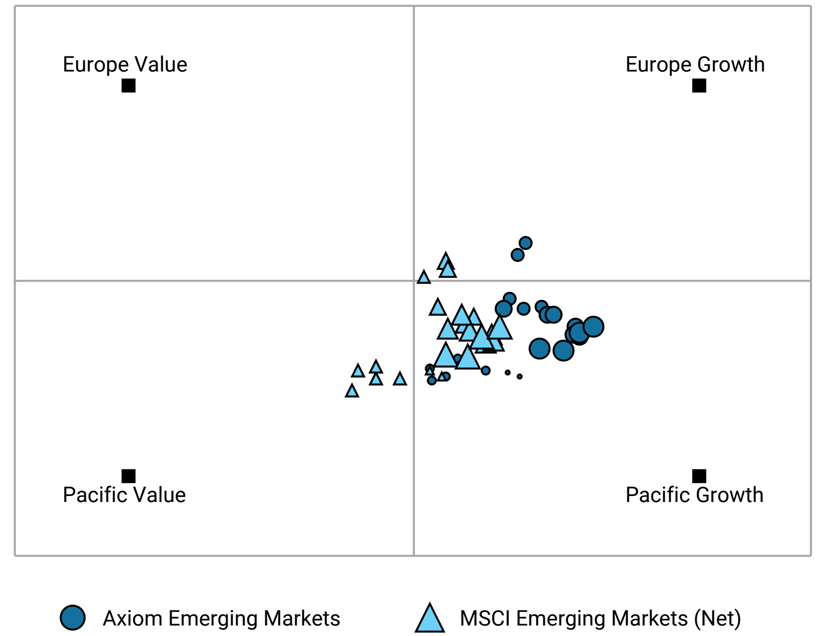
December 31, 2021

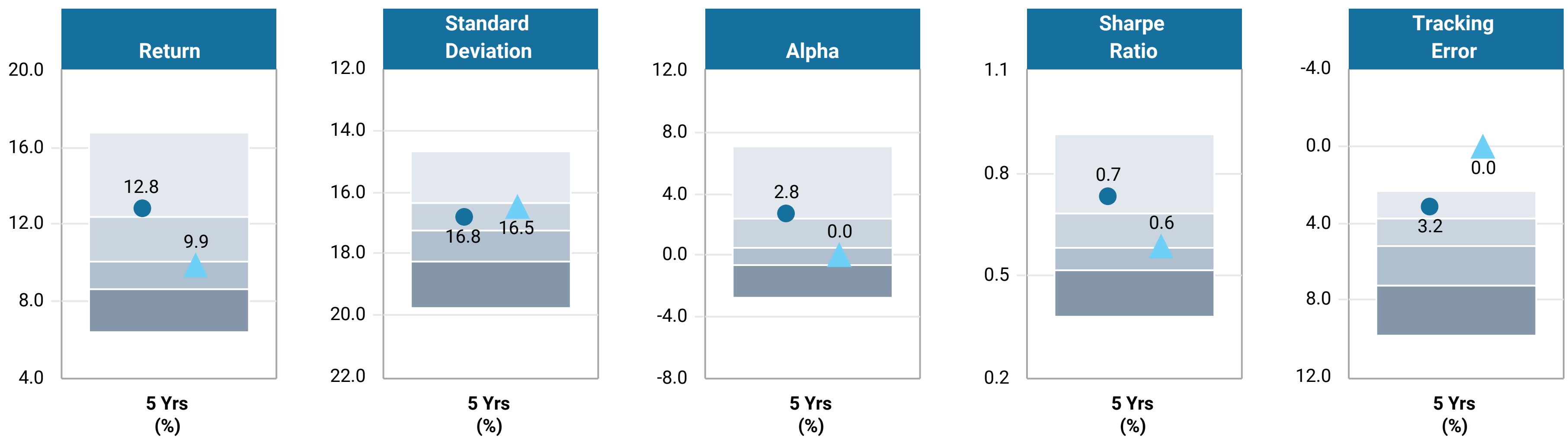
AXIOM EMERGING MARKETS

5 Years Return vs. Standard Deviation



Rolling 5 Years Style Map



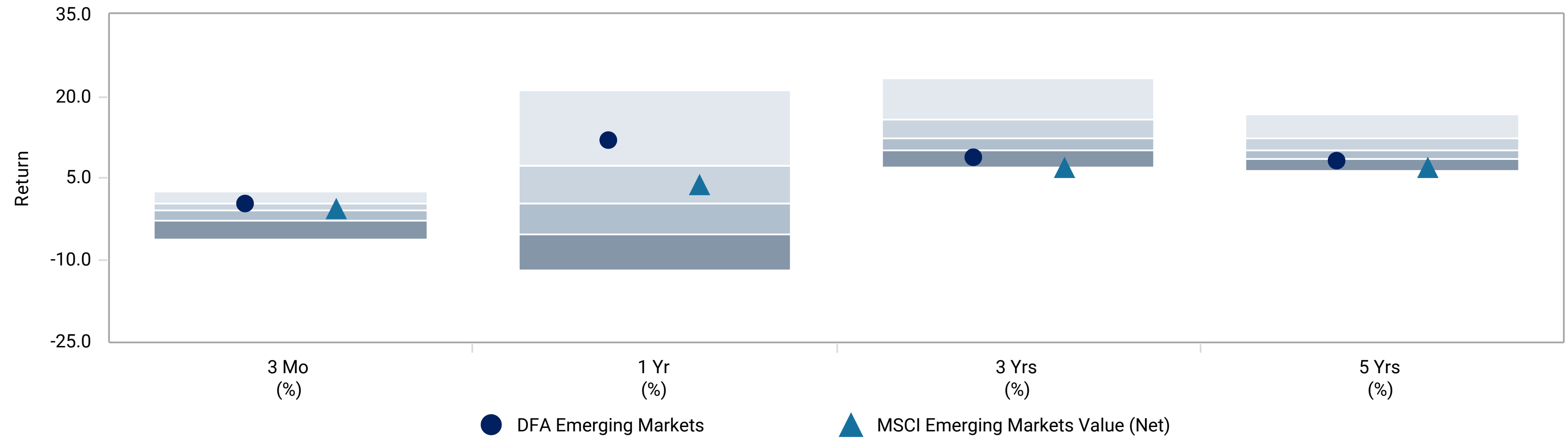


Los Angeles City Employees' Retirement System-LACERS Master Trust

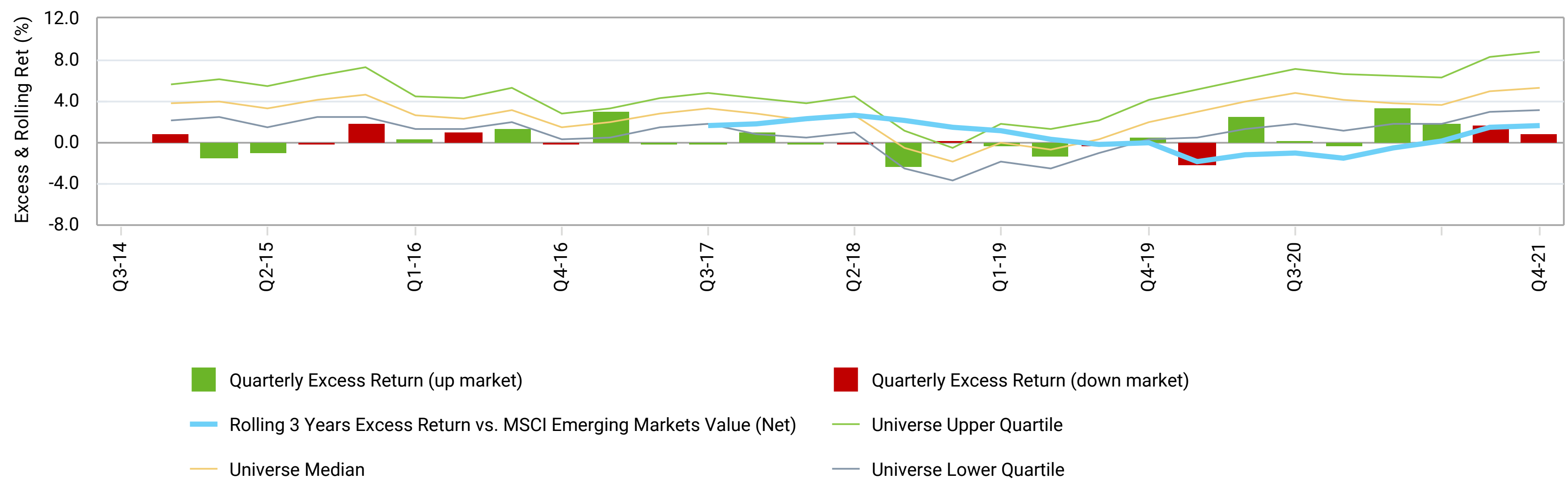
December 31, 2021

DFA EMERGING MARKETS

eV Emg Mkts Equity (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

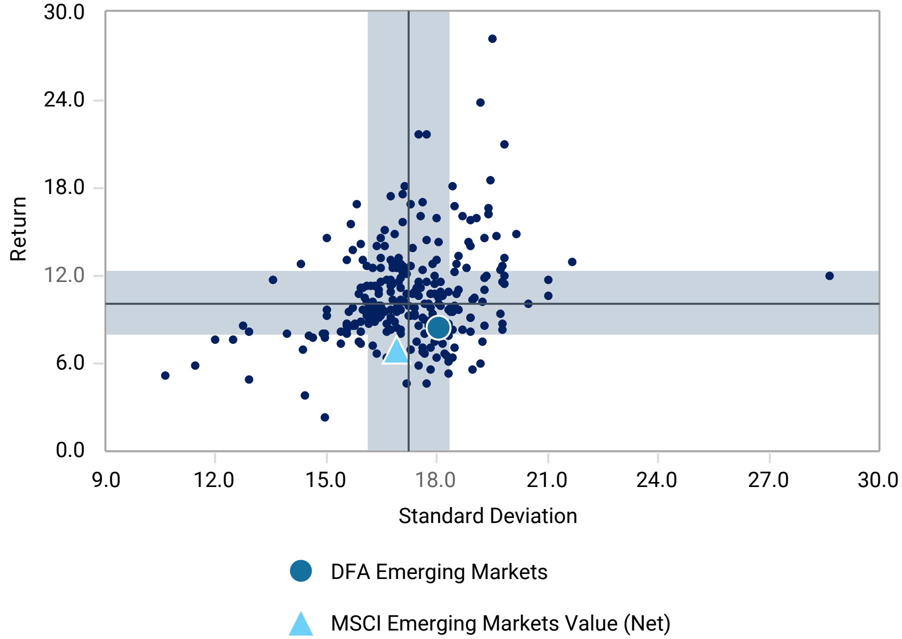


Los Angeles City Employees' Retirement System-LACERS Master Trust

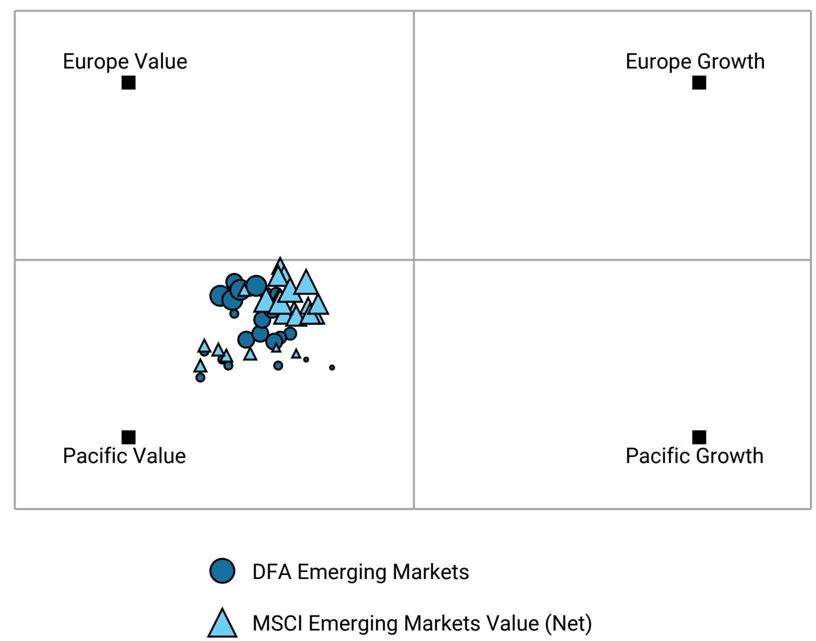
December 31, 2021

DFA EMERGING MARKETS

5 Years Return vs. Standard Deviation



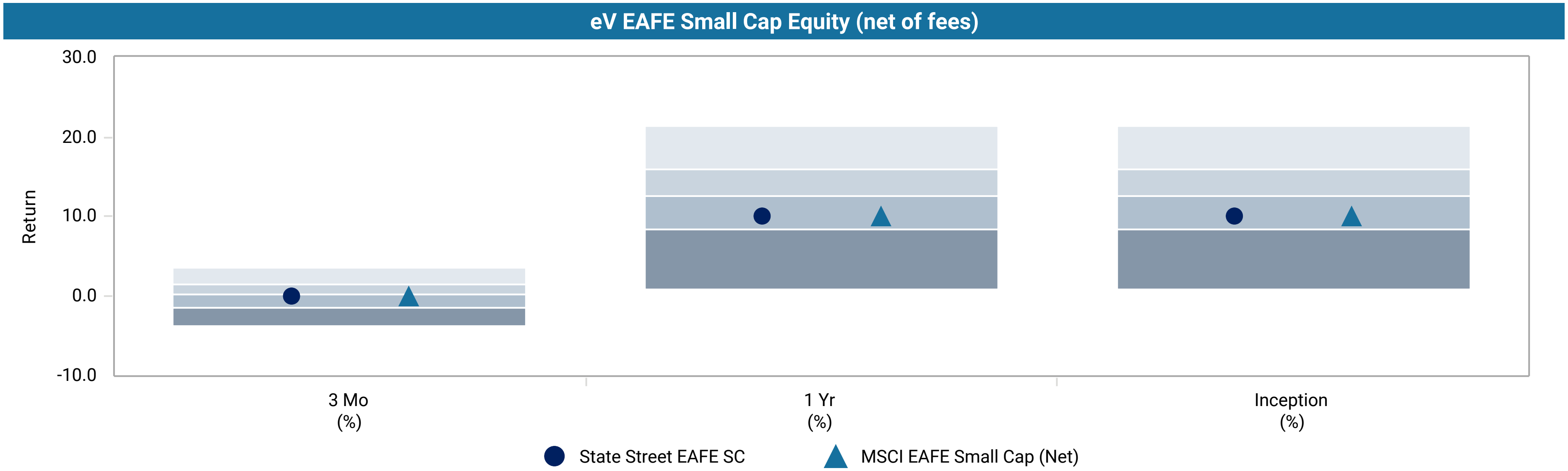
Rolling 5 Years Style Map

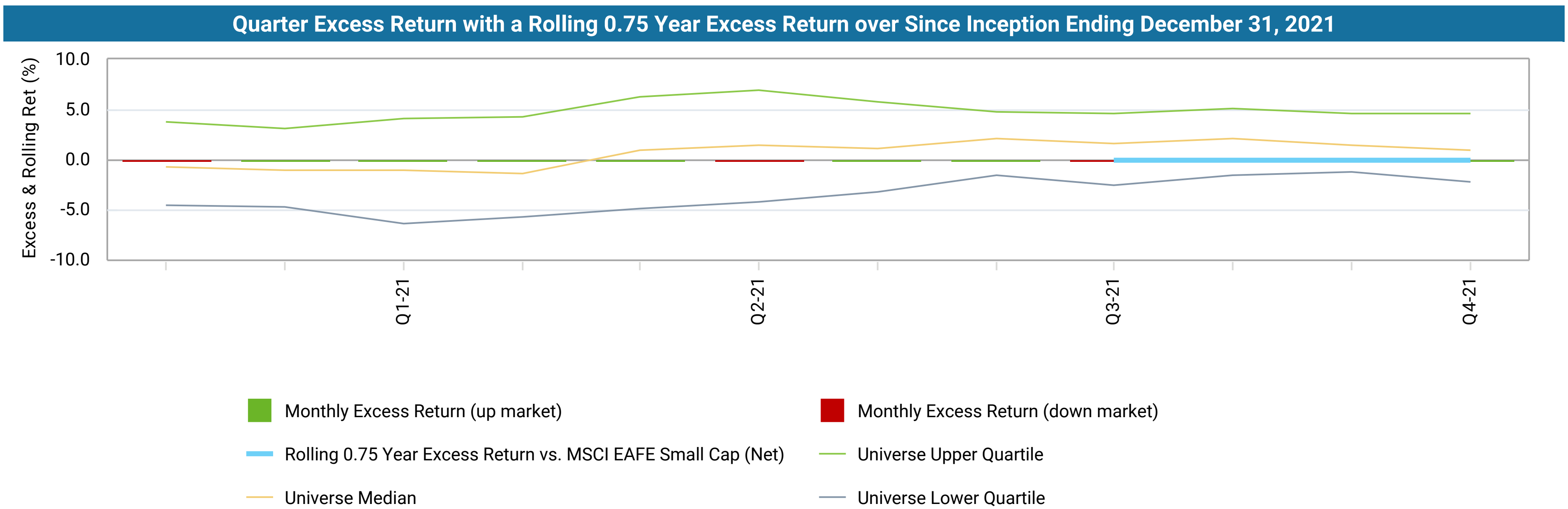


Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

SSGA EAFE SC



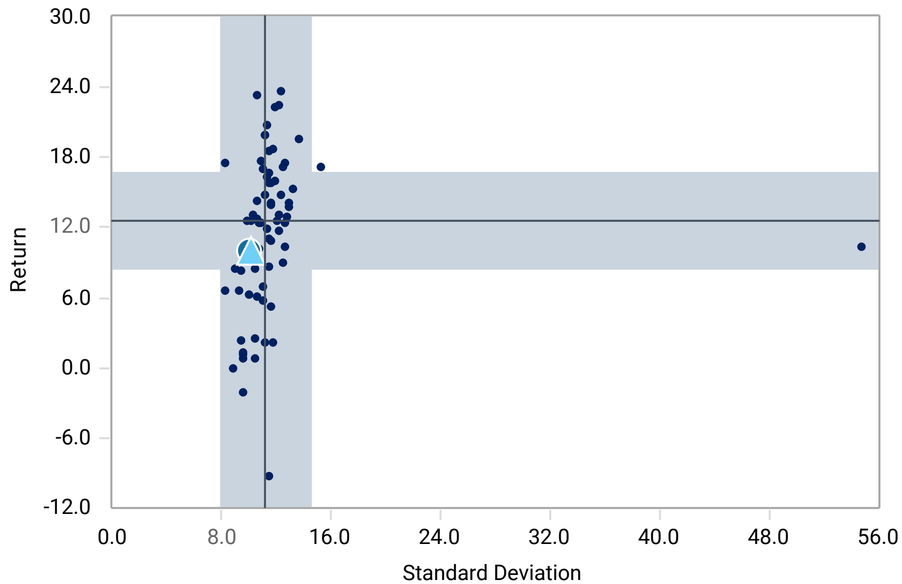


Los Angeles City Employees' Retirement System-LACERS Master Trust

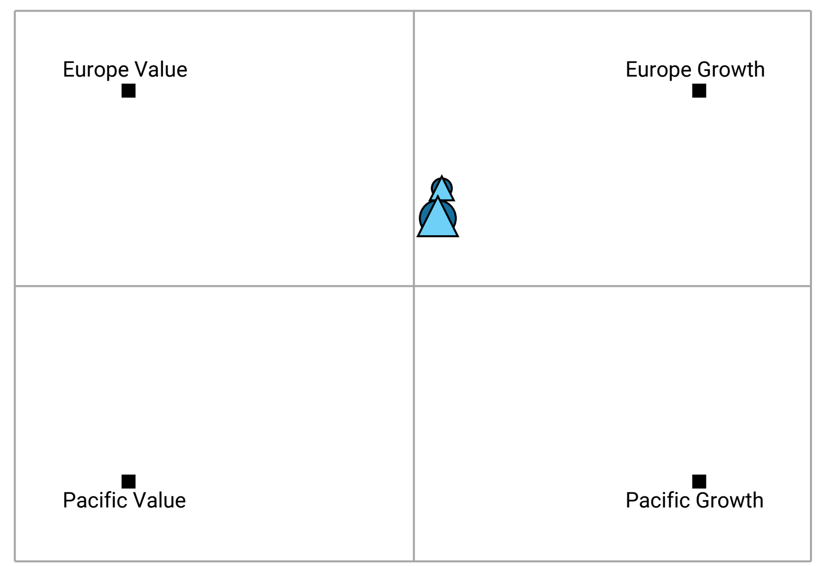
December 31, 2021

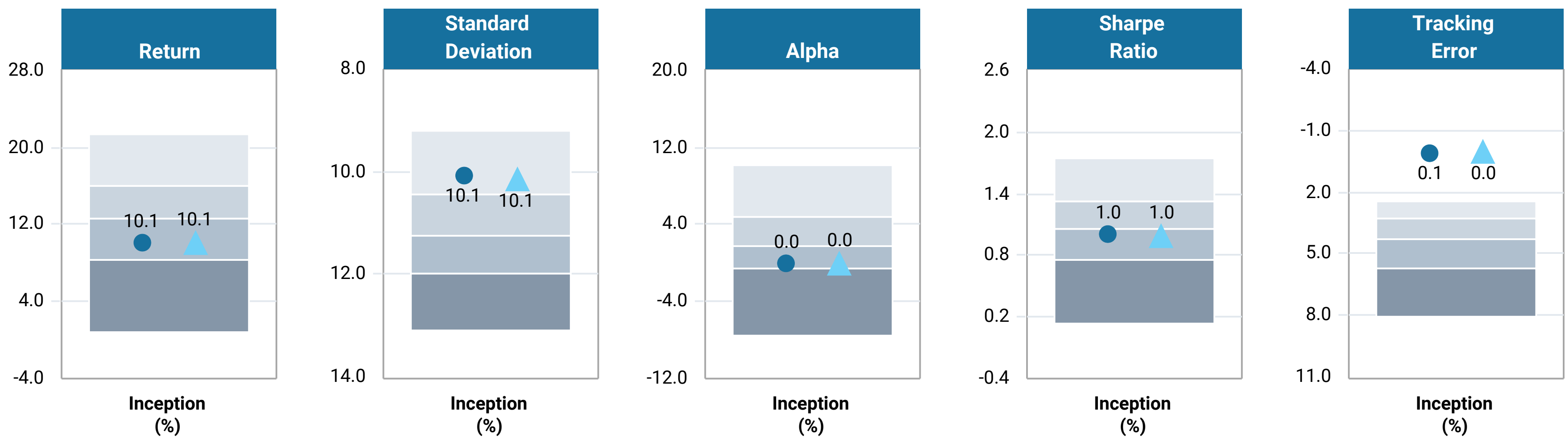
SSGA EAFE SC

Since Inception Return vs. Standard Deviation



Rolling 0.75 Year Style Map



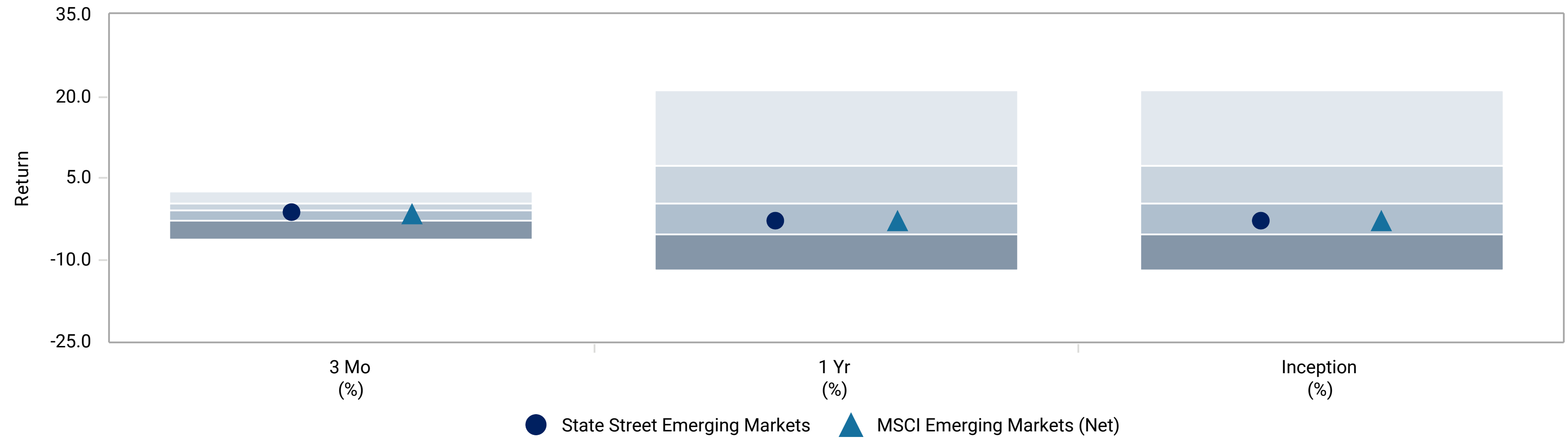


Los Angeles City Employees' Retirement System-LACERS Master Trust

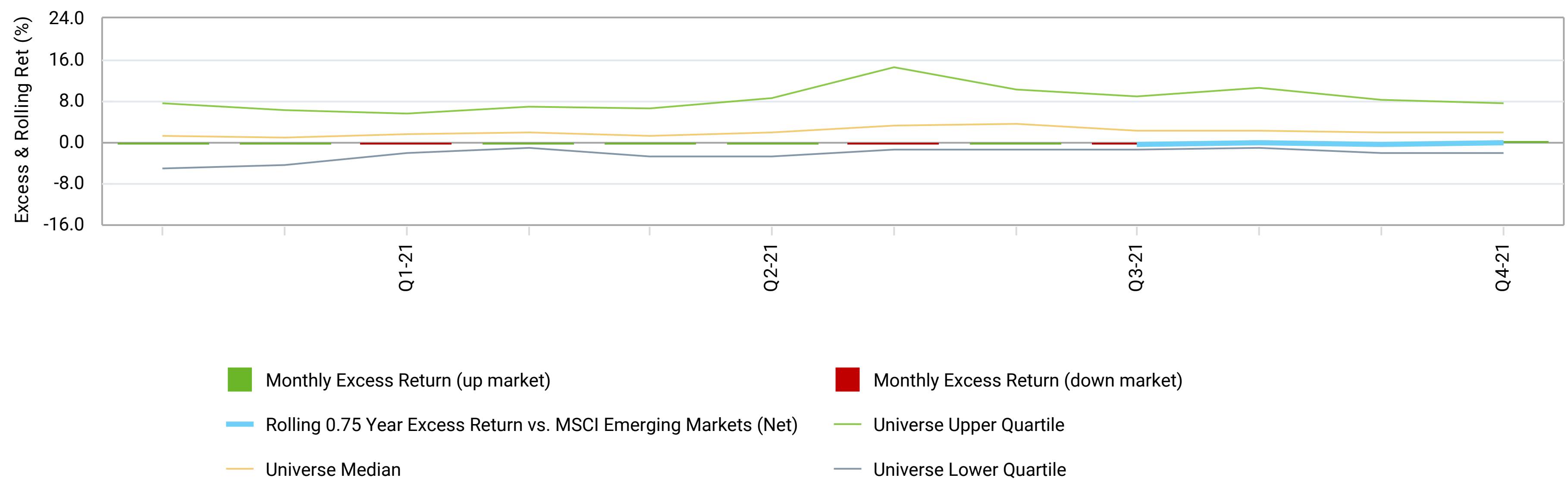
December 31, 2021

SSGA EMERGING MARKETS

eV Emg Mkts Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

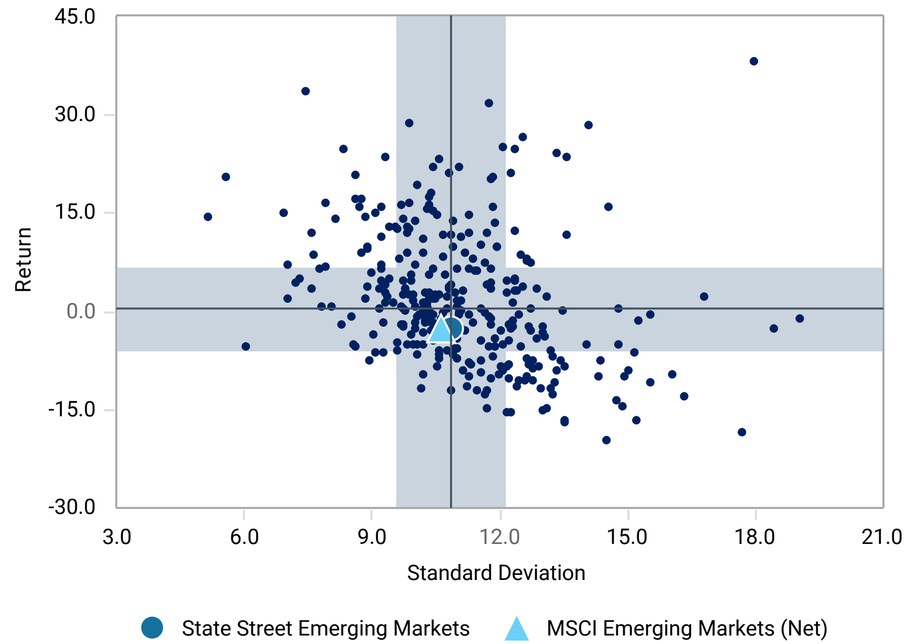


Los Angeles City Employees' Retirement System-LACERS Master Trust

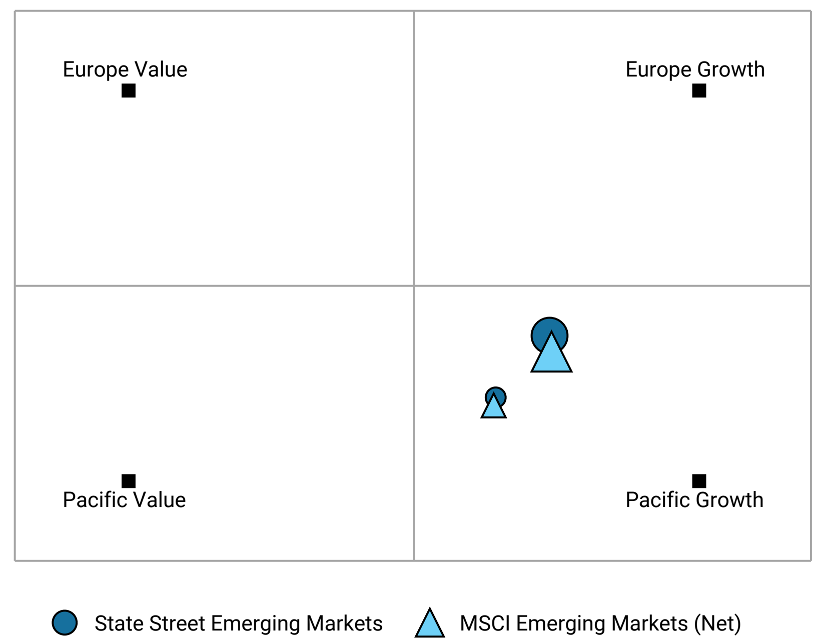
December 31, 2021

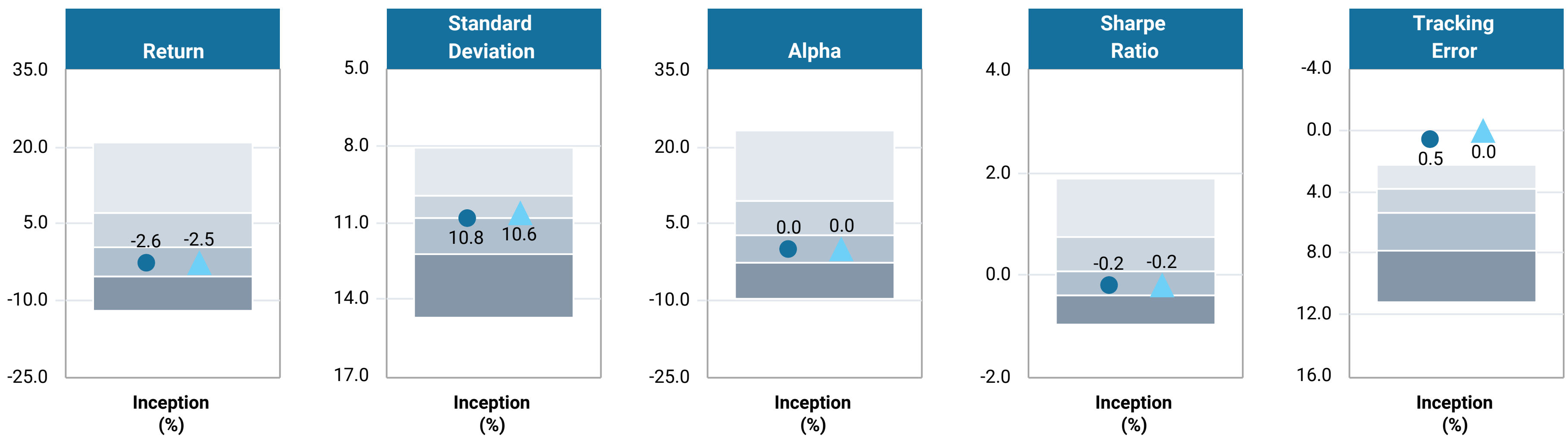
SSGA EMERGING MARKETS

Since Inception Return vs. Standard Deviation



Rolling 0.75 Year Style Map



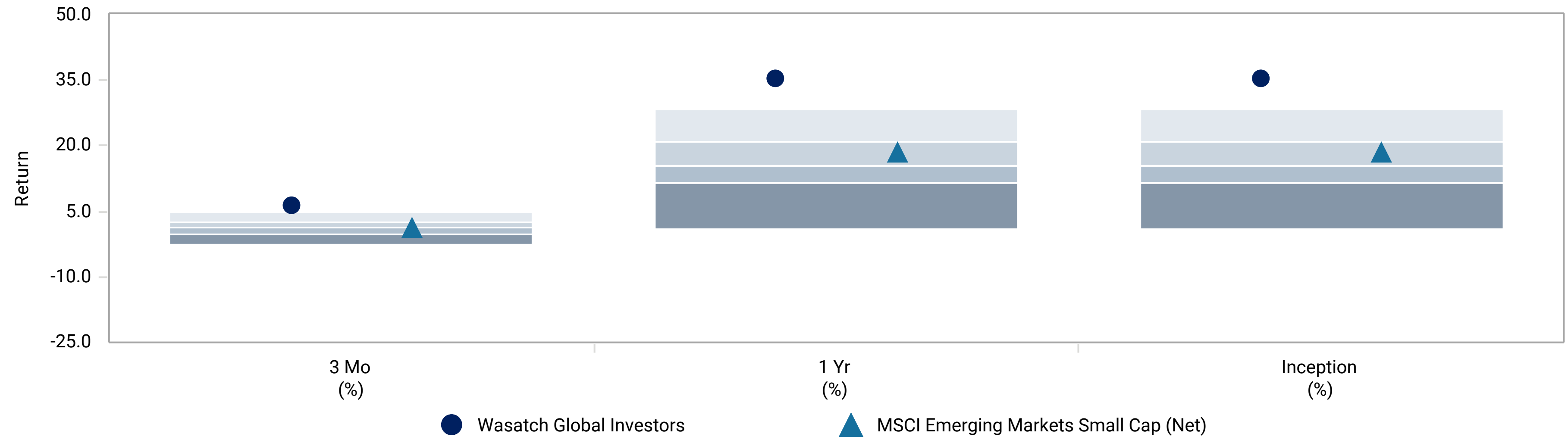


Los Angeles City Employees' Retirement System-LACERS Master Trust

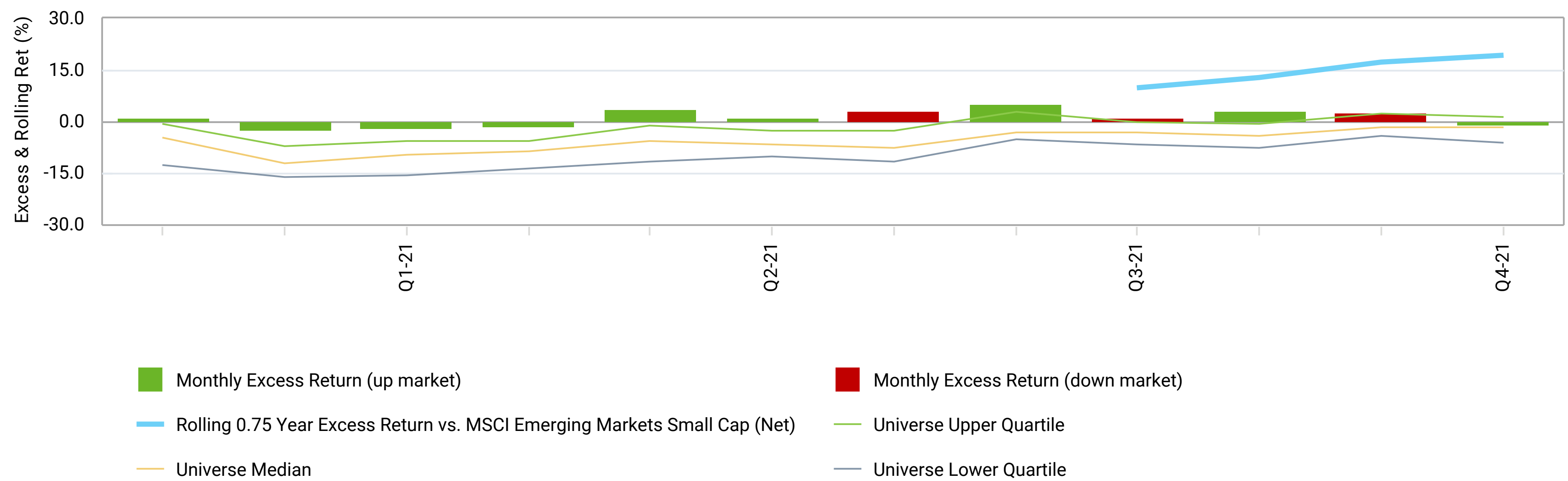
December 31, 2021

WASATCH GLOBAL INVESTORS

eV Emg Mkts Small Cap Equity (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

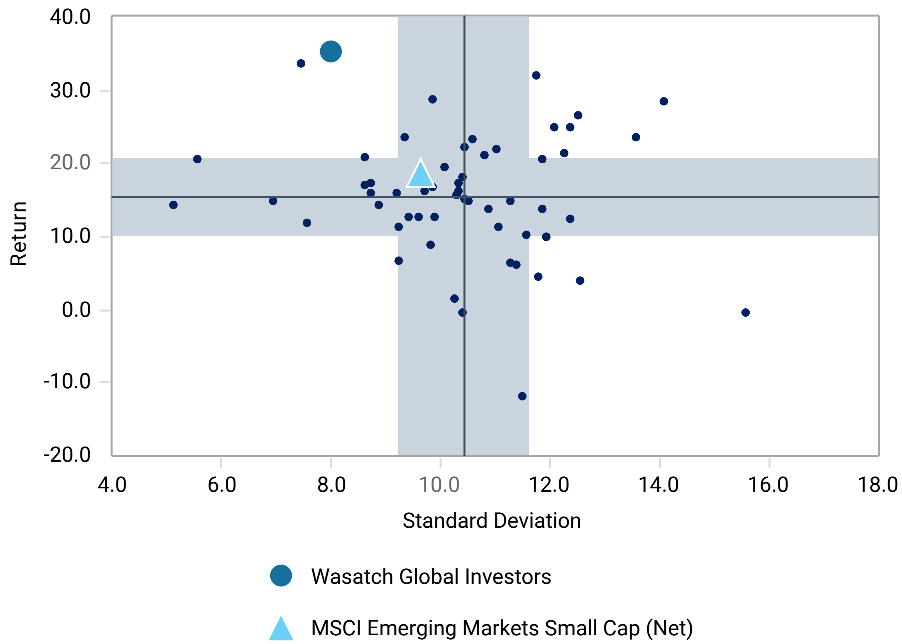


Los Angeles City Employees' Retirement System-LACERS Master Trust

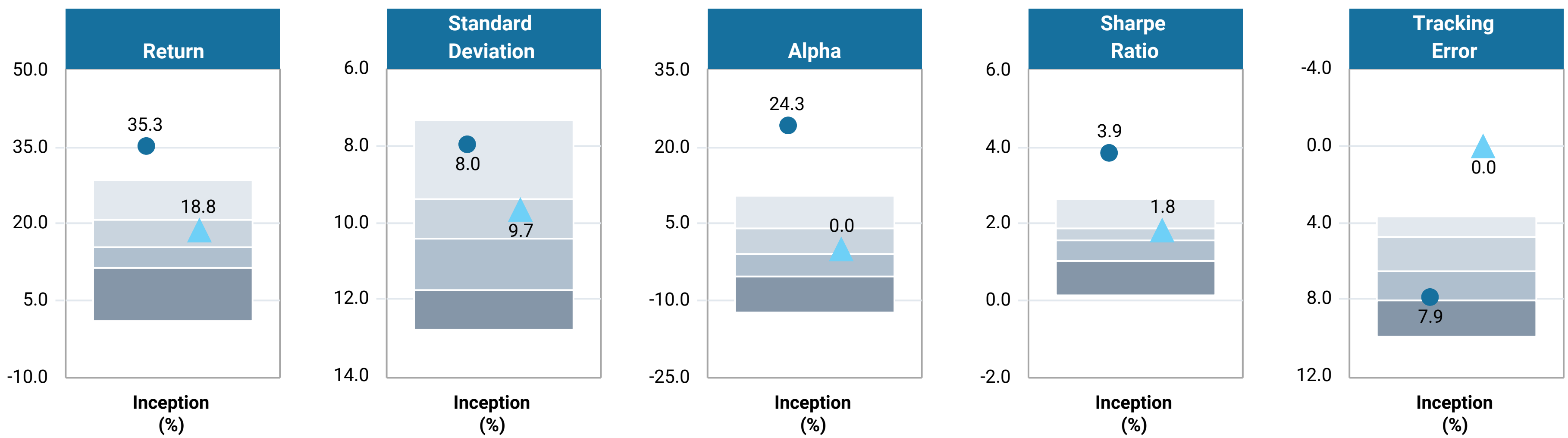
December 31, 2021

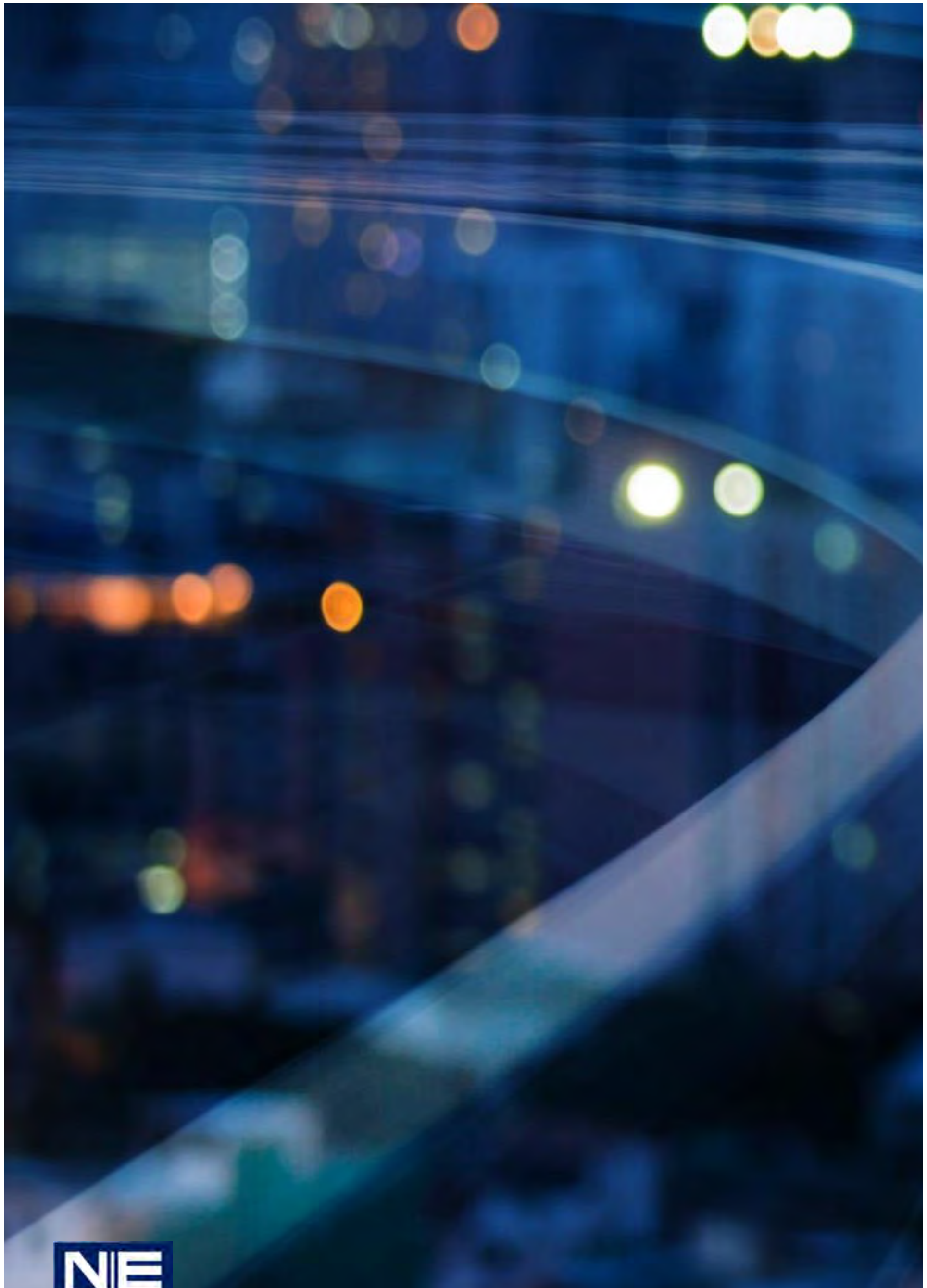
WASATCH GLOBAL INVESTORS

Since Inception Return vs. Standard Deviation



Rolling 0.75 Year Style Map





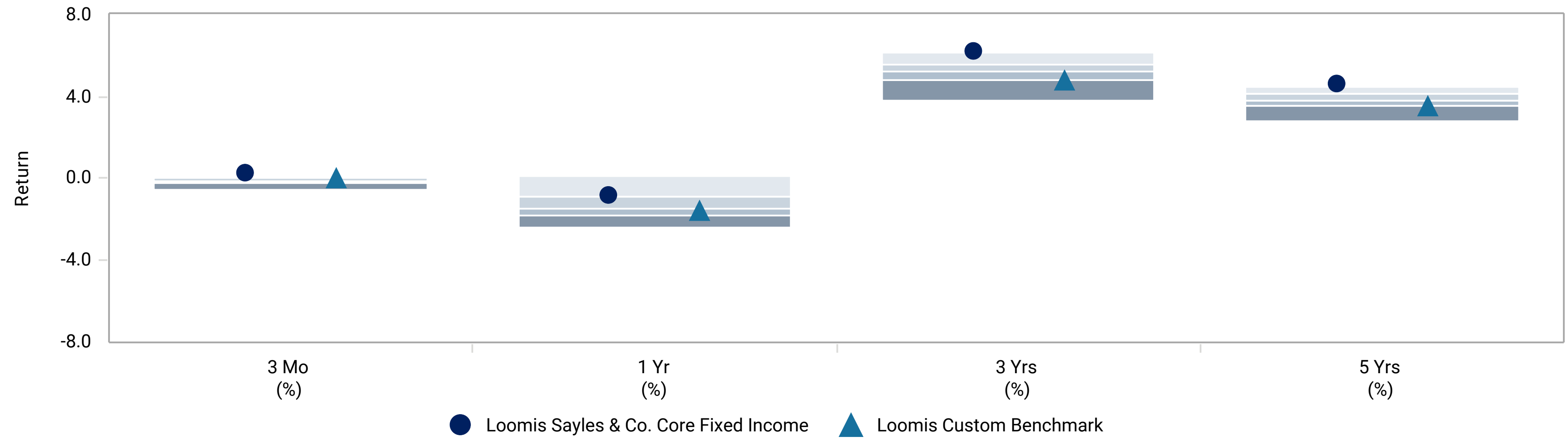
CORE FIXED INCOME MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

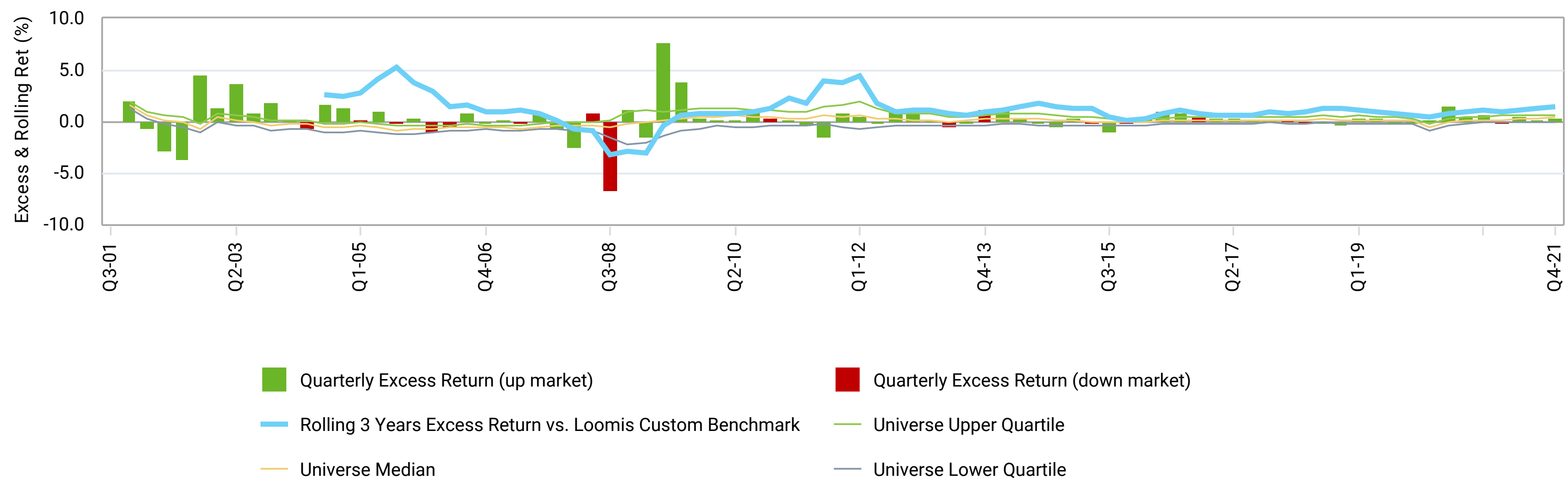
December 31, 2021

LOOMIS SAYLES & CO. CORE FIXED INCOME

eV US Core Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

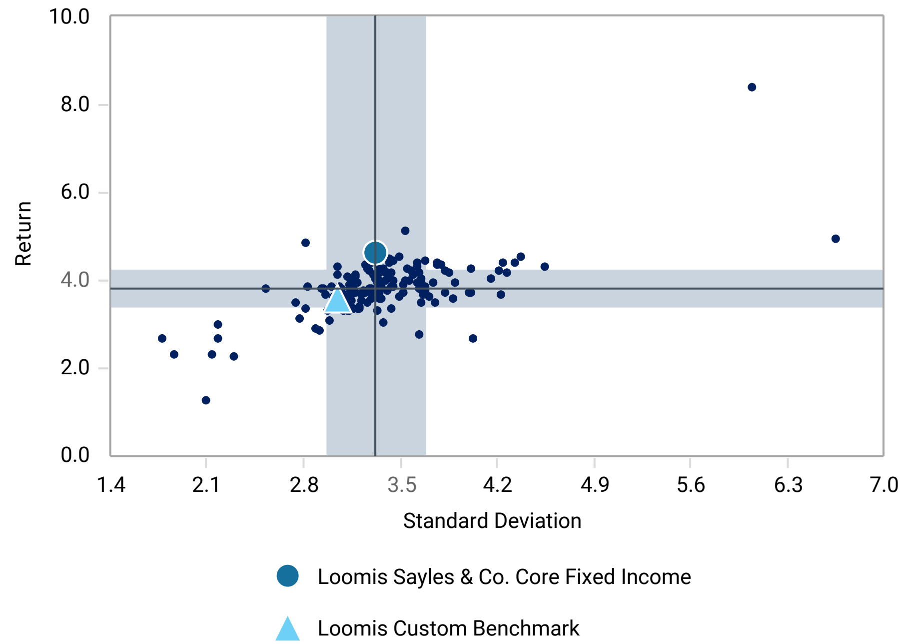


Los Angeles City Employees' Retirement System-LACERS Master Trust

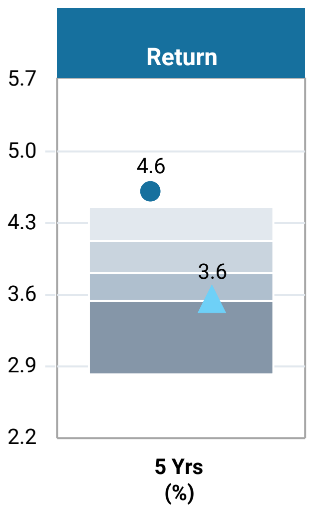
December 31, 2021

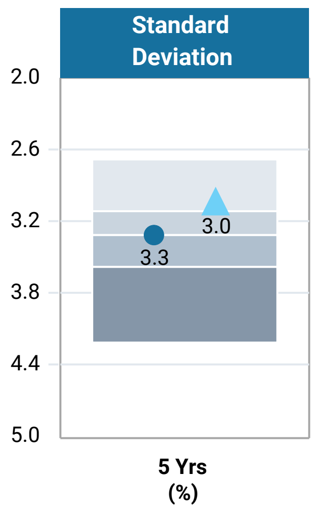
LOOMIS SAYLES & CO. CORE FIXED INCOME

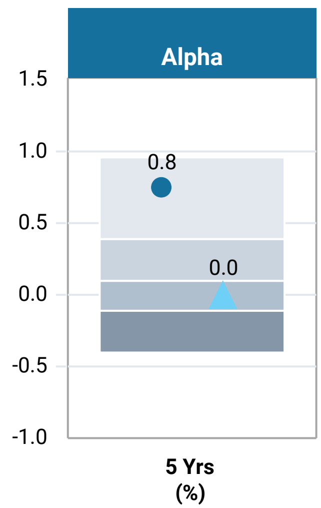
5 Years Return vs. Standard Deviation

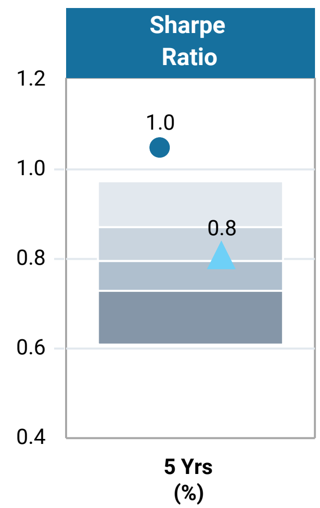


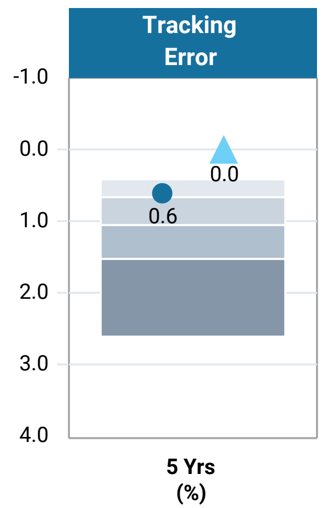
Style Map: (5 Years)









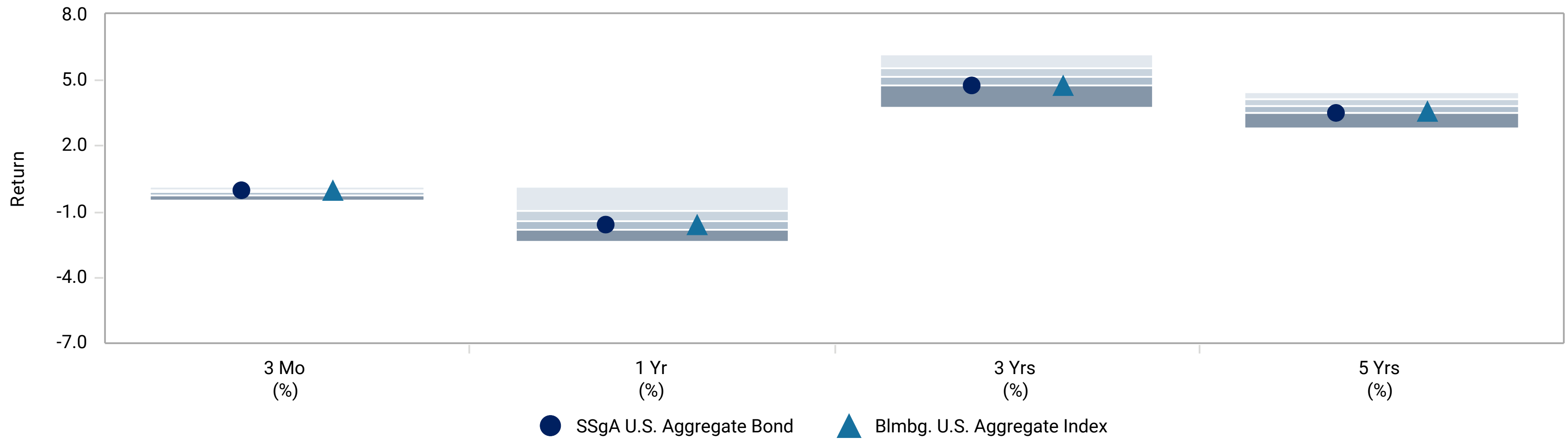


Los Angeles City Employees' Retirement System-LACERS Master Trust

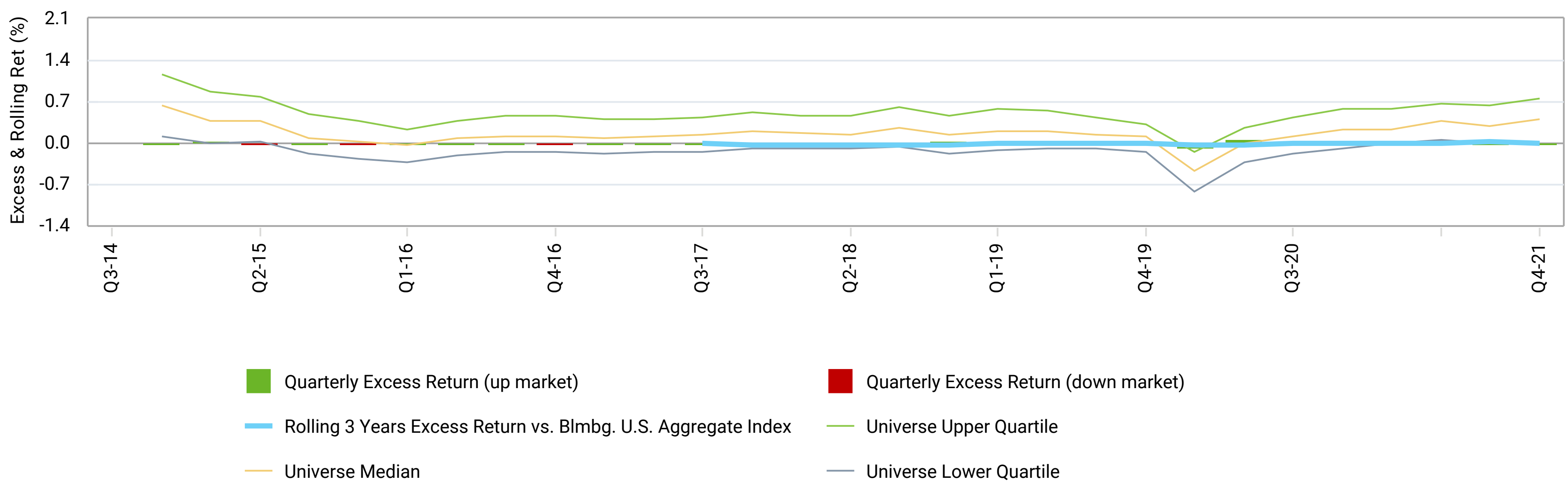
December 31, 2021

SSGA U.S. AGGREGATE BOND

eV US Core Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

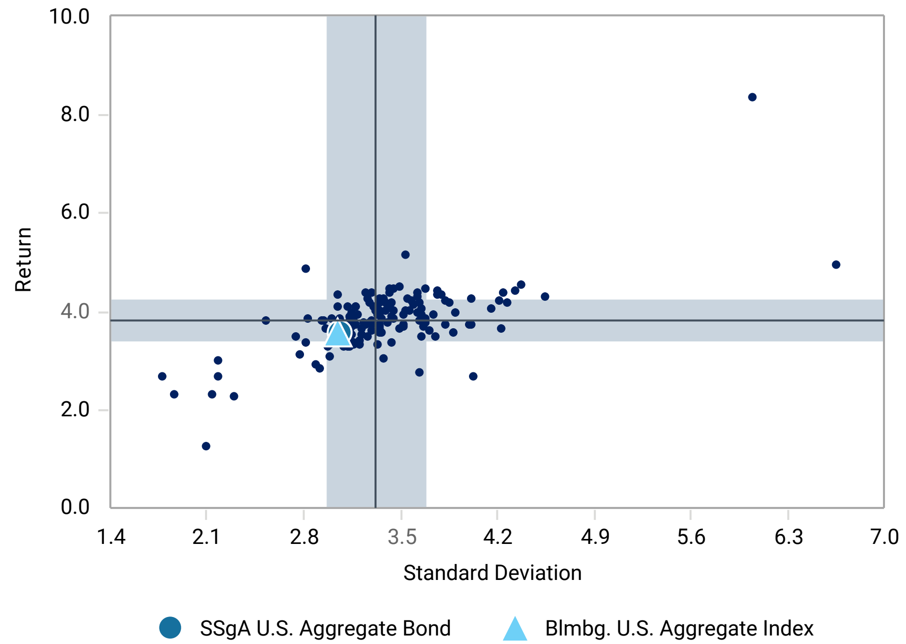


Los Angeles City Employees' Retirement System-LACERS Master Trust

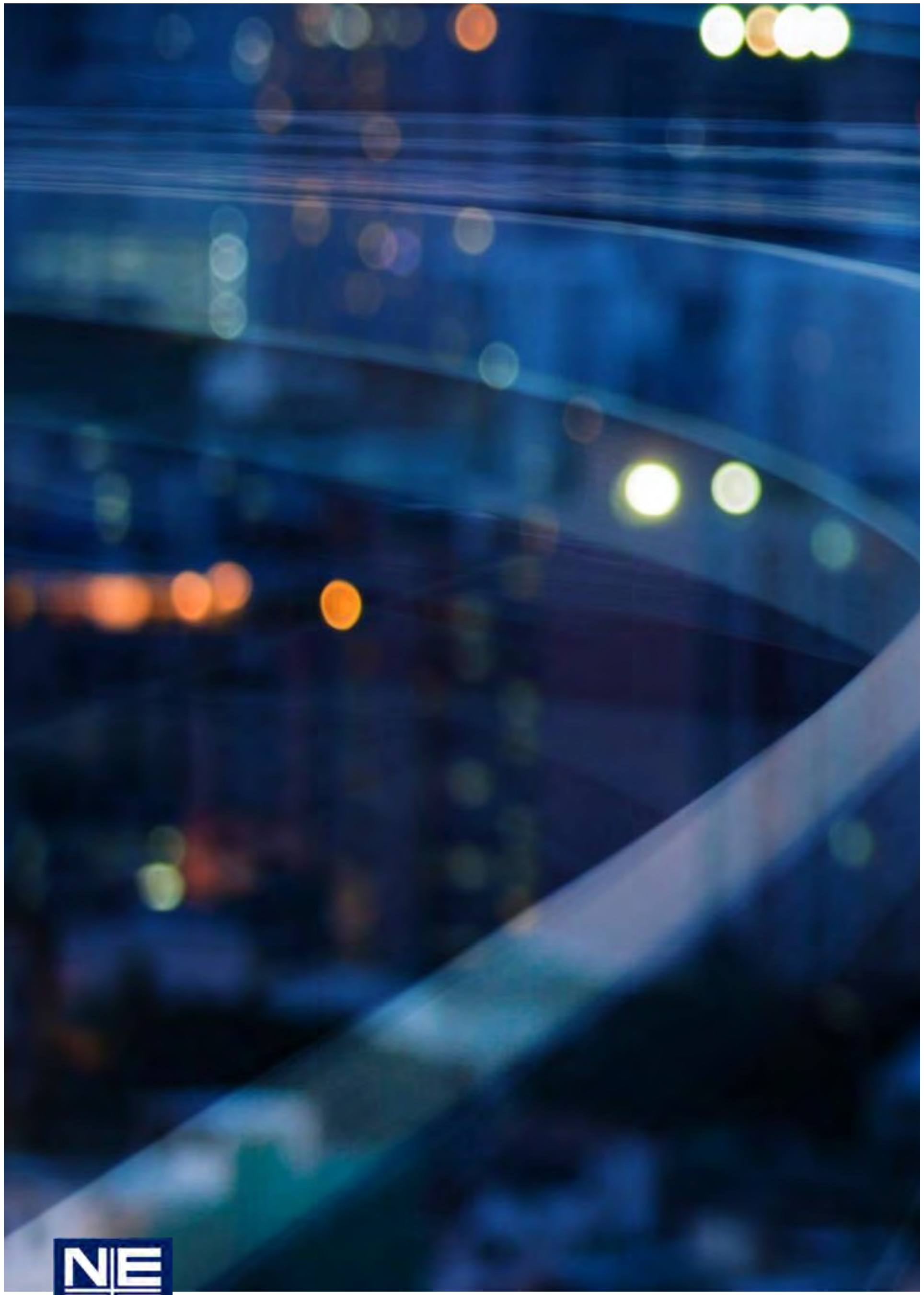
December 31, 2021

SSGA U.S. AGGREGATE BOND

5 Years Return vs. Standard Deviation



Style Map: (5 Years)



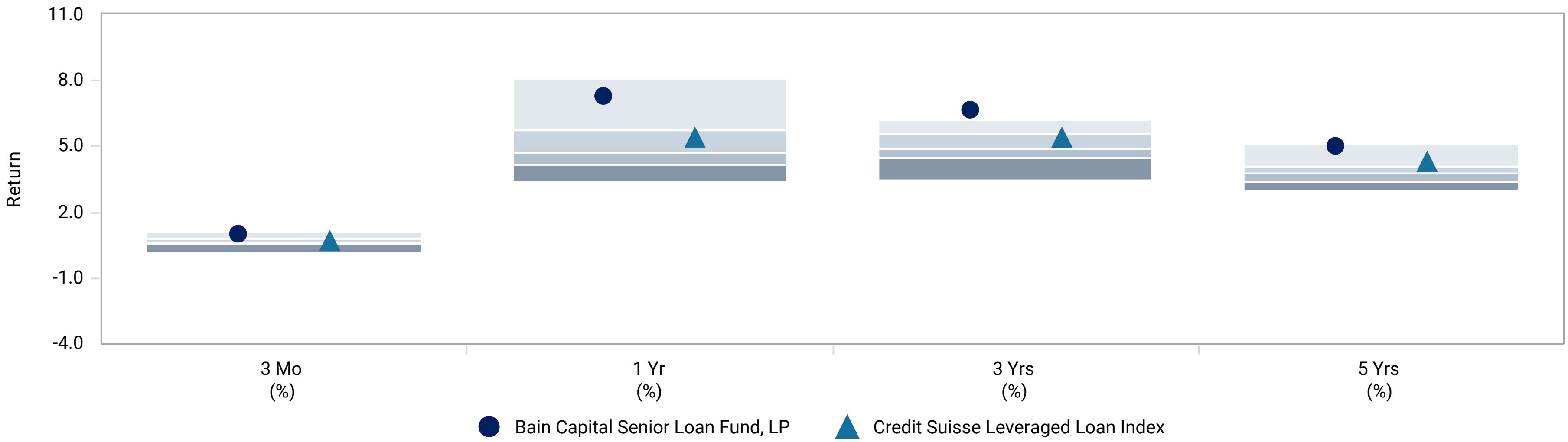
CREDIT OPPORTUNITIES MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

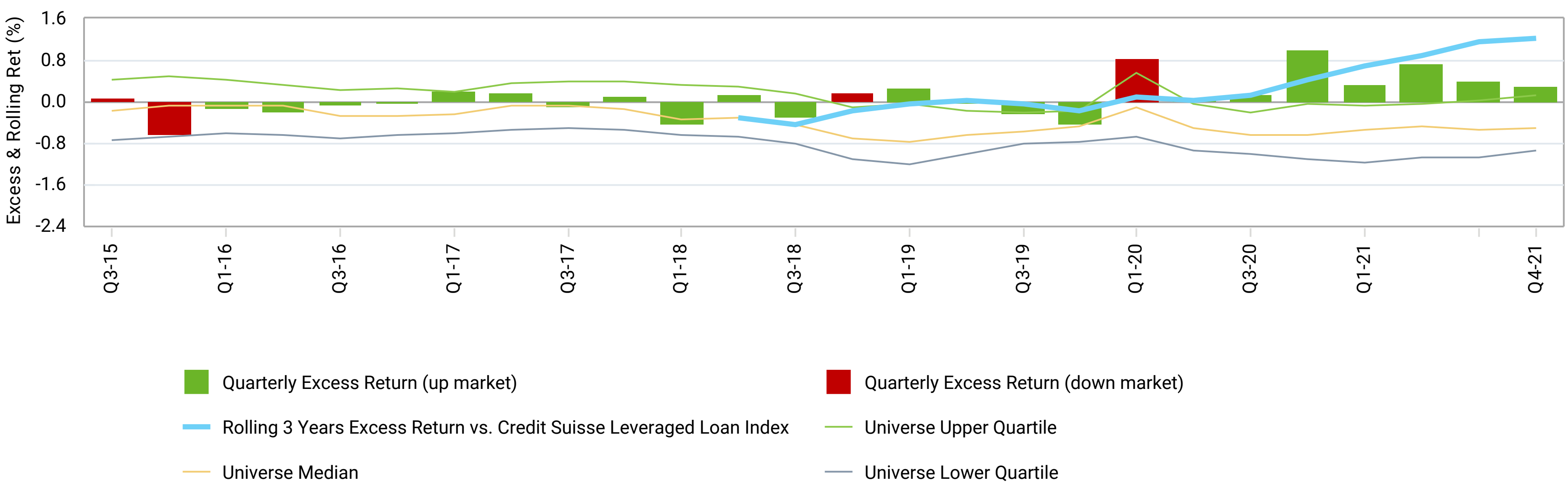
December 31, 2021

BAIN CAPITAL SENIOR LOAN FUND, LP

eV US Float-Rate Bank Loan Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

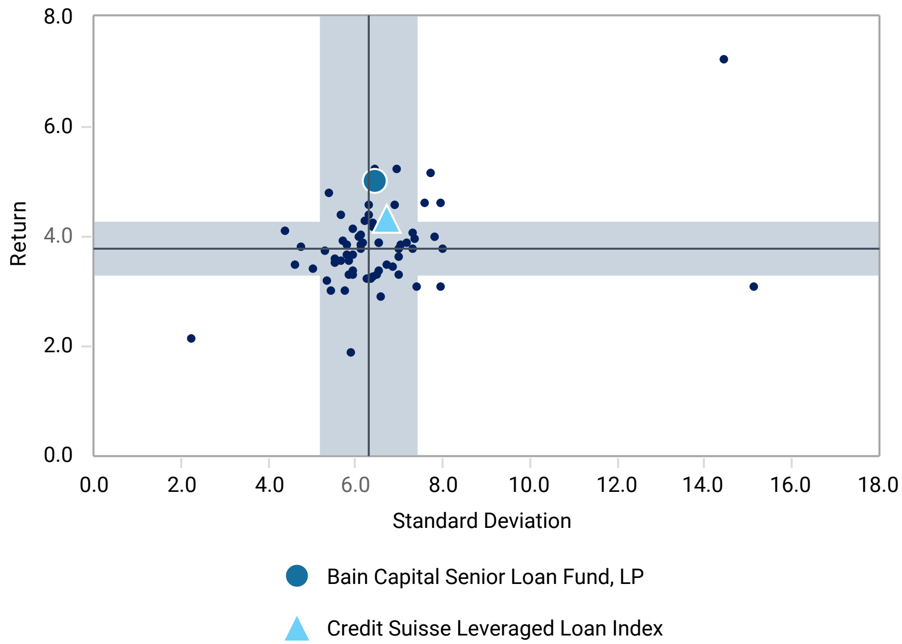


Los Angeles City Employees' Retirement System-LACERS Master Trust

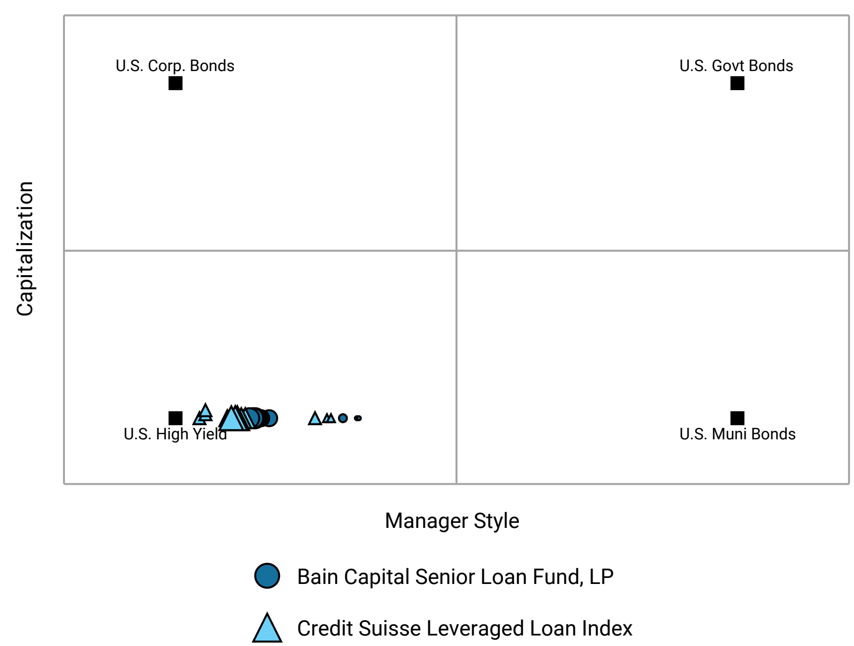
December 31, 2021

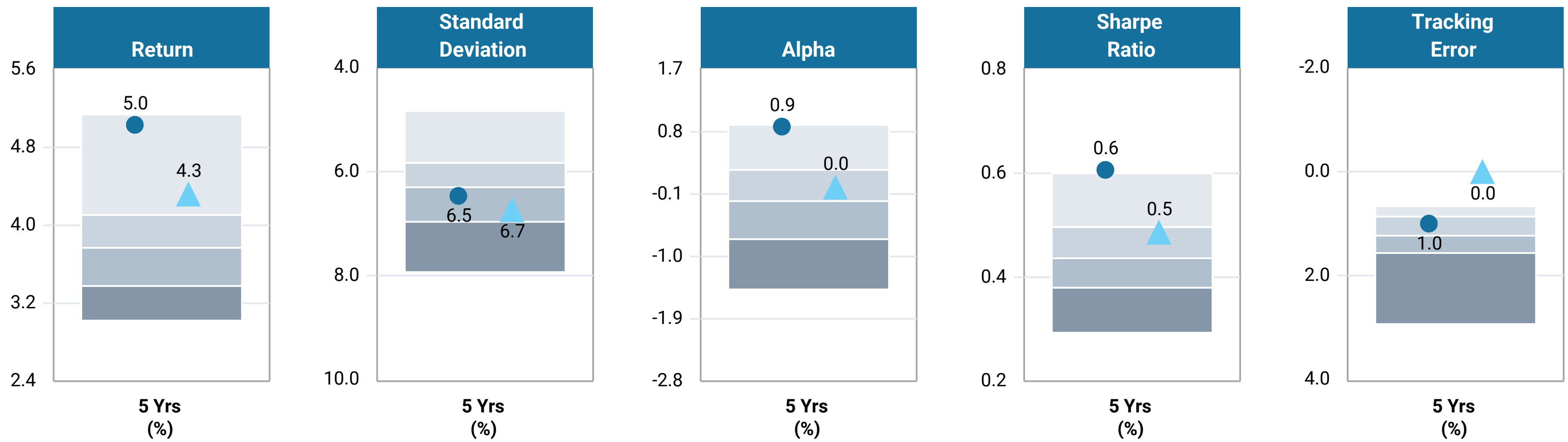
BAIN CAPITAL SENIOR LOAN FUND, LP

5 Years Return vs. Standard Deviation



Style Map: (3 Years)



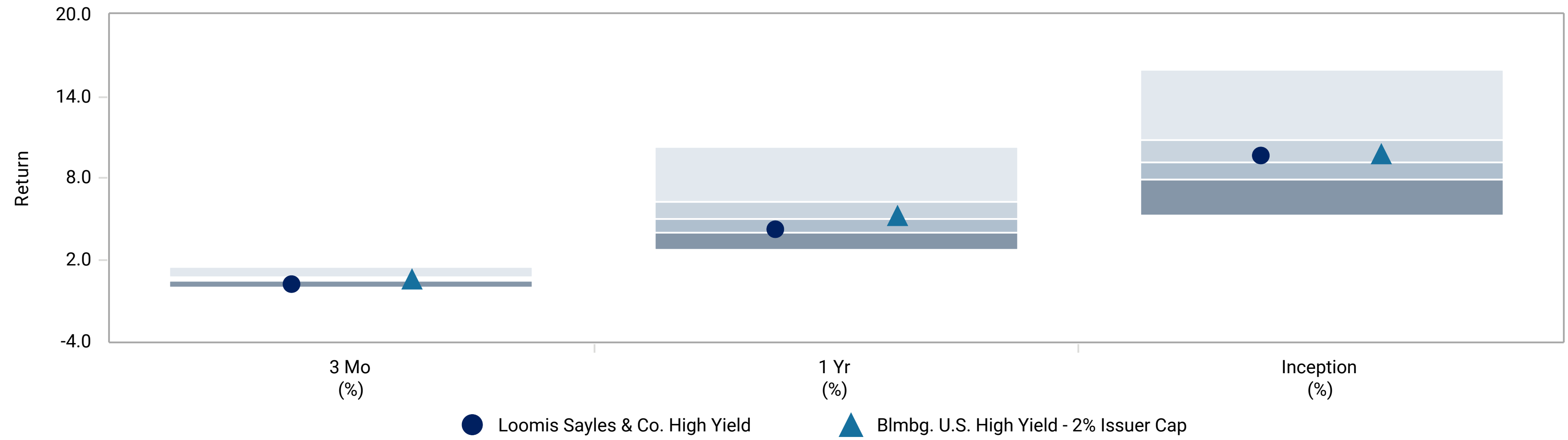


Los Angeles City Employees' Retirement System-LACERS Master Trust

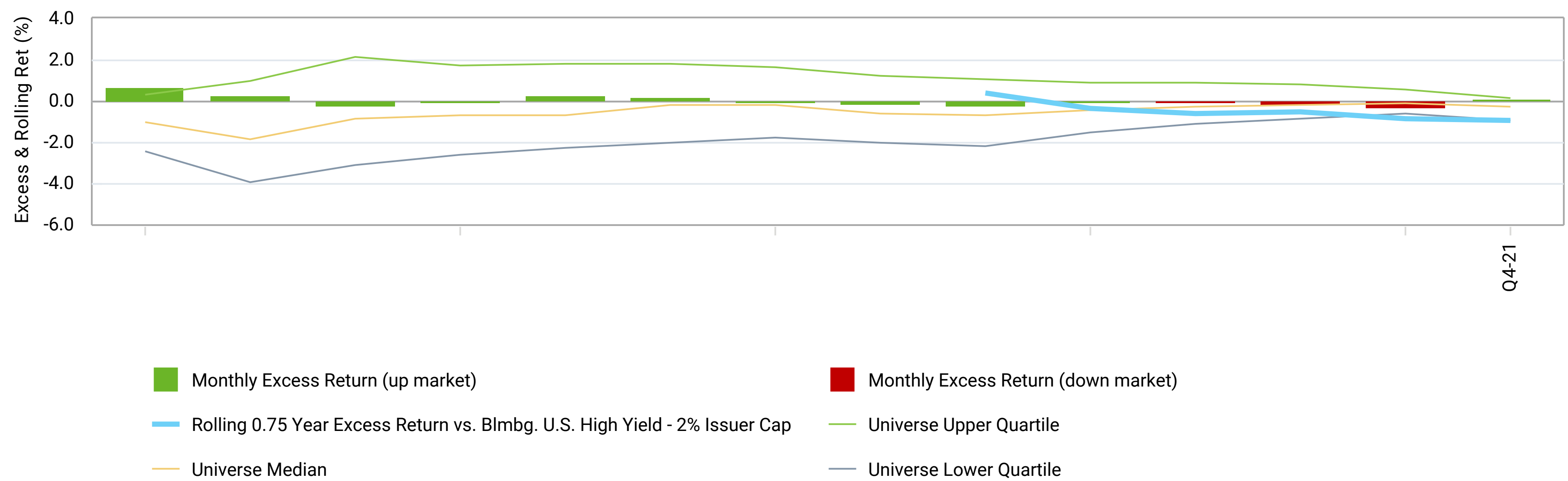
December 31, 2021

LOOMIS SAYLES & CO. HIGH YIELD

eV US High Yield Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

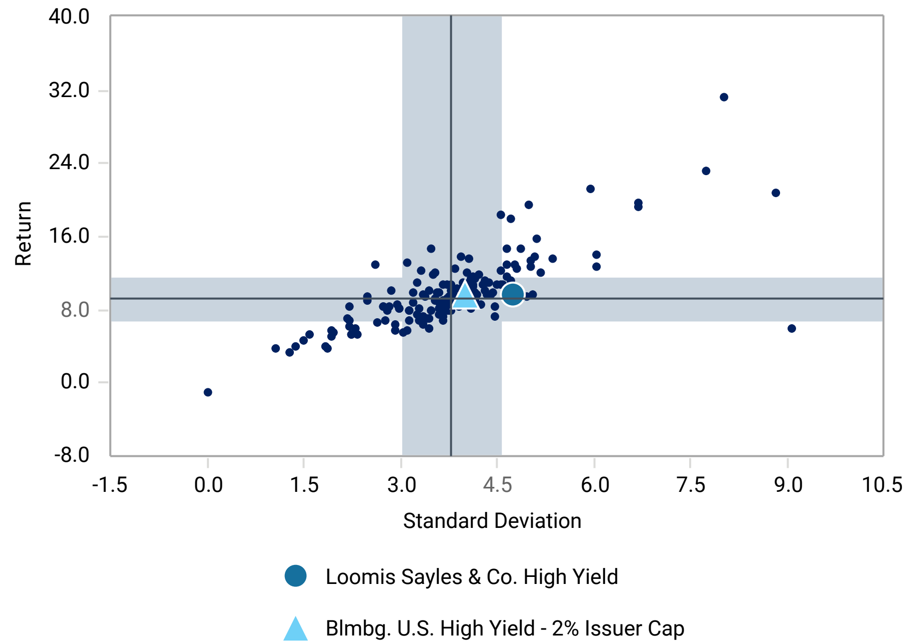


Los Angeles City Employees' Retirement System-LACERS Master Trust

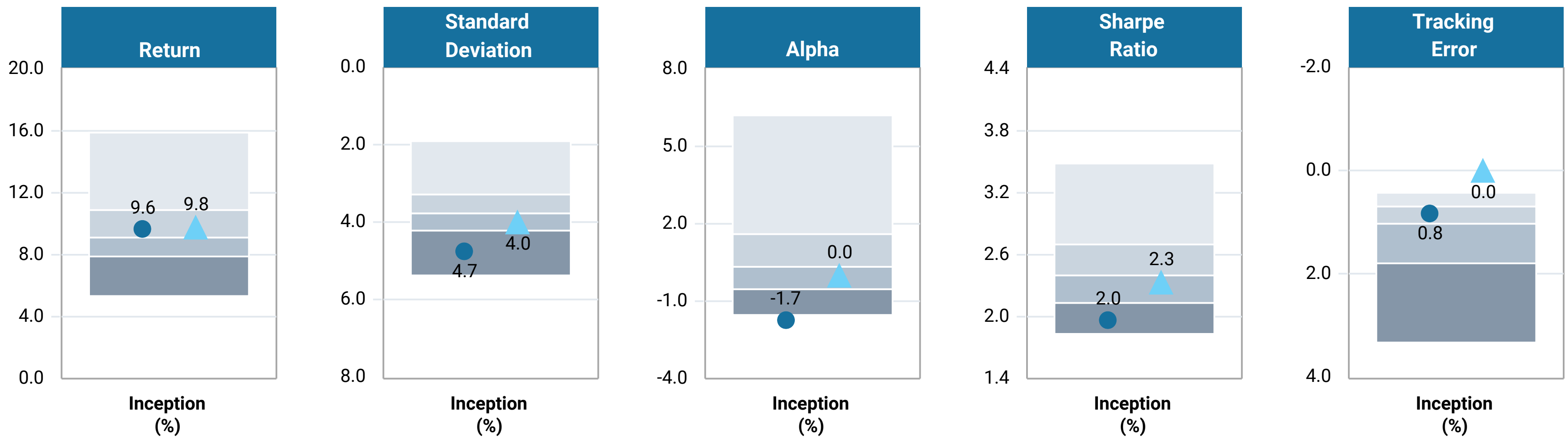
December 31, 2021

LOOMIS SAYLES & CO. HIGH YIELD

Since Inception Return vs. Standard Deviation



Style Map: (0.75 Year)

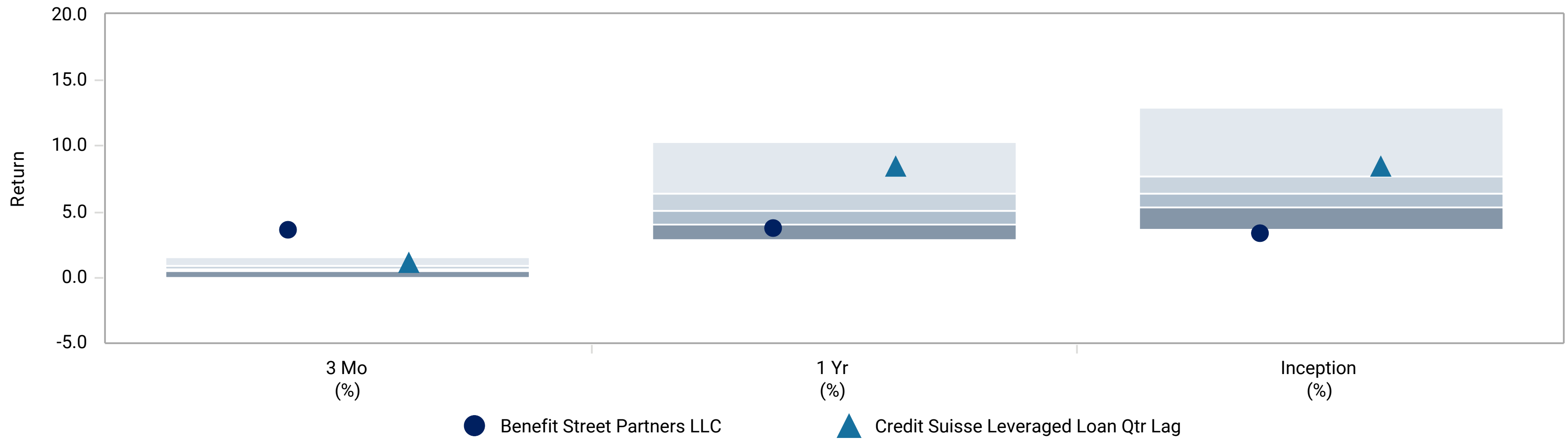


December 31, 2021

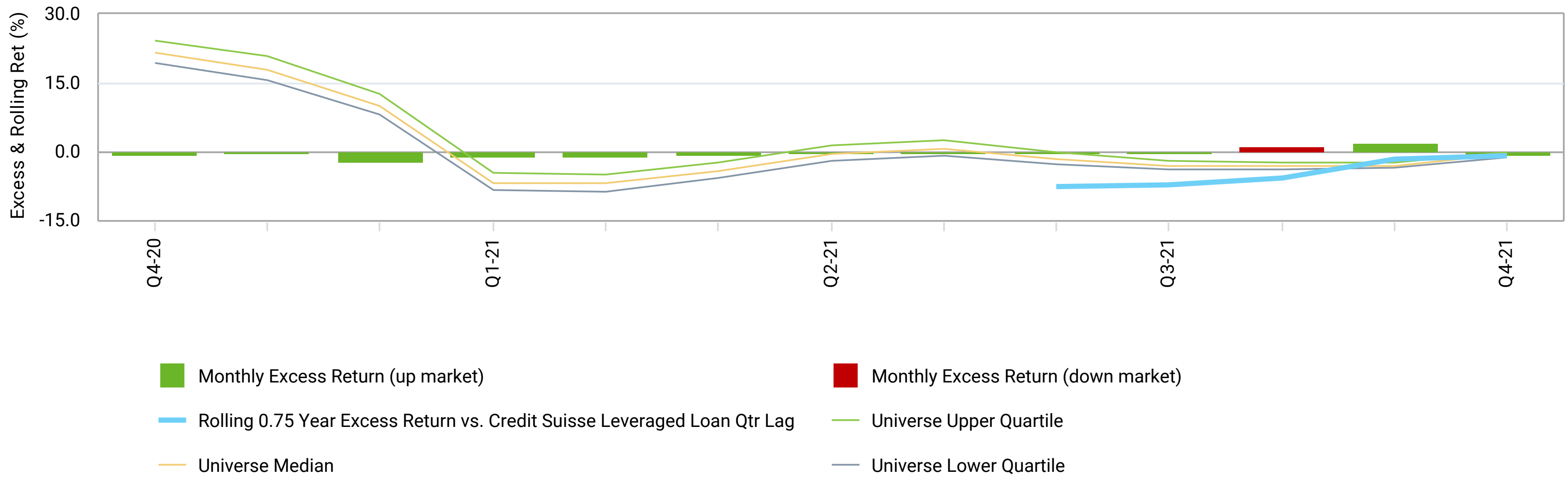
Los Angeles City Employees' Retirement System-LACERS Master Trust

BENEFIT STREET PARTNERS LLC

eV US High Yield Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021

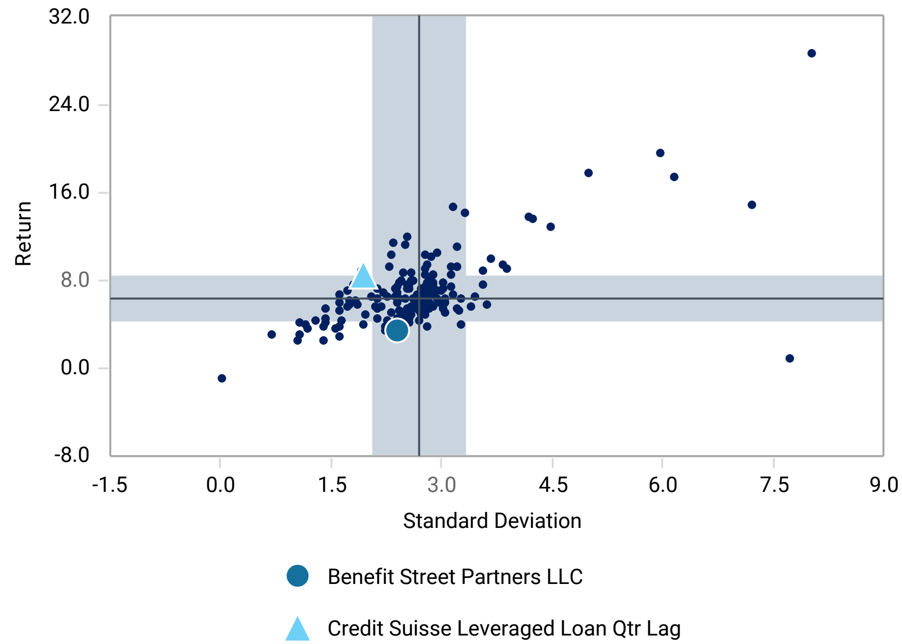


Los Angeles City Employees' Retirement System-LACERS Master Trust

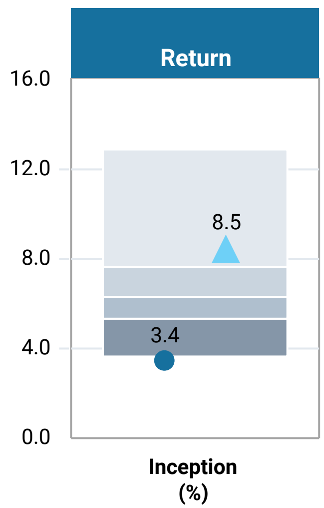
December 31, 2021

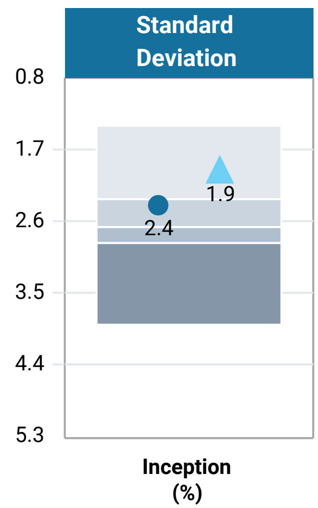
BENEFIT STREET PARTNERS LLC

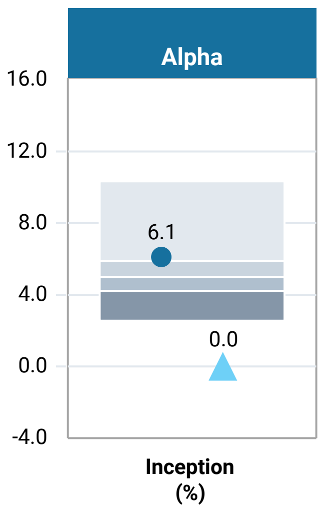
Since Inception Return vs. Standard Deviation

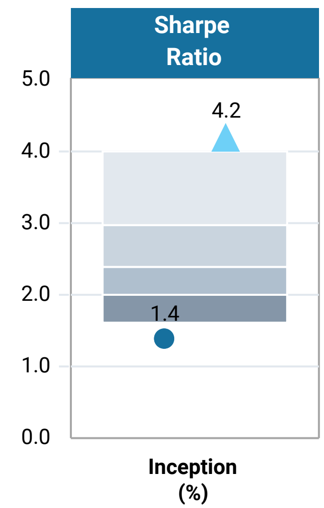


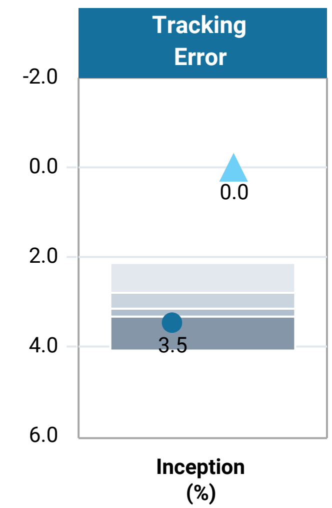
Style Map: (0.75 Year)









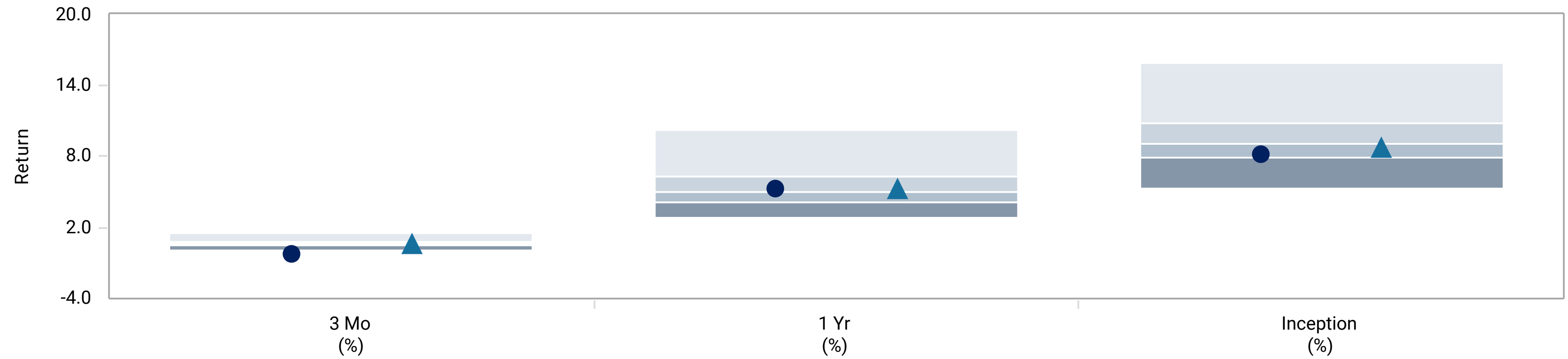


Los Angeles City Employees' Retirement System-LACERS Master Trust

December 31, 2021

DDJ CAPITAL MANAGEMENT

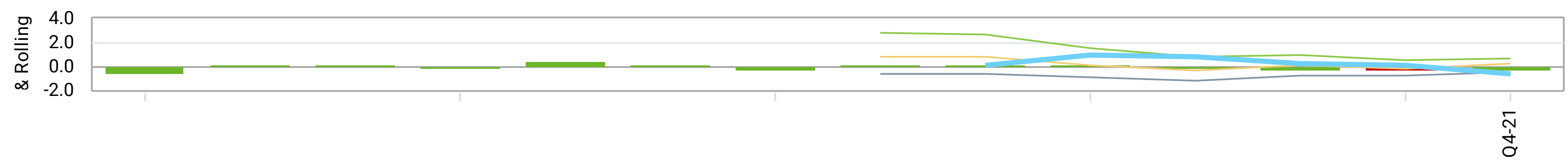
eV US High Yield Fixed Inc (net of fees)



DDJ Capital Management

50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse Leveraged Loan Index

Quarter Excess Return with a Rolling 0.75 Year Excess Return over Since Inception Ending December 31, 2021



Monthly Excess Return (up market)

Monthly Excess Return (down market)

Rolling 0.75 Year Excess Return vs. 50% BBgBarc US High Yield 2% Issuer Cap / 50% Credit Suisse Leveraged Loan Index

Universe Upper Quartile

Universe Median

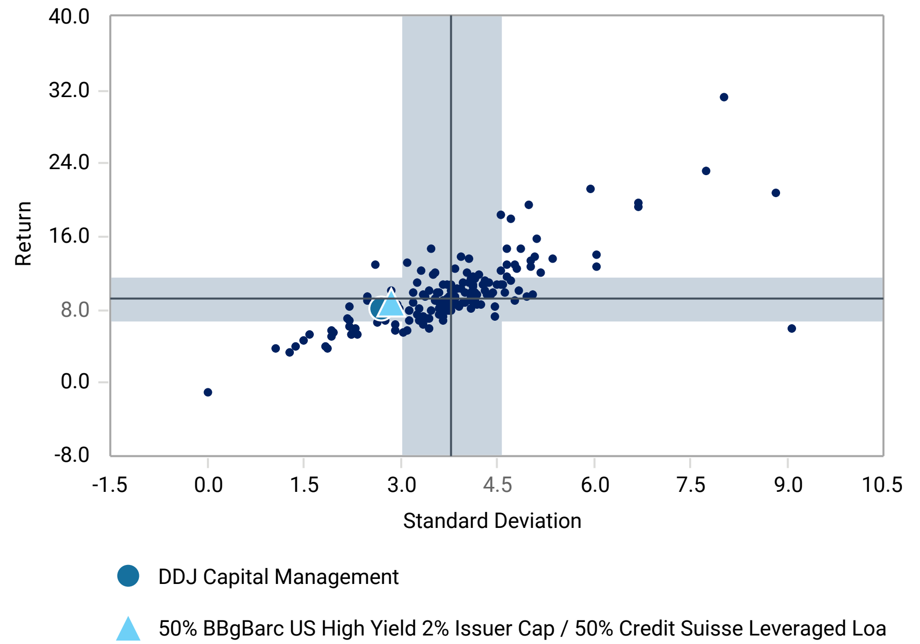
Universe Lower Quartile

Los Angeles City Employees' Retirement System-LACERS Master Trust

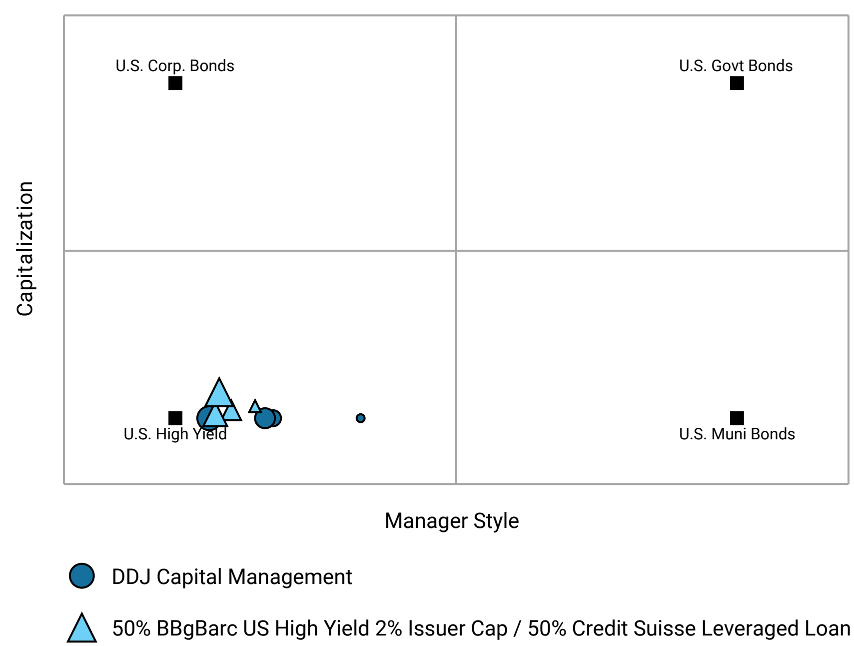
December 31, 2021

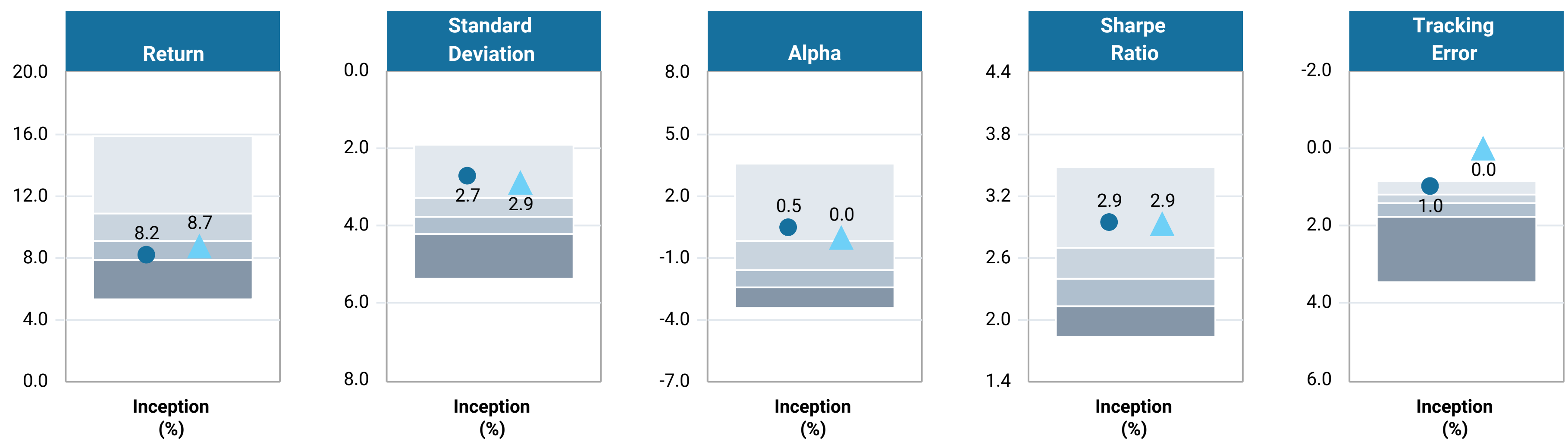
DDJ CAPITAL MANAGEMENT

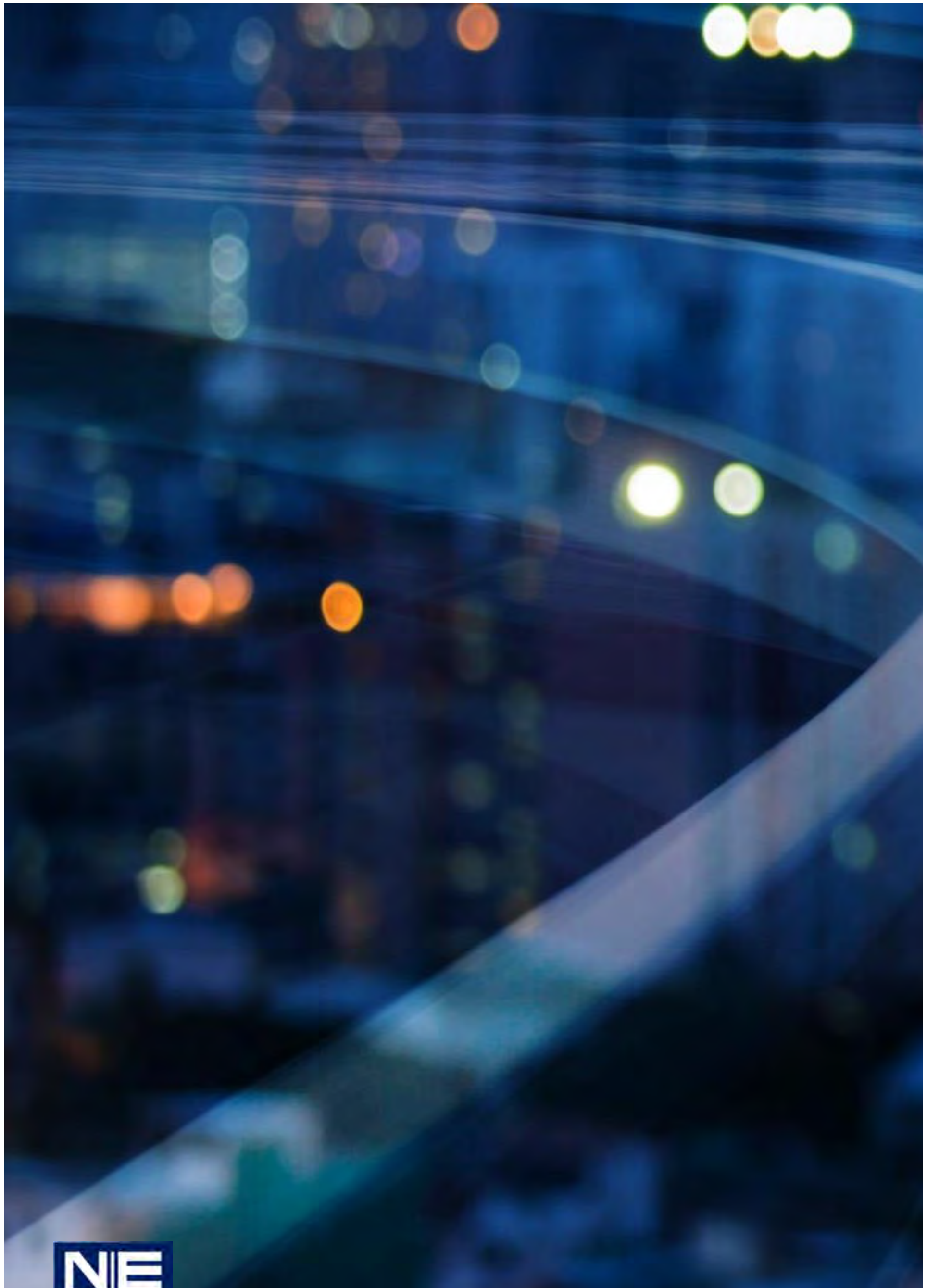
Since Inception Return vs. Standard Deviation



Style Map: (0.75 Year)







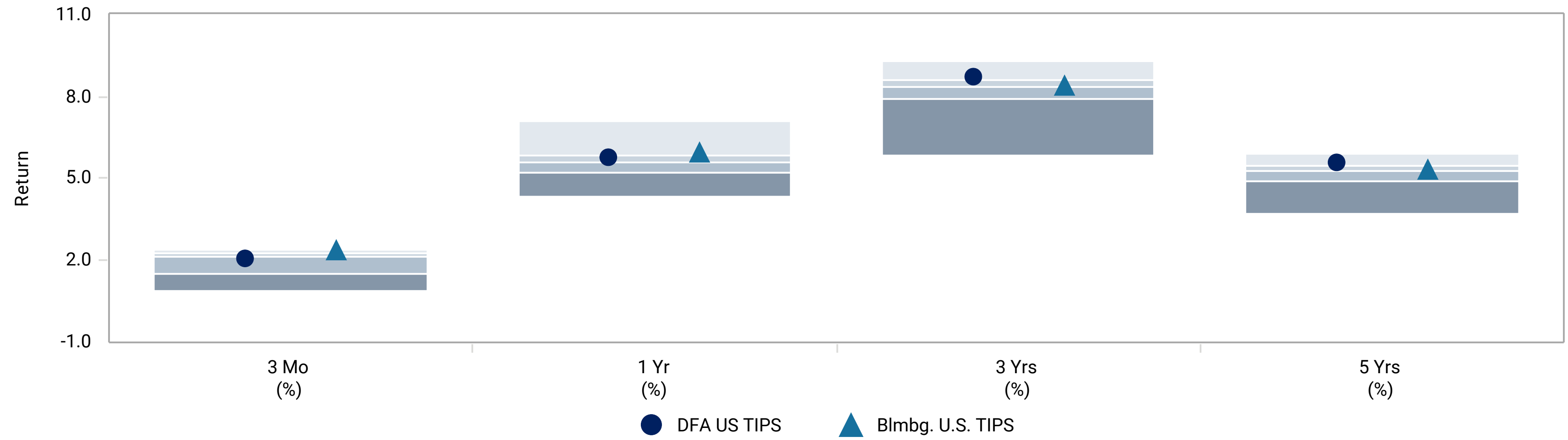
REAL ASSETS MANAGER PERFORMANCE

Los Angeles City Employees' Retirement System-LACERS Master Trust

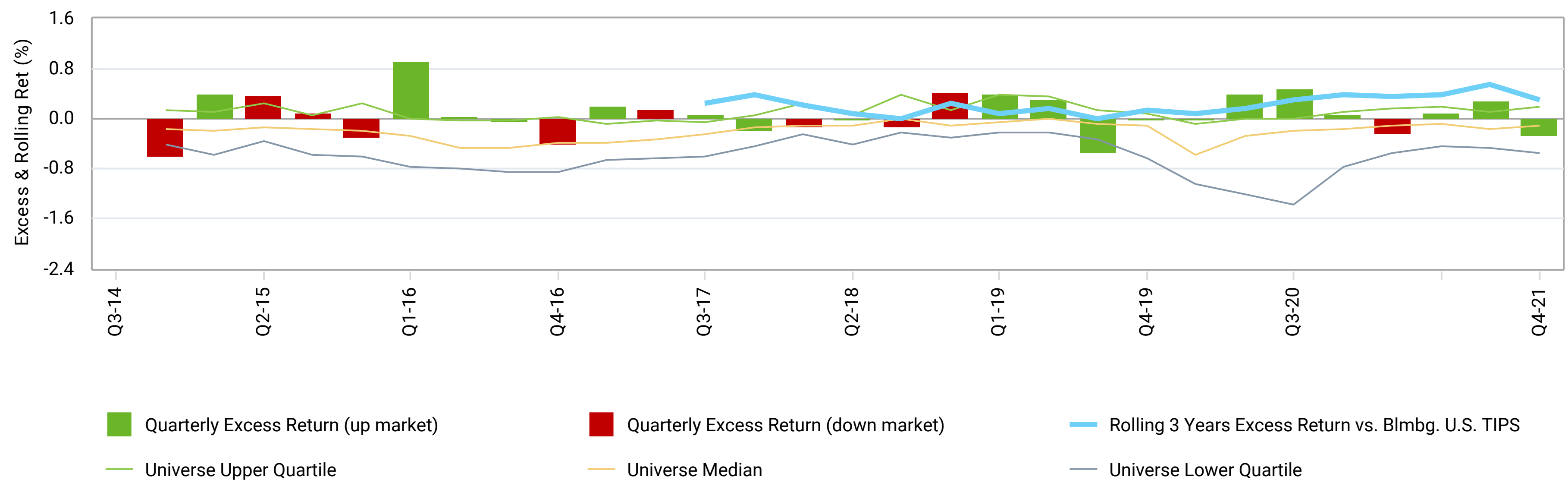
December 31, 2021

DFA US TIPS

eV US TIPS / Inflation Fixed Inc (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

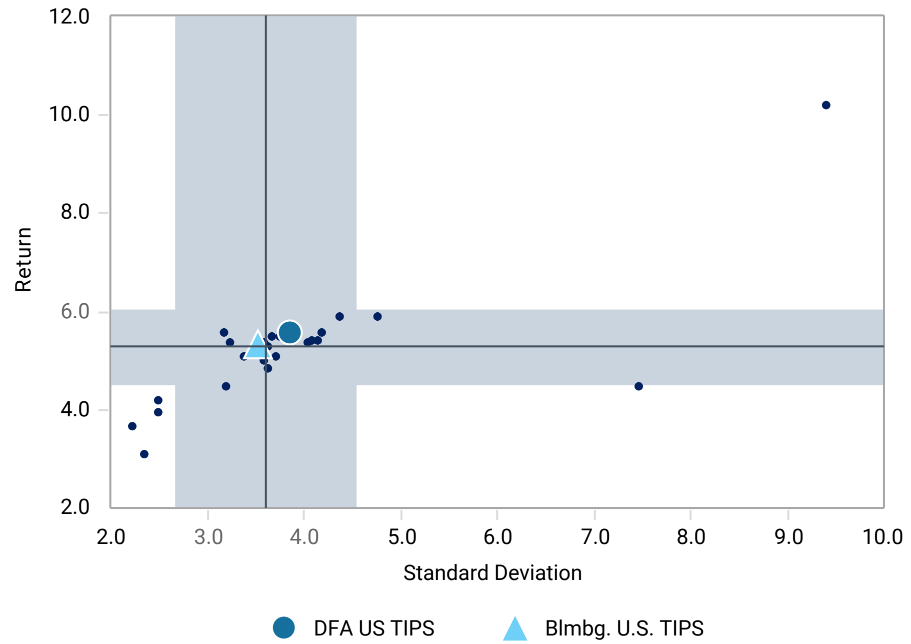


Los Angeles City Employees' Retirement System-LACERS Master Trust

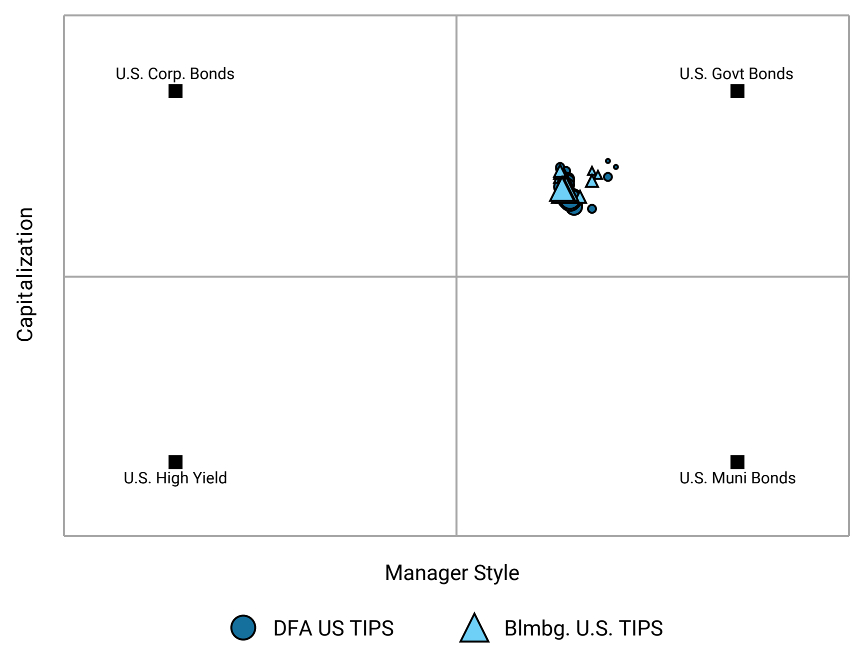
December 31, 2021

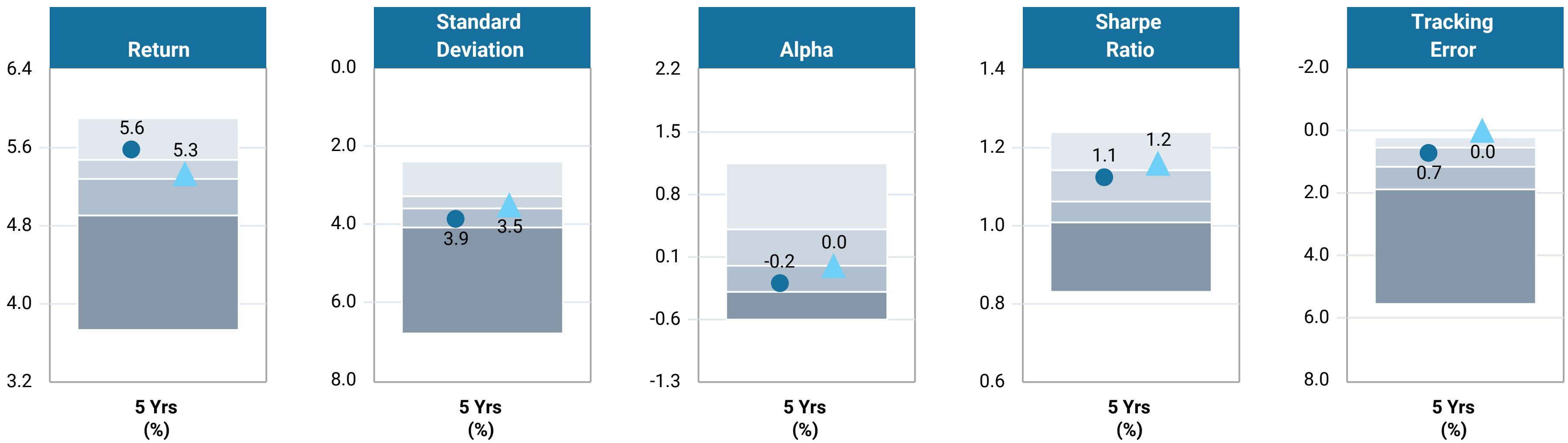
DFA US TIPS

5 Years Return vs. Standard Deviation



Style Map: (5 Years)



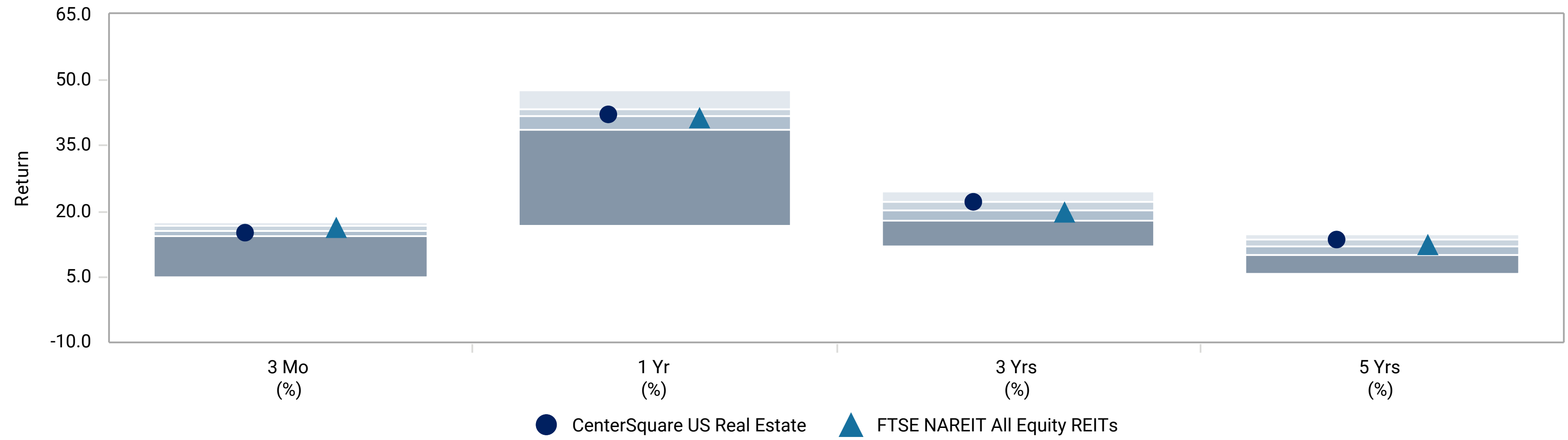


Los Angeles City Employees' Retirement System-LACERS Master Trust

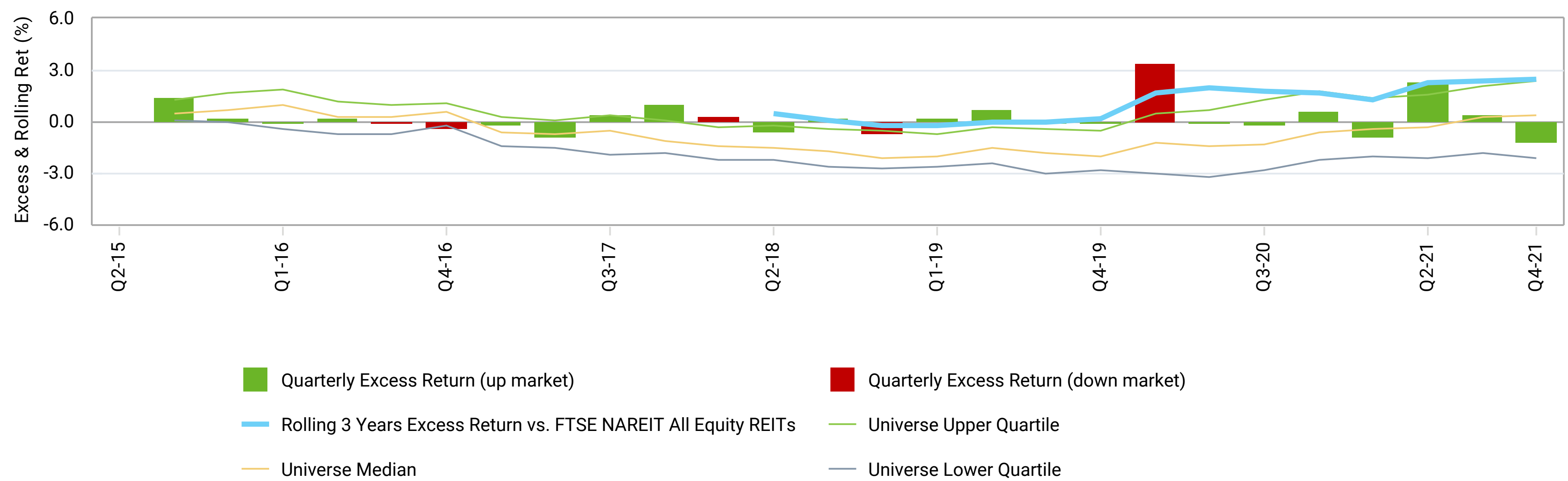
December 31, 2021

CENTERSQUARE US REAL ESTATE

eV US REIT (net of fees)



Quarter Excess Return with a Rolling 3 Years Excess Return over Since Inception Ending December 31, 2021

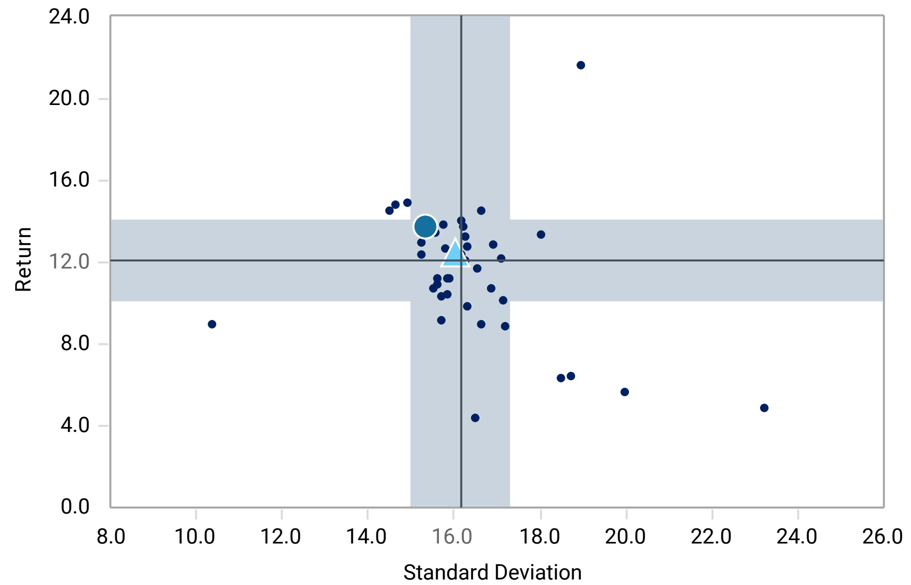


Los Angeles City Employees' Retirement System-LACERS Master Trust

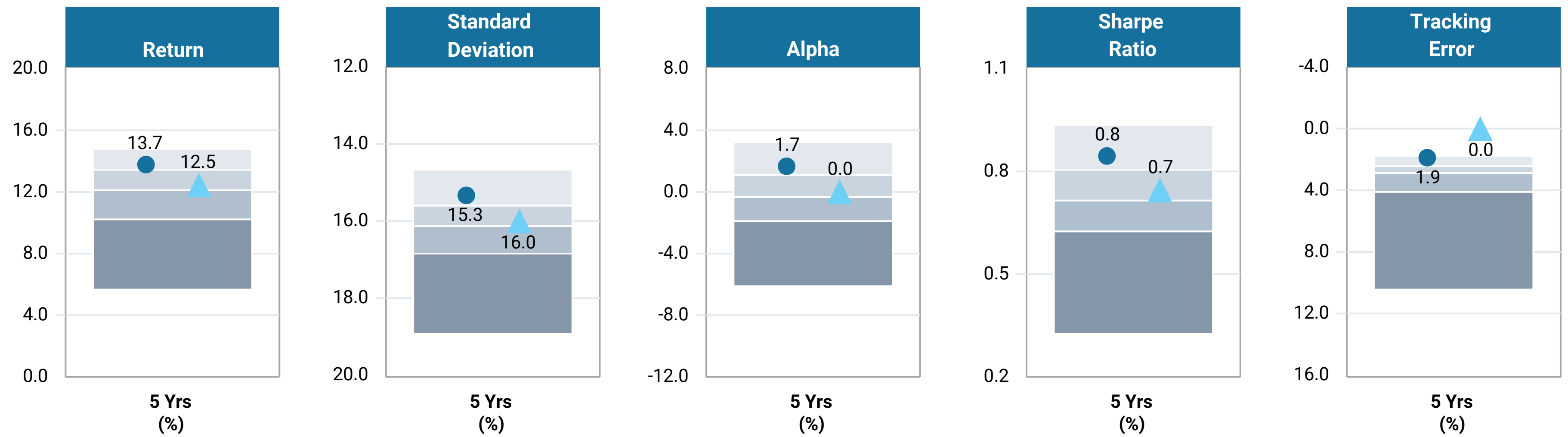
December 31, 2021

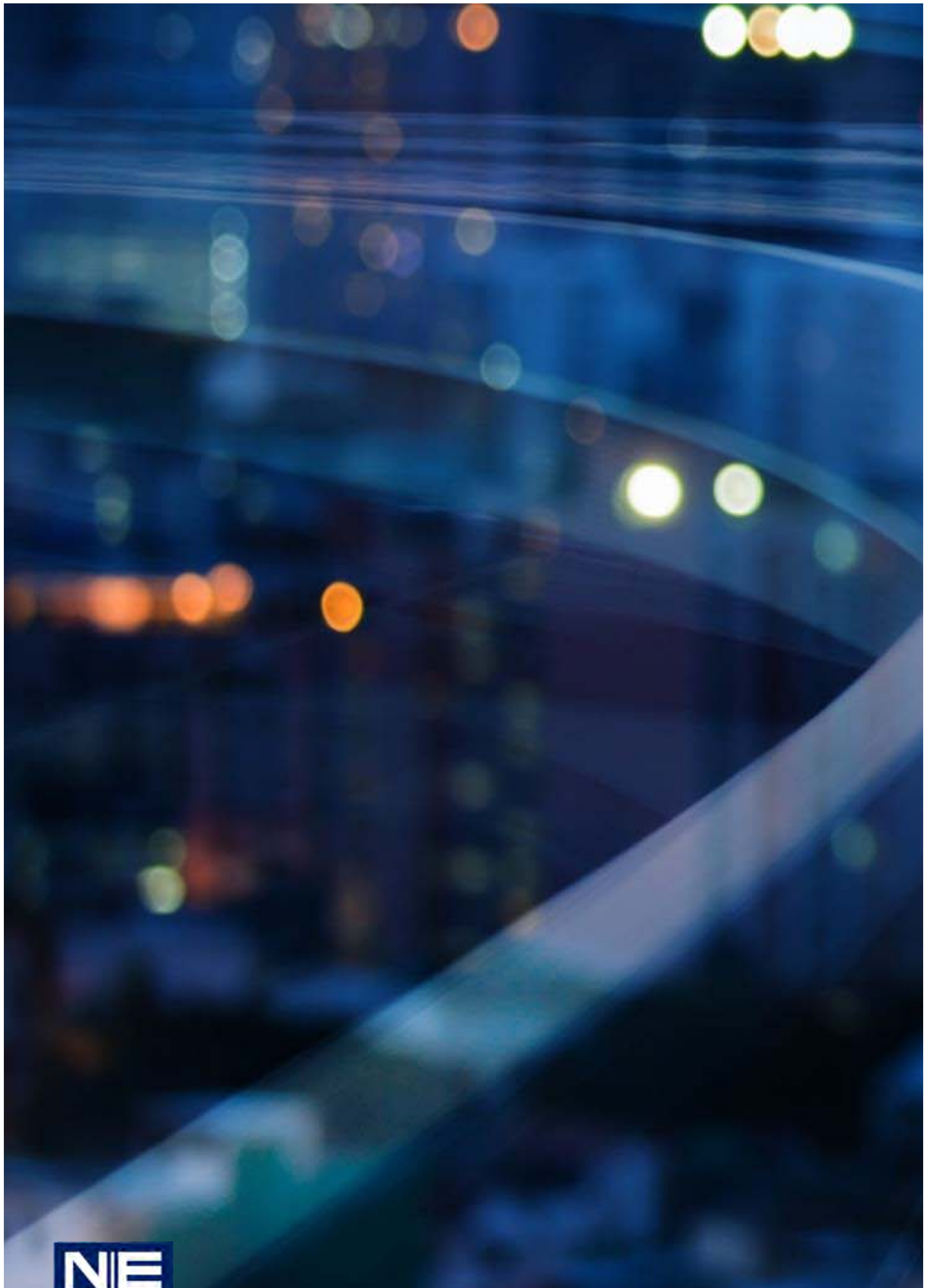
CENTERSQUARE US REAL ESTATE

5 Years Return vs. Standard Deviation



Style Map: (2.5 Years)





DEFINITIONS

POLICY INDEX DEFINITIONS

Policy Index: Current (FY 2021 interim targets adopted September 14, 2021) 22.5% Russell 3000 Index, 27% MSCI ACWI ex USA Net Index, 16.75% Bloomberg U.S. Aggregate Bond Index, 7.25% Credit Opportunities Blend, 12% Real Assets Blend, 13.5% Private Equity Blend, 1% Citi 3 Month T-Bill Index

U.S. Equity Blend: July 1, 2011 - Current: Russell 3000 Index; September 30, 1994 - December 31, 1999 S&P 500 Index 33.75, Russell 1000 Value Index 35%, Russell 1000 Growth 12.5%, Russell 2000 Value 12.5%, Russell 2000 Growth 6.25%

Core Fixed Income Blend: July 1, 2013 – Current: Bloomberg U.S. Aggregate Bond Index

Credit Opportunities Blend: 20.7% Bloomberg US High Yield 2% Issuer Capped Index, 20.7% Credit Suisse Leveraged Loan Index, 55% Blended Emerging Markets Debt Blend, 3.6% Credit Suisse Leveraged Loan Index One Quarter Lagged

Emerging Markets Debt Blend: 50% JPM EMBI Global Diversified, 50% JPM GBI-EM Global Diversified

Real Assets Blend: 41.67% Bloomberg US TIPS Index, 25% FTSE NAREIT All Equity Index, 33.33% Real Estate Blend

Public Real Assets Blend: 62.5% Bloomberg US TIPS Index, 37.5% FTSE NAREIT All Equity Index

Real Estate Blend: July 1, 2014 - Current NCREIF ODCE + 0.80%; July 1, 2012 - June 30, 2014 NCREIF Property Index Lagged +1%; October 1, 1994 - June 30, 2012 NCREIF Property Index Lagged

Private Equity Blend: February 1, 2012 – current: Russell 3000 + 3%; Inception – January 31, 2012: Russell 3000 + 4%

Note: See Investment Policy for a full description of the indices listed.

POLICY INDEX DEFINITIONS

INTERIM POLICY TARGETS ADOPTED ON SEPTEMBER 14, 2021

Asset Class	Policy Target %	Interim Policy Targets 2021	2022	2023	2024	2025
U.S. Equity	21.00%	22.50%	22.00%	21.50%	21.40%	21.00%
Non-U.S. Equity	26.00%	27.00%	27.00%	26.50%	26.10%	26.00%
Private Equity	16.00%	13.50%	14.00%	15.00%	15.50%	16.00%
Core Fixed Income	11.25%	16.75%	16.00%	14.75%	13.25%	11.25%
Credit Opportunities	12.75%	7.25%	8.00%	9.25%	10.75%	12.75%
Public Real Assets	5.00%	8.00%	7.50%	7.00%	6.00%	5.00%
Real Estate	7.00%	4.00%	4.50%	5.00%	6.00%	7.00%
Cash	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

GLOSSARY OF INVESTMENT TERMINOLOGY

- **# Of Portfolios/Observations[1]**
  - The total number of data points that make up a universe or sample.

- **Allocation Index[3]**
  - The Allocation Index measures the value added to (or subtracted from) each portfolio by active management. It is calculated monthly: The portfolio weight allocated to each category from the prior month-end is multiplied by a specified market index return.

- **Asset Allocation Effect[2]**
  - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

- **Agency Bonds (Agencies)[3]**
  - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

- **Asset Backed Securities (ABS)[3]**
  - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

- **Attribution[3]**
  - Attribution is an analytical technique used to evaluate the performance of a portfolio relative to a benchmark. A proper attribution highlights where value was added or subtracted as a result of the manager's decisions.

- **Average Effective Maturity[4]**
  - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

    For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

- **Batting Average[1]**
  - A measurement representing an investment manager's history in surpassing an index.

    Formula: *Divide the number of days (or months, quarters, etc.) in which the manager beat or matched the index by the total number of days (or months, quarters, etc.) in the time period, and multiply that factor by 100.*

- **Brinson Fachler (BF) Attribution[1]**
  - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

Source: [1]InvestorForce, [2]Interaction Effect Performance Attribution, [3]NEPC, LLC, [4]Investopedia, [5]Hedgeco.net

GLOSSARY OF INVESTMENT TERMINOLOGY

- **Brinson Hood Beebower (BHB) Attribution**[1]
  - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

- **Corporate Bond (Corp)**[4]
  - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

- **Correlation**[1]
  - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

- **Coupon**[4]
  - The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

- **Currency Effect**[1]
  - The effect that changes in currency exchange rates over time affect excess performance.

- **Derivative Instrument**[3]
  - A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

- **Downside Deviation**[1]
  - The standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

    Formula: *Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.*

- **Duration**[3]
  - Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

- **Equity/Debt/Cash Ratio**[1]
  - The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. a 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

- **Foreign Bond**[3]
  - A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

- **Hard Hurdle**[5]
  - A rate of return that, once beaten, allows a fund manager to charge a performance fee on returns above the specified hurdle rate.

- **High-Water Mark**[4]
  - The highest value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance-based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Source: [1]InvestorForce, [2]Interaction Effect Performance Attribution, [3]NEPC, LLC, [4]Investopedia, [5]Hedgeco.net

GLOSSARY OF INVESTMENT TERMINOLOGY

- **High-Water Mark[4]**
  - The highest value that an investment fund/account has reached. This term is often used in the context of fund manager compensation, which is performance-based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

- **Hurdle Rate[4]**
  - The minimum rate of return on an investment required for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

- **Interaction Effect[2]**
  - The Interaction Effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with either effect.

- **Median[3]**
  - The value that exceeds one-half of the values in a population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

- **Modified Duration[3]**
  - The percentage change in the price of a fixed income security that results from a change in yield.

- **Mortgage Backed Securities (MBS)[3]**
  - Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

- **Municipal Bond (Muni) [4]**
  - A debt security issued by a state, municipality or county to finance its capital expenditures.

- **Net Investment Change[1]**
  - The change in an investment after accounting for all Net Cash Flows.

- **Performance Fee[4]**
  - A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

- **Policy Index[3]**
  - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in the investment policy statement.

- **Price to Book (P/B)[4]**
  - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

- **Price to Earnings (P/E)[3]**
  - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

- **Price to Sales (P/S)[4]**
  - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

- **Quartile[3]**
  - One of four segments of a distribution. The top quartile consists of observations that rank from 1 to 25, the second quartile consists of observations that rank between 25 and 50, etc.

Source: [1]InvestorForce, [2]Interaction Effect Performance Attribution, [3]NEPC, LLC, [4]Investopedia, [5]Hedgeco.net

GLOSSARY OF INVESTMENT TERMINOLOGY

- **Rank**[3]
  - The relative position of a single observation in a larger population. Universe rankings range from 1 to 100, with 1 being the best and 100 the worst.
- **Return on Equity (ROE)**[4]
  - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.
- **Selection (or Manager) Effect**[2]
  - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect: The larger the sector, the larger the effect, positive or negative.
- **Soft Hurdle**[5]
  - A rate of return that, once beaten, allows a fund manager to charge a performance fee based on the entire annualized return.
- **Tiered Fee**[1]
  - A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first $10M invested, 0.90% on the next $10M, and 0.80% on the remaining balance).
- **Total Effect**[2]
  - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.
- **Total Return**[1]
  - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over the time period.
- **Universe**[3]
  - The list of all assets eligible for inclusion in a portfolio, or group of portfolios eligible for inclusion in a distribution.
- **Upside Deviation**[1]
  - Standard Deviation of Positive Returns
- **Weighted Average Market Cap.**[4]
  - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.
- **Yield (%)**[3]
  - The current yield of a security is the current indicated annual dividend rate divided by current price.
- **Yield to Maturity**[3]
  - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Source: [1]InvestorForce, [2]Interaction Effect Performance Attribution, [3]NEPC, LLC, [4]Investopedia, [5]Hedgeco.net

DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

LACERS
LA CITY EMPLOYEES' RETIREMENT SYSTEM

REPORT TO BOARD OF ADMINISTRATION

From: Investment Committee
Sung Won Sohn, Chair
Elizabeth Lee
Nilza R. Serrano

MEETING: MARCH 22, 2022
ITEM: VIII- C

SUBJECT: **PRIVATE EQUITY AND PRIVATE REAL ESTATE INVESTMENT POLICIES AND POSSIBLE BOARD ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Board approve the following proposed revisions to:

1. The Private Equity Investment Policy to increase the maximum commitment thresholds for new and existing general partnership relationships to $150 million; and

2. The Private Equity and Private Real Estate Investment Policies to change the frequency of the Board's review of portfolio performance reports from quarterly to semi-annually.

Discussion

On March 8, 2022, the Committee considered the attached report regarding proposed revisions to the Private Equity and Private Real Estate Investment Policies. The Committee heard a presentation from staff and David Fann of Aksia TorreyCove Partners LLC (Aksia), LACERS' private equity consultant.

Proposed Revisions to Commitment Thresholds for Consideration
Under the current Private Equity Investment Policy, the private equity consultant, with staff concurrence, has the discretion to invest up to and including $50 million for new partnerships, and up to and including $100 million for follow-on funds without pre-approval from the Board. Based on research conducted by staff and discussions with Aksia, staff proposed to raise the existing General Partner (GP) relationship commitment threshold from $100 million to $150 million and to eliminate the lower $50 million threshold for new GP relationships as compared to existing GP relationships. This will result in one investment maximum threshold of $150 million for new or existing GP relationships.

The increase to $150 million is based on the growth of the LACERS portfolio and an increased target asset allocation to private equity since February 2019 when the current thresholds were established.

Elimination of the lower threshold amount for new GP relationships is based on research conducted by staff of policies of peer U.S. public pension plans. Details about can be found in the attached report (Attachment 1).

Staff discussed the anticipated benefits of the proposed changes, which include greater access to in-demand managers new to LACERS; greater access to high-conviction managers when re-upping: access to separately managed accounts; stronger relationships with GPs; and the potential for additional benefits and rights granted to investors that make larger commitments.

Frequency of Formal Board Review of Private Equity and Private Real Estate Performance
Staff also proposed an administrative revision to the Private Equity and Private Real Estate Investment Policies to change the frequency of portfolio performance presentations made to the Board from quarterly to semi-annually, consistent with a Board action taken on May 8, 2012, and with current practice.

The Committee concurred with both recommendations.

Strategic Plan Impact Statement

Revising the Private Equity and Private Real Estate policies as described above aligns with the Strategic Plan Goals to optimize long-term risk adjusted investment returns (Goal IV), to uphold good governance practices which affirm transparency, accountability, and fiduciary duty (Goal V), and to maximize organizational effectiveness and efficiency (Goal VI).

Prepared By: Clark Hoover, Investment Officer I, Investment Division

NMG/RJ/BF/WL/CH:jp

Attachment: 1. Investment Committee Report dated March 8, 2022

LACERS
LA CITY EMPLOYEES' RETIREMENT SYSTEM

REPORT TO INVESTMENT COMMITTEE **MEETING: MARCH 8, 2022**
From: Neil M. Guglielmo, General Manager **ITEM: VI**

SUBJECT: **PRIVATE EQUITY AND PRIVATE REAL ESTATE INVESTMENT POLICIES AND POSSIBLE COMMITTEE ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Committee consider and provide comments regarding proposed revisions to:

1. The Private Equity Investment Policy to increase the maximum commitment thresholds for new and existing general partnership relationships to $150 million; and

2. The Private Equity and Private Real Estate Investment Policies to change the frequency of the Board's review of portfolio performance reports from quarterly to semi-annually.

Executive Summary

Under the current Private Equity Investment Policy, the private equity consultant, with staff concurrence, has the discretion to invest up to and including $50 million for new partnerships, and up to and including $100 million for follow-on funds without pre-approval from the Board. This report, prepared at the request of the Investment Committee, considers whether to adjust these maximum allowable commitment amounts, which have remained unchanged since February 2019.

Separately, staff also proposes an administrative revision the Private Equity and Private Real Estate Investment Policies to change the frequency of performance presentations to the Board from quarterly to semi-annually for the Private Equity and Private Real Estate portfolios, consistent with a Board action taking on May 8, 2012 and with current practice.

Discussion

Background
The Investment Committee requested staff to consider whether changes are warranted to the private equity commitment thresholds specified in the Private Equity Investment Policy. The current policy states that in conjunction with the private equity consultant, staff may invest up to and including $50 million for new partnerships, and up to and including $100 million for follow-on funds without Board approval. These commitment limits were adopted by the Board on February 12, 2019 as part of a comprehensive review of the Investment Policy Manual.

Adjustment Commensurate with Portfolio Size

As of February 12, 2019, the approximate value of LACERS' total portfolio was $17.1 billion and the 14.0% target private equity allocation in effect at the time represented approximately $2.4 billion of total plan assets. As of January 31, 2022, nearly three years after the thresholds were established, LACERS' total portfolio was valued at approximately $23.2 billion, and the current 16.0% target private equity allocation represents approximately $3.7 billion of total plan assets. Therefore, the target private equity portfolio allocation has increased approximately 54.2% since the $50 million and $100 million thresholds were adopted. Adjusting these current commitment thresholds for this growth, they increase to $77.1 million and $154.2 million as presented in the following table.

Threshold for new GP Relationship	Threshold for Existing GP Relationship	Adoption Date	Target Strategic PE Asset Allocation on Adoption Date	Value of Target PE Allocation on Adoption Date	% Change in Value of Target PE Allocation since prior Adoption Date	Threshold for new GP Relationship Adjusted for % Change in Target Portfolio	Threshold for existing GP Relationship Adjusted for % Change in Target Portfolio
$25 million	$40 million	10/24/2017	12.0%	$2.0 B	NA	NA	NA
$50 million	$100 million	2/12/2019	14.0%	$2.4 B	+20.0%	$30.0 M	$48.0 M
$150 million	*$150 million*	*TBD*	*16.0%*	*$3.7 B*	*+54.2%*	*$77.1 M*	*$154.2 M*

Italics represents proposed new threshold amounts.

Staff Review of Policies for other Public Plans

Staff also examined private equity investment policies of seven California public plans -- Los Angeles Fire and Police Pensions (LAFPP), Los Angeles Water and Power Employees' Retirement Plan (WPERP), Los Angeles County Employees Retirement Association (LACERA), Orange County Employees Retirement System (OCERS), San Francisco Employees Retirement System (SFERS), the California State Teachers' Retirement System (CalSTRS), and the California Public Employees' Retirement System (CalPERS) -- as well as several plans outside of the state. The review provided the following general findings:

- Unlike LACERS, only one public plan was found to make any distinction between commitment thresholds for new General Partner (GP) relationships as compared to existing GP relationships.
- Few plans have absolute PE commitment limitations formally stated in their investment policy. Based on conversations with investment staff from some of the plans without formal commitment limitations, the commitment thresholds are not set in stone as they are based on internal discussions between of staff and consultants based on the plan's needs and the investment opportunity set at the time.
- In cases where plan policy made any distinction between new and existing GP relationships, this applied to direct co-investments only.

Proposed Revisions to Commitment Thresholds for Consideration

Based on the research conducted by staff and discussions with Aksia TorreyCove Partners LLC (Aksia), LACERS' Private Equity Consultant, staff proposes to raise the existing GP relationship commitment threshold from $100 million to $150 million and eliminate the lower $50 million threshold for new GP relationships as compared to existing GP relationships. This will result in one investment maximum threshold of $150 million for new or existing GP relationships.

Anticipated Benefits of the Proposed Changes

- Greater access to in-demand managers new to LACERS: Eliminating the lower commitment threshold for new GP relationships will allow LACERS greater access to highly sought-after managers that rarely have capacity to bring on new investors as well as to highly qualified teams that spin out from established firms.
- Greater access to high-conviction managers when re-upping: Oversubscribed and highly sought-after GPs often use the Limited Partner (LP) commitment size in the prior fund as a starting point to determine how much to allocate to the LP in a new fund. Eliminating the lower threshold for new GP relationships allows LACERS to make larger investments to new relationships, which will give LACERS access to larger commitment sizes when committing to the GPs next fund.
- Access to Separately Managed Accounts: The capacity to make larger commitments makes it more feasible for LACERS to meet the minimum requirements of separately managed accounts (SMAs) versus investing in comingled vehicles. Potential benefits of SMAs include fee discounts and increased customization options. Access to SMAs can also help advance LACERS' efforts to develop a successful direct co-investment program.
- Build stronger relationships with GPs: The ability to make larger commitments makes it easier to manage the number of GP relationships. With fewer relationships, staff can develop deeper and more meaningful relationships, which is especially important as LACERS considers direct co-investments.
- Additional benefits and rights: Larger commitment sizes can potentially grant additional benefits such as more extensive legal protection (e.g. Most Favored Nation) and membership on the LP Advisory Committee.

Frequency of Formal Board Review of Private Equity and Private Real Estate Performance
Staff also proposes an administrative revision to the Private Equity and Private Real Estate Investment Policies to change the frequency of portfolio performance presentations made to the Board from quarterly to semi-annually, consistent with a Board action taken on May 8, 2012 and with current practice.

Strategic Plan Impact Statement

Revising the Private Equity and Private Real Estate policy is consistent with the Strategic Plan Goals to optimize long-term risk adjusted investment returns (Goal IV), to uphold good governance practices which affirm transparency, accountability, and fiduciary duty (Goal V), and to maximize organizational effectiveness and efficiency (Goal VI).

Prepared By: Clark Hoover, Investment Officer I, Investment Division

NMG/RJ/BF/WL/CH:jp

Attachments:

1. Private Equity and Private Real Estate Investment Policies – Proposed Revisions (Redline Version)
2. Private Equity and Private Real Estate Investment Policies – Proposed Revisions (Clean Version)
3. Private Equity and Private Real Estate Investment Policies – Current Board Approved Version

X. PRIVATE EQUITY INVESTMENT POLICY

A. Introduction

This Private Equity Investment Policy ("Private Equity Policy") sets forth guidelines that provide a general framework for selecting, building, and managing LACERS' investments in private equity, including corporate finance/buyout, special situations (including distressed debt, distressed turnaround and mezzanine strategies), venture capital and growth equity, co-investments, secondary market transactions, and other privately structured investments with the return and risk characteristics of private equity.

B. Investment Objectives

1. Return

On a relative basis, the return objective for the LACERS' private equity portfolio ("Private Equity Portfolio") is 300 bps over the Russell 3000 Index net of fees, expenses, and carried interest.

Returns are measured over the life of the partnership and become meaningful for periods past the J-Curve. The valuation methodology used by general partners should conform to industry and regulatory standards. Performance will be measured using standard industry metrics such as IRR (internal rate of return), TVPI (total value to paid in capital), and MOIC (multiple on invested capital.) Additionally, the IRR performance in the first few years of a partnership's life may be negative due to the J-curve effect.

2. Risk

Private equity investments are illiquid and have a long-term holding period. When invested alongside publicly traded assets, the asset class increases diversification and reduces risk at the System level. Nonetheless, LACERS expects that the Private Equity Consultant will take all appropriate measures to assume risks that are sufficiently compensated by expected return. Such measures include, but are not limited to, diversification (as detailed in Section X.D.3 below) and due diligence.

C. Scope

The Private Equity Consultant, with Staff concurrence, shall select new investments, monitor and advise on the sale of existing private equity investments, and provide recommendations and program advice in accordance with the Private Equity Policy. The Private Equity Policy establishes the framework for the management of the Private Equity Portfolio. The Private Equity Consultant will be evaluated annually as consultant and investment manager for the Private Equity Portfolio based upon the following factors: portfolio performance; quality of analytical and technical work; expertise in the private equity asset class; responsiveness to requests from the LACERS Board of Administration ("Board") and LACERS Investment Staff ("Staff"); availability to attend Board meetings and meetings with Staff with reasonable advance notice; consulting and advising on LACERS' portfolio, including information on

selected private equity related topics; identifying and mitigating risks; and proactively informing Staff of new investment opportunities or risks in the marketplace.

The Private Equity Consultant will evaluate and recommend investment transactions pursuant to the roles and responsibilities defined in Section X.F. With Staff concurrence on a recommendation from the Private Equity Consultant, LACERS may effect investments in ~~new~~ partnerships up to and including $150 million~~ and for all follow-on partnerships up to and including $100 million~~. With Staff concurrence, recommended investments in excess of these amounts must be presented to the Board for approval. Non-U.S. dollar commitments to private equity partnerships shall be equal or less than the maximum U.S. dollar-equivalent limits as of the day Staff concurs with the Private Equity Consultant. However, non-U.S. dollar commitments to private equity partnerships may exceed the U.S. dollar currency equivalent maximum commitment limits after the date of Staff's concurrence due to foreign currency exchange rate fluctuations, and require no further Board approval.

D. **Investment Guidelines**

1. **Eligible Investments**

LACERS will invest in limited partnership interests of pooled vehicles as well as separate accounts, funds of one (or similar structures together with a limited number of other LPs), special purpose vehicles (SPVs), and other investment structures such as limited liability companies, investment trusts, separate accounts, and other corporate structures (unless otherwise stated in this Policy) covering the broad spectrum of private investments as follows:

a) Private equity partnerships – Investments in corporate finance/buyout, special situations, venture capital and growth equity, secondaries, and co-investment funds. Special situations is a broad investment strategy, which includes mezzanine and distressed debt partnerships, fund-of-funds (both direct and secondary), industry-focused, and multi-stage partnerships;

b) Direct co-investments – Investments made alongside general partners directly in underlying assets and securities, usually with discounted management fees and carried interest. Co-investments may be structured as securities held directly by LACERS ("direct co-investments") or as an interest in a vehicle managed by a General Partner that invests in such underlying assets and securities.

Direct co-investments shall be made on the same or better terms as provided to the Limited Partnership that is investing in the same transaction.

Co-investing can increase concentration risk because the company in which the limited partner is investing directly may also be a company held in a private equity fund in which the limited partner has also invested. Therefore, the Private Equity Consultant will monitor co-investments for concentration risk and recommend adjustments in the private equity portfolio as needed in order

to adequately manage such risk. The Private Equity Consultant will address concentration risk in the Annual Private Equity Strategic Plan.

It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel), and break-up fees on potential Co-investments. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

c) Secondary market purchases – purchases of private equity related interests in which one or more of the original parties sells their ownership stake(s) or interests, as a single interest or a pool of interests. Such interests can take the form of: 1) Limited Partnership Interests; 2) Co-investments; 3) General Partner interests; 4) Separately Managed Accounts; 5) Direct Ownership of Portfolio Companies; or 6) a combination of the above.

It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel and broker-dealers), and break-up fees on potential secondary transactions. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

d) LACERS will also consider sales of partnership fund interests on the secondary market or to other limited partner(s) or potential buyer(s).

e) Other privately structured investments deemed appropriate within LACERS' risk profile as determined by the Private Equity Consultant.

2. Limitation on Percent of Partnership's Total Commitment

LACERS' commitment to any given partnership shall not exceed 20% of total commitments (by all limited partners and any other investors including the GP, excluding any co-investments) in that partnership. Any commitments in excess of this threshold will require pre-approval by the Board.

These limitations shall not apply to specially constructed partnerships (such as a fund of one or two); or separately managed accounts (SMAs) where LACERS is the sole limited partner.

3. Diversification

The Private Equity Consultant, on behalf of LACERS, will seek to appropriately diversify the Private Equity Portfolio in order to manage risk based on the following guidelines:

a) Up to 15% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may be attributable to partnerships by the same manager at the time the commitment is made.

b) Up to 25% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may consist of co-investments and secondary opportunities.

c) The Private Equity Consultant shall appropriately diversify the Portfolio across vintage years when possible.

d) The Private Equity Consultant shall appropriately diversify the Portfolio with respect to geographic distribution.

e) The Private Equity Consultant shall monitor Portfolio investments with respect to GICS industry sector exposure as compared to the Cambridge Associates US Private Equity Index with the understanding that industry sector exposure at an investment fund level will be managed at the discretion of the general partner.

f) Private Equity Sub-asset Classes

(1) Assets committed to venture capital shall be appropriately diversified across the stages of venture capital (e.g., early-stage, mid-stage, late-stage, and growth equity).

(2) Assets committed to corporate finance/buyouts shall be appropriately diversified by target company size (e.g., mega, large, mid, and small).

In addition to the diversification criteria listed above, LACERS' Board will adopt optimal sub-asset allocation targets, which will be updated pursuant to the Annual Private Equity Strategic Plan.

4. **Illiquidity**

Private equity investments are not designed to meet the short-term liquidity needs of LACERS. The investments in this asset class are illiquid until the general partner, subject to the provisions of the partnership agreement, decides to sell fund investments and distribute proceeds to limited partners.

5. **Distributions**

Staff is responsible for the final disposition of distributions from partnerships.

E. **Review of Investment Guidelines**

The Private Equity Consultant and Staff periodically will review the above private equity investment guidelines and recommend changes if necessary.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

F. Roles and Responsibilities

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Strategy/Policy	• Select Private Equity Consultant. • Approve asset class funding level. • Review and approve the Private Equity Annual Strategic Plan which includes allocation targets and ranges.	• In consultation with Private Equity Consultant and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.	• Help develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.
Investment Management and Monitoring	• Review ~~quarterly~~semi-annual, annual, and other periodic monitoring reports and plans. • Review Commitment Notification Reports.	• Review quarterly, annual and other periodic monitoring reports prepared by the Private Equity Consultant. • Conduct meetings with existing managers periodically. • Attend annual partnership meetings when appropriate. • Fund capital calls and manage distributions. • Review Private Equity Consultant's recommendations on partnership amendments and consents. • Execute partnership amendments and consents. • Manage and approve the wind-down and/or dissolve private equity fund investment(s) with private equity consultant's concurrence. • Manage and execute the sale of partnership interest on the secondary market or to other limited partner(s) or potential buyer(s). • Prepare Commitment Notification Reports for Board.	• Maintain regular contact with existing managers in the portfolio to ascertain significant events within the portfolio. • Recommend amendments and consents to Staff for approval. • Provide quarterly, annual, and other periodic monitoring reports and plans.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Investment Selection	• Review investment analysis reports. • Review and approve investments in ~~new~~ partnerships of amounts greater than $150 million prior to investment. ~~• Review and approve investments in follow-on partnerships of amounts greater than $100 million prior to investment.~~ • Review and approve direct co-investment opportunities that exceed $50 million. • Review and approve the sale of any one existing partnership fund on the secondary market exceeding $50 million in Fair Market Value. • Review and approve a simultaneous sale of multiple partnership fund interests in a packaged structure.	• Refer investments and forward to Private Equity Consultant for preliminary screening. • Conduct meetings with prospective or existing general partners representing new investment opportunities. • Conduct due diligence with general partners to better ascertain risk and return profile, as determined by the Chief Investment Officer. • In conjunction with Private Equity Consultant, invest up to and including $150 million ~~for new~~in partnerships~~, and up to and including $100 million for follow-on funds~~ without Board approval. If Staff opposes and Private Equity Consultant disagrees, refer to Board for decision. • In conjunction with Private Equity Consultant, make recommendations to Board for approval for investments over $150 million~~ in new partnerships, or over $100 million in follow-on funds~~. • In conjunction with Private Equity Consultant, review and concur with direct co-investment opportunities up to and including $50 million. • In conjunction with Private Equity Consultant, review and concur with the approval of sale of existing partnership funds on the secondary market up to and including $50 million in Fair Market Value. • General Manager or designee with signature authority will execute agreements and other legal or business documents to effectuate the transaction closing. • Ensure review of relevant fund documents by the City Attorney and/or external legal counsel.	• Conduct appropriate analysis and due diligence on investments. • Prepare investment reports for Board consideration on investments exceeding $150 million~~ for new managers, or exceeding $100 million in follow-on funds~~. • With Staff concurrence, approve investments of up to and including $150 million~~ for new partnerships, and up to and including $100 million in follow-on funds~~. • With Staff concurrence, approve direct co-investment opportunities up to and including $50 million. • Present to Staff recommendations pertaining to the sale of existing partnership funds on the secondary market exceeding $50 million in Fair Market Value. Such transactions shall be brought to the Board for review and approval. • Provide investment analysis reports for each new investment and for sales of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s). • Communicate with Staff regarding potential investment opportunities undergoing analysis and due diligence. • Coordinate meetings with general partners at the request of Staff. • Advise on and negotiate investment terms.

XI. PRIVATE REAL ESTATE INVESTMENT POLICY

This Real Estate Investment Policy sets forth a general framework for managing LACERS' investments in real estate. This policy provides that the LACERS' real estate program shall be planned, implemented, and monitored through the coordinated efforts of the Board, the General Fund Consultant, Staff, the Real Estate Consultant, and the Investment Managers. Additionally, this policy is subject to the guidelines set forth by LACERS in the Ethical Contracting Compliance Policy and in the Third Party Marketing and Referrals Disclosure Policy, as amended from time to time by the Board, or as stated under applicable laws or regulations.

The Real Estate Consultant, along with Staff, shall prepare an Annual Real Estate Strategic Plan, as defined below, to be considered and acted upon by the Board that will address the specific goals and guidelines to be achieved and followed in the Real Estate Portfolio each year. The Annual Real Estate Strategic Plan shall be consistent with the guidelines set forth in this policy.

A. Real Estate

For purposes of this policy, real estate shall be defined to include investments that are private equity or debt positions in real property. Investments may be leveraged or unleveraged. As further set forth in this policy, LACERS will invest primarily in discretionary commingled funds (e.g., limited liability companies, real estate investment trusts, and limited partnerships) owned with other suitable institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds). As further set forth in this policy, LACERS also may invest in real estate assets on a direct ownership basis through a discretionary separate account vehicle. Such investments will be evaluated on a case by case basis, but at a minimum, need to provide a compelling opportunity, which is consistent with the Real Estate Portfolio's investment objectives and overrides or outweighs the benefits of commingled fund investments.

B. Fiduciary Standards

The investment and management of the Real Estate Portfolio shall be accomplished in a manner consistent with the "prudent person" standard of fiduciary care. This level of care requires that all LACERS' fiduciaries act reasonably to accomplish the stated investment objectives and to safeguard the System on behalf of LACERS' participants and their beneficiaries. The implementation of this Real Estate Policy, including the selection of investment managers, shall be completed in a manner that enhances the Real Estate Portfolio's diversification, thereby reducing risk by limiting exposure to any one investment, manager, real estate property type, geographic region, or other defined risk factor.

C. Scope

This Real Estate Policy sets forth the objectives, policies, and processes and procedures related to the implementation and oversight of the Real Estate Portfolio. Specifically, the objectives outlined herein define the desired risk level and return expectations governing the Real Estate Portfolio; the policies provide guidelines governing investment styles to manage defined risk exposures within the asset class; the investment processes and procedures and roles and responsibilities describe the investment process and allocation of duties among the Board, Staff, the Managers, and the Real Estate Consultant.

LACERS has engaged the Real Estate Consultant on a non-discretionary basis to assist the Board and Staff to implement and revise this policy when necessary. The Real Estate Consultant's duties and responsibilities, which are further defined in Section XI.H include selecting Managers, including performing due diligence and recommending new investments; monitoring existing investments; and generally providing advice to Staff and the Board with respect to the Portfolio. The Real Estate Consultant shall conduct a review of this policy, in conjunction with the Board and Staff, at a minimum of once per year, and set forth any strategic and tactical recommendations in the Annual Real Estate Strategic Plan.

D. **Investment Objectives**

The main investment objective with respect to the Real Estate Portfolio is to maximize returns given the defined level of risk, as determined by the Board. While it is necessary to use active asset management strategies to maximize total investment returns (i.e., income and appreciation returns), investment principal is to be safeguarded within the Portfolio's framework of prudence and managed risk. Although real estate investments are illiquid and have a long-term holding period, investing in this asset class should improve the System's fund level risk-adjusted returns by enhancing overall diversification, which reduces total portfolio risk. Specifically, the objectives of LACERS with respect to the Real Estate Portfolio include the following:

1. **Attractive Risk-Adjusted Returns**

To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns. As discussed in Section XI.G below, the benchmarks for the Portfolio will be the NFI-ODCE Index plus 80 basis points.

2. **Increased Portfolio Diversification/Reduced Portfolio Risk**

To use real estate to enhance overall diversification and, in turn, reduce overall risk of the System's assets, given the historically low to negative return correlations that exist between real estate and other asset classes.

3. **International Investments**

To access international real estate markets through private equity and debt real estate investments. By so doing, the Real Estate Portfolio will obtain exposure to diverse economies, populations, and currencies.

4. **Significant Current Cash Yields**

To invest in real estate assets, which will generate a significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value add and core investments.

5. **Inflation-Hedge**

To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation.

6. **Preservation of Principal**

To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

E. **Investment Guidelines**

LACERS shall establish a long-term target allocation to real estate (the "Target Allocation"). The Target Allocation will fluctuate according to the relative values among the Real Estate Portfolio and the allocations to other asset classes of LACERS. To accomplish and maintain the Target Allocation, the Real Estate Consultant may recommend committing in excess of the Target Allocation percentage in order to meet full allocation objectives. The Real Estate Portfolio allocation percentage actually achieved quarterly may vary from the Target Allocation within a reasonable range as determined by the Board and Staff from time to time.

Eligible real estate funds will range from core open-end funds to opportunistic closed-end funds, and may also include separate investment accounts with selected fund managers; however, the Real Estate Portfolio will be comprised primarily of commingled fund vehicles. Separate accounts represent opportunities wherein LACERS would be the sole or significant equity sponsor for an investment manager pursuing a specifically targeted opportunity or defined strategy. As the sole or significant equity sponsor, LACERS would likely be entitled to voting and control rights generally not available to commingled fund investors.

The following investment guidelines set forth investment parameters consistent with the risk and return objectives of the Real Estate Portfolio.

1. **Portfolio Composition – Risk Strategy Mix**

The Real Estate Portfolio shall be comprised of two different but complementary risk/return categories or risk strategies. These categories or risk strategies are referred to as core and non-core, as defined below. These categories or risk strategies generally define the risk and return levels as low, medium, and high risk associated with institutional real estate investments.

a) **Core and Core Plus**

Core

Equity investment in operating and substantially-leased (i.e., at least at market occupancy levels) institutional quality real estate in the traditional property types (i.e., apartment, office, retail, industrial, and hotel). Core investments may also include high-quality, non-traditional property types (i.e. student housing, medical office, and self-storage) that produce stable income with low risk. Assets are located in significant metropolitan markets with reasonable population sizes and economies. Net returns historically have been in the 6% to 9% range (net of fees) with annual standard deviation near 8.0%. Of note, core investments typically feature current income as a large portion of overall return (i.e., up to 70%), and appreciation that generally matches or exceeds inflation. Low leverage is utilized (i.e., 50% or less on a portfolio basis). Core debt investments include first mortgage loans secured by the previously defined core equity real estate assets. Such mortgage loans are either newly originated or are existing but performing loans with reasonable borrowers (e.g., credit), reasonable terms (e.g., loan to value of less than 50% and debt service coverage of 1.25 or greater) and institutional-quality management (e.g., an institutional investment manager with reasonable experience and track record in managing first mortgage loan investments). During periods of market illiquidity, core equity investments can provide high going-in income returns and provide a reasonable inflation-hedge so long as markets are not over-supplied.

Core Plus

Core Plus investments typically will target a higher leverage ratio (around 50% on a loan-to-value basis) and allocate slightly more to non-operating real estate investments, around 20%.

b) **Non-Core**

Value Add

Value add investments are functional, high quality assets with specific property issues, such as high vacancy, significant upcoming lease expirations, or below market rents. These are debt or equity investments that typically require rehabilitation, redevelopment, development, lease-up, and/or repositioning. Levered returns historically have been in the 10% to 14% range (net of fees). Value add investments also typically feature both current income and appreciation as components of overall return, and frequently involve the repositioning of distressed assets (i.e., not fully leased and operating) and potentially the purchase of interests in real estate operating companies ("REOCs"). Value add investments typically are expected to generate above-core returns through the leasing-up of a property, which increases the end value by increasing in-place income and, in many cases, ultimately decreasing the capitalization rate upon disposition. Value add investments are typically more dependent on appreciation returns than core investments, with purchase prices based on in-place income or asset replacement cost (i.e., at a discount to replacement cost). During periods of market illiquidity, value equity investments can provide high going-in income returns and pricing at significant discounts to replacement costs. During periods of market liquidity, value equity investments include new development projects (i.e., acquire land, obtain entitlements, construct building and lease or sell), which require significant expertise and underwriting. Moderate leverage is utilized for these investments (i.e., targeting 50% to 65% on a portfolio basis).

Opportunistic

Equity or debt investment in real estate properties, operating companies, and other investment vehicles involving significant investment risk, including real estate, financial restructuring, and non-real estate risk. Levered returns have been 15% or higher (net of fees) with significant annual standard deviation. Opportunistic investing includes distressed assets, financial restructurings, and/or financial engineering opportunities (e.g., foreclosing on a mortgage and selling the equity interest) and potentially the purchase of REOCs. Opportunistic investments typically have even greater appreciation potential than value add investments (e.g., 50% of total returns); correspondingly, these investments offer a higher return potential and a higher risk profile than core or value add investments. In many cases, since appreciation is the primary goal of opportunistic investing, many are originated with little if any in-place income and therefore less current income as a portion of total return. These investments historically have experienced higher return performance during periods of market illiquidity (e.g., early 1990's in the U.S.). Higher leverage is used (i.e., up to 80% with some funds).

Core and core plus and non-core exposure targets shall be evaluated at a minimum of once per year and set forth in an Annual Real Estate Strategic Plan and approved by the Board. When making investment recommendations, the Real Estate Consultant shall evaluate the impact of the prospective investment on the Real Estate Portfolio's risk/return exposures based on the existing portfolio net asset value.

2. **Risk Mitigation**

a) **Leverage**

Leverage is a significant risk factor that shall have exposure guidelines and monitoring requirements, as set forth in Section XI.E.7 of this Real Estate Policy.

b) **Diversification**

Diversification is an important tool in reducing real estate portfolio risk and accomplishing superior risk-adjusted returns. The Real Estate Portfolio shall be diversified by risk factors which can be reduced through diversification (e.g., geographic region and property type). Diversification reduces the impact on the portfolio of any one investment or any single investment manager to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio.

It is expected that at various points in time, the Real Estate Portfolio may have a significant exposure to a single property type or location to take advantage of opportunities available in the market which are projected to generate superior returns. When making investment recommendations, the Real Estate Consultant shall consider as part of its investment recommendation the impact on Real Estate Portfolio diversification and risk and return. As part of the Annual Real Estate Strategic Plan, the Real Estate Consultant shall provide annually, or more frequently when market conditions require, the risk factor (e.g., property type and region) ranges which it believes provide reasonable diversification given the expected market conditions. The following describe the various diversification guidelines that will be utilized.

Property Type

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information, and industry indices' diversification. Property type portfolio exposure levels have had a significant impact on institutional investor returns since property types have performed differently during economic cycles.

Real estate investments may include investments other than the traditional property types, such as healthcare facilities, manufactured housing, infrastructure, timber and farmland. The Real Estate Consultant shall include a section in each Annual Real Estate Strategic Plan, reviewing the Real Estate Portfolio's property-type exposures and investment objectives relating thereto.

Geographic Region

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information and industry indices' diversification. The importance of location to the long-term value of real estate is based on local economic fundamentals and the other risk attributes (e.g., weather, earthquake and local government impact) of regional areas.

The Real Estate Consultant shall include in each Annual Real Estate Strategic Plan investment guidelines and targets related to the Real Estate Portfolio's allocation to geographic regions.

3. **Investment Life Cycle**

Investment life cycle refers to the stage of development of a real estate investment. The stages of development include the following: (1) land or pre-development (i.e., un-entitled or partially entitled land); (2) development/redevelopment (i.e., in process of entitling or constructing improvements); (3) leasing (i.e., less than full or market occupancy); and (4) operating (i.e., greater than market occupancy). As a result of the risks associated with development, at no time shall the Real Estate Portfolio have an exposure exceeding 30% to total non-operating investments (i.e., the total of pre-development/land, development/redevelopment and leasing). Also, the Real Estate Consultant shall monitor the Real Estate Portfolio's exposure to different life cycles through the quarterly performance report, which shall indicate the Real Estate Portfolio's non-operating investment exposure and whether a non-compliance issue exists.

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4. **Permissible Investment Structures/Vehicles and Private Allocations**

The Real Estate Portfolio may include private real estate equity and debt investments. Private equity real estate investments may include any investment made in equity interests in real estate assets (i.e., land and assets deriving most of their income return from rents paid by tenants subject to lease agreements) or companies through private placements, including REOCs and Real Estate Investment Trusts ("REITs"). Typical property types include the following: office, retail, rental apartments, for sale residential, industrial and hotel. Private debt investments may include structured investments, which provide for stated preferred returns, which may be accrued or paid on a current basis. Private debt investments may also include loans secured by senior or junior mortgage or deed of trust agreements.

5. **Investment Vehicles**

Investment vehicle exposure ranges shall be used to mitigate portfolio risk including enhancing portfolio liquidity. The following discussion provides a summary of the advantages and disadvantages of the investment vehicles, which shall be used in developing the Real Estate Portfolio.

a) **Open-End Commingled Funds**

The open-end fund investments shall be made primarily to provide (1) reasonable property type and geographic diversification, (2) exposure to larger properties (i.e., over $50 million) or certain countries, and (3) reasonable liquidity (i.e., ability to redeem within 90 days). The Real Estate Consultant shall complete reasonable due diligence in evaluating open-end commingled funds consistent with this policy. Open-end commingled fund vehicles may include, but are not limited to, insurance company separate accounts, group trusts, limited liability companies, single purpose corporations or any other vehicle that is determined by the Real Estate Consultant to be consistent with the Real Estate Policy.

b) **Closed-End Commingled Funds**

The closed-end fund investments shall be made primarily to obtain exposure to reasonably diversified portfolios of value add and opportunistic investments. The primary advantages of closed-end funds are that they provide access to talented management teams with focused niche value add and opportunistic strategies. Also, management teams typically co-invest and rely on incentive fees, which combined enhance the alignment of investor and manager interests. The Real Estate Consultant shall complete reasonable due diligence in selecting closed-end fund investments. Co-investment by the manager of a fund or by investors in the fund is acceptable providing: (1) the co-investor(s) have similar investment objectives regarding risk/return exposures and holding periods, (2) control and voting rights with respect to investment decisions are deemed reasonable, and (3) reasonable buy/sell or other agreements exist to allow for the resolution of investor disagreements. Closed-end funds typically have terms of no less than seven years and are therefore illiquid.

c) **Separate Account Vehicles**

Separate accounts may be used to make private equity/debt investments. Separate accounts offer the primary advantage of control over the manager, the strategy, the asset investment and sales decisions, and the capital. The Real Estate Consultant shall complete reasonable due diligence in selecting the Managers for direct investment separate accounts.

Direct Investments

LACERS may make direct equity/debt investments using separate account vehicles; however, such investments require careful consideration. Transaction costs and management expenses are high and there may be a significant time commitment by the Staff. Separate account direct investments shall be made only when the opportunity is compelling, as determined by the Staff, the Real Estate Consultant, and the Board. To be compelling, a direct investment needs to: (1) be in compliance with this Real Estate Policy; (2) be consistent with the strategic needs of LACERS, as set forth in the Annual Real Estate Strategic Plan; and (3) present an investment opportunity that provides benefits to LACERS that outweigh or override those provided by commingled funds, as previously described. The Real Estate Consultant shall assist the Staff with any direct investments by recommending a Manager and by completing an independent report, which summarizes and evaluates the manager due diligence completed. The report shall include a summary of findings and conclusions and shall be retained by the Staff on file for review.

Direct investments shall also include any private REOC investments. These include full or joint venture ownership of an operating company, which may be used to acquire a single asset, to implement a niche investment strategy or to serve another purpose as defined by the Real Estate Consultant and approved by the Staff and the Board.

Each direct investment strategy, fee structure and level of investment discretion shall be defined by the Real Estate Consultant and approved by the Staff and the Board. The Manager shall complete an annual budget review, as defined by the Real Estate Consultant, and a hold/sell analysis, for each direct investment. Since the sale or refinancing of a direct investment interest is required to return invested capital, such investments are considered illiquid.

6. **Manager/Investment Concentration**

LACERS shall limit its exposure to any single Manager or investment, and be subject to other investment restrictions to reduce risk, as further defined below.

a) **Maximum Manager Allocation**

No single manager (including any allocation to pooled funds and/or separate accounts) shall be allocated more than thirty percent (30%) of the Real Estate Portfolio's total allocation at the time of the prospective investment commitment. The allocation amount calculation shall include all of the Real Estate Portfolio's investment commitments remaining to the Manager plus the net asset value of the existing investments at the time of measurement or at the time of a prospective investment allocation.

b) **Maximum Investment Commitment**

The Real Estate Portfolio's maximum investment commitment to a non-core commingled fund or a separate account Manager shall be limited to fifteen percent (15%) of the Real Estate Portfolio's allocation to real estate at the time of the prospective investment commitment.

c) **Commingled Fund Guidelines**

The Real Estate Portfolio's investment in a single open-ended commingled fund shall not exceed twenty percent (20%) of the total net market value of the commingled fund at the time of the prospective investment. The Real Estate Portfolio's investment in a single closed-end commingled fund shall not exceed twenty percent (20%) of the total investor commitments to the fund at the time of closing of the commitment period of the prospective investment. LACERS shall not consider investments in a commingled fund that has less than $150 million in committed capital inclusive of LACERS pending commitment.

d) **Maximum Individual Separate Account Investment**

The Real Estate Portfolio's maximum investment in any single separate account investment shall be limited to a maximum of ten percent (10%) of the Real Estate Portfolio's total allocation to real estate at the time of the prospective separate account investment, unless otherwise approved by the Board.

The Real Estate Consultant and the Staff shall be responsible for reviewing separate account allocations and commingled fund terms to ensure they are consistent with or have incorporated the applicable restrictions previously described. Even though a prospective commingled fund or separate account allocation may be in compliance with the Real Estate Policy restrictions, the Real Estate Consultant shall complete reasonable due diligence with respect to each prospective investment to determine whether it is appropriate for recommendation to the Staff and the Board. The Real Estate Consultant may consider a number of factors in determining whether investments are reasonable and appropriate for institutional investors, including the following: the level of investment by institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds); the size of the organization; the experience of key personnel; the track record of key personnel in investments comparable to the strategy to be undertaken; and the financial condition of the firm.

7. **Leverage**

Leverage is a significant risk factor, the importance of which is magnified during an economic downturn when decreasing property values and stricter lending terms can lead to unexpected increased leverage levels and decreased equity interests. The Real Estate Consultant shall set forth reasonable leverage targets given market conditions in the Annual Real Estate Strategic Plan. When making a new investment recommendation, the Real Estate Consultant shall consider the impact on the Portfolio's leverage guidelines and targets at the time of the prospective investment.

Additionally, the Real Estate Consultant shall monitor the Real Estate Portfolio's leverage to evaluate compliance with the above stated guidelines through the quarterly performance report.

8. **Specialized Investments**

LACERS has in the past, and as determined by the Staff, the Board, and the Real Estate Consultant, may continue to allocate to unique investment strategies and/or investment firms, as further described below.

a) **Unique Investment Strategies**

Unique investment strategies include those that have collateral benefit objectives, which include job creation, community development, green or environmental objectives (e.g., reduce the use of carbon based fuels), and underserved market initiatives (e.g., defined by geography such as urban or inner city and by demographics such as minority or lower income areas). While such strategies offer attractive benefits, the Real Estate Consultant shall focus its evaluation on whether the expected return projected for the investment is reasonable given the level of risk. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation is reasonable and consistent with that of a comparable real estate strategy not providing the same collateral benefits.

b) **Unique Managers**

Unique Managers include those that are Emerging Managers pursuant to the LACERS Emerging Investment Manager Policy. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation to the unique Manager is reasonable. In so doing, the Real Estate Consultant needs to evaluate comprehensively any factors of the unique Manager that may adversely affect investment performance and conclude that such factors are not likely to affect return performance materially and adversely.

A. **Investment Processes And Procedures**

1. **Real Estate Manager Selection Process**

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The following discussion describes the process by which LACERS selects Managers and investments.

a) **Universe of Potential Manager Candidates**

The Real Estate Consultant, pursuant to the Annual Real Estate Strategic Plan, will initiate a Manager search by creating a global list of potential candidates for selection based on the Staff and Real Estate Consultant's initial search criteria. The Real Estate Consultant shall provide information from its databases regarding the candidates to be reviewed with the Staff. The Staff will set forth any additional candidates to be considered. The Real Estate Consultant and the Staff will consolidate their lists to create a single list of potential candidates.

b) **Minimum Manager Qualifications**

The Manager requirements include that the Manager have $200 million of assets at a minimum under management and no less than three (3) years of real estate investment experience or a demonstrable track record of three (3) years of real estate investment experience.

c) **Manager Candidate Summaries**

The Real Estate Consultant shall complete a brief summary of the Manager candidates, including descriptions of their meeting Manager criteria established by the Real Estate Consultant and the Staff relating to the Managers' organization, track record, personnel, alignment of interests, terms and fees. The Real Estate Consultant will screen these summaries and recommend the finalists for further due diligence to the Staff.

d) **Due Diligence**

After the Staff and the Real Estate Consultant select the finalists, the Real Estate Consultant shall complete a comprehensive due diligence review. The comprehensive due diligence review includes an in-depth analysis of the firm's background, organization, personnel, strategy and other related factors. The Real Estate Consultant shall invite the Staff to participate in completing due diligence activities.

e) **Selection and Approval**

After completing the due diligence report, the Staff and Real Estate Consultant will recommend a candidate for consideration to the Board, which will make the final decision.

f) **Term Negotiation**

The Staff, Real Estate Consultant and the legal counsel will negotiate the Manager contract and propose a side letter if necessary. The final contract shall be executed by LACERS' General Manager or the appropriate party or parties authorized by the Board.

2. **Monitoring Process and Performance Measurement**

The Real Estate Consultant and the Staff, when available, will meet with managers on a periodic basis to determine the progress being made in the fund. These discussions may occur at annual investor meetings or in face-to-face or telephone meetings either at the Manager's or the Real Estate Consultant's offices.

Investment Managers will send financial reports and capital account statements on a regularly scheduled basis to the Real Estate Consultant and LACERS. ~~Quarterly~~ Semi-annual Portfolio Performance Review Reports ("PPR") shall be prepared by the Real Estate Consultant and formally presented to the Board. The PPR is a comprehensive reporting and evaluation system addressing each investment. The PPR system shall provide such information as may be required by LACERS to understand and administer its investments and shall include attributes for both the Managers and the total portfolio. These attributes include: income, appreciation, gross and net returns for the portfolio and each manager, cash flow, internal rate of return calculations, diversification, comparisons to relevant industry performance indices, and information reporting standards.

G. **Benchmark Returns**

While no return objectives are stated by strategy, relative performance comparisons will be made to various indices to provide additional perspective on performance and/or facilitate attribution analysis. The return objectives are as follows:

LACERS' Real Estate Portfolio Benchmark Guideline	
Strategy	**Return Objectives Over Rolling 5-year Periods**
Core Real Estate	NFI-ODCE Index
Non-Core Real Estate	NFI-ODCE Index + 200 basis points
Timber	NCREIF Timberland Index, gross of fees

Portfolio Benchmark

With respect to private real estate investments, The Real Estate Consultant, the Staff and the Board shall use the NFI-ODCE plus 80 basis points over a rolling 5-year period as its benchmark.

H. **Roles and Responsibilities**

The following duties have been established to manage the risks involved with investing in real estate. Set forth below is the delegation of the major roles and responsibilities of each participant:

1. **Duties of the Board**

a) Establish the role of the real estate investment program in light of the total System objectives.

b) Consider and act upon the allocation to real estate and approve any adjustments to the allocation which may from time to time be necessary.

c) Review, consider, and act upon the Annual Real Estate Policy (objectives, policies and procedures) and the Annual Real Estate Strategic Plan for the real estate program.

d) Interview, consider, and act upon the Staff recommendations for selection, retention and removal of the Managers and/or the Real Estate Consultant and the selection of Manager investments.

e) Review the real estate portfolio on a ~~quarterly~~ semi-annual basis to evaluate the investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan.

2. **Duties of the Staff**

a) Update and communicate with the Board and Investment Managers on issues and matters of the Policy.

b) Provide the Board with education and analysis that is independent from the Real Estate Consultant to the extent time and resources allow.

c) Be familiar with the asset class and stay informed of developments in industry as they occur.

d) Oversee the Real Estate Consultant’s preparation of the Annual Real Estate Strategic Plan for the real estate program. Present and recommend, along with the Real Estate Consultant, the Real Estate Policy and Annual Real Estate Strategic Plan to the Board.

e) Oversee and review the performance of the Real Estate Consultant and the Managers on a periodic basis and discuss findings with the Board.

f) Bring any non-conforming items or significant issues to the attention of the Board.

g) Document and monitor funding procedures.

h) Complete any other activity as directed by the Board.

i) Conduct or assist in conducting due diligence on prospective investment opportunities as LACERS’ resources permit.

j) Prepare investment documentation with the Real Estate Consultant.

3. **Duties of the Manager**

a) Adhere to reporting and performance measurement standards and comply with generally accepted accounting principles (“GAAP”) applied on a fair market value basis.

b) Execute and perform its duties under the terms of the investment vehicle documents.

c) Provide timely requests for capital contributions.

d) Provide quarterly financial statements, annual reports and other investment information requested by the Staff and/or the Real Estate Consultant.

e) Conduct annual meetings to discuss important developments regarding investment and management issues.

4. **Duties of the Real Estate Consultant**

LACERS engaged the Real Estate Consultant on a non-discretionary basis to select new investments, to monitor existing investments, and to provide advice in accordance with the investment objectives for the real estate portfolio. The Real Estate Consultant's services to LACERS may include but are not limited to the following:

a) Report directly to the Board and Staff on matters of policy.

b) Bring any non-conforming items or significant issues to the attention of the Staff and the Board.

c) Complete due diligence on potential investments and preparation of the due diligence report.

d) Monitor the performance of the real estate portfolio and compliance with approved policy.

e) Prepare the Annual Real Estate Strategic Plan for the real estate program, in consultation with the Staff, and present the Annual Real Estate Strategic Plan to the Board for review.

f) Review proposed real estate investments and recommend prudent investments, structure and controls. Monitor investments and ventures through completion and disposition, including satisfaction of conditions to funding, partnership and financial issues.

g) Assist Staff with the review and preparation of documents related to new investments approved by the Board consistent with the Real Estate Consultant's recommendation.

h) Prepare reports on a periodic basis for the Board to evaluate investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan. The evaluation system shall provide such information as may be required by LACERS to understand and administer its investments.

i) Assist the Staff in the Annual Real Estate Strategic Plan portfolio review.

j) Provide Board and Staff with topical research and education on investment subjects that are relevant to LACERS.

k) Review the Real Estate Policy annually and notify LACERS if any revisions are needed thereto.

l) Monitor and report on risk.

m) Provide ongoing real estate education information and seminars to the Board.

Section 12 GLOSSARY

5. **Duties of Legal Counsel**

The legal counsel selected by LACERS along with the Office of the Los Angeles City Attorney will represent LACERS and will review all real estate related documents and provide advice for special investment situations as needed.

X. PRIVATE EQUITY INVESTMENT POLICY

A. Introduction

This Private Equity Investment Policy ("Private Equity Policy") sets forth guidelines that provide a general framework for selecting, building, and managing LACERS' investments in private equity, including corporate finance/buyout, special situations (including distressed debt, distressed turnaround and mezzanine strategies), venture capital and growth equity, co-investments, secondary market transactions, and other privately structured investments with the return and risk characteristics of private equity.

B. Investment Objectives

1. Return

On a relative basis, the return objective for the LACERS' private equity portfolio ("Private Equity Portfolio") is 300 bps over the Russell 3000 Index net of fees, expenses, and carried interest.

Returns are measured over the life of the partnership and become meaningful for periods past the J-Curve. The valuation methodology used by general partners should conform to industry and regulatory standards. Performance will be measured using standard industry metrics such as IRR (internal rate of return), TVPI (total value to paid in capital), and MOIC (multiple on invested capital.) Additionally, the IRR performance in the first few years of a partnership's life may be negative due to the J-curve effect.

2. Risk

Private equity investments are illiquid and have a long-term holding period. When invested alongside publicly traded assets, the asset class increases diversification and reduces risk at the System level. Nonetheless, LACERS expects that the Private Equity Consultant will take all appropriate measures to assume risks that are sufficiently compensated by expected return. Such measures include, but are not limited to, diversification (as detailed in Section X.D.3 below) and due diligence.

C. Scope

The Private Equity Consultant, with Staff concurrence, shall select new investments, monitor and advise on the sale of existing private equity investments, and provide recommendations and program advice in accordance with the Private Equity Policy. The Private Equity Policy establishes the framework for the management of the Private Equity Portfolio. The Private Equity Consultant will be evaluated annually as consultant and investment manager for the Private Equity Portfolio based upon the following factors: portfolio performance; quality of analytical and technical work; expertise in the private equity asset class; responsiveness to requests from the LACERS Board of Administration ("Board") and LACERS Investment Staff ("Staff"); availability to attend Board meetings and meetings with Staff with reasonable advance notice; consulting and advising on LACERS' portfolio, including information on

selected private equity related topics; identifying and mitigating risks; and proactively informing Staff of new investment opportunities or risks in the marketplace.

The Private Equity Consultant will evaluate and recommend investment transactions pursuant to the roles and responsibilities defined in Section X.F. With Staff concurrence on a recommendation from the Private Equity Consultant, LACERS may effect investments in partnerships up to and including $150 million. With Staff concurrence, recommended investments in excess of these amounts must be presented to the Board for approval. Non-U.S. dollar commitments to private equity partnerships shall be equal or less than the maximum U.S. dollar-equivalent limits as of the day Staff concurs with the Private Equity Consultant. However, non-U.S. dollar commitments to private equity partnerships may exceed the U.S. dollar currency equivalent maximum commitment limits after the date of Staff's concurrence due to foreign currency exchange rate fluctuations, and require no further Board approval.

D. **Investment Guidelines**

1. **Eligible Investments**

LACERS will invest in limited partnership interests of pooled vehicles as well as separate accounts, funds of one (or similar structures together with a limited number of other LPs), special purpose vehicles (SPVs), and other investment structures such as limited liability companies, investment trusts, separate accounts, and other corporate structures (unless otherwise stated in this Policy) covering the broad spectrum of private investments as follows:

a) Private equity partnerships – Investments in corporate finance/buyout, special situations, venture capital and growth equity, secondaries, and co-investment funds. Special situations is a broad investment strategy, which includes mezzanine and distressed debt partnerships, fund-of-funds (both direct and secondary), industry-focused, and multi-stage partnerships;

b) Direct co-investments – Investments made alongside general partners directly in underlying assets and securities, usually with discounted management fees and carried interest. Co-investments may be structured as securities held directly by LACERS ("direct co-investments") or as an interest in a vehicle managed by a General Partner that invests in such underlying assets and securities.

Direct co-investments shall be made on the same or better terms as provided to the Limited Partnership that is investing in the same transaction.

Co-investing can increase concentration risk because the company in which the limited partner is investing directly may also be a company held in a private equity fund in which the limited partner has also invested. Therefore, the Private Equity Consultant will monitor co-investments for concentration risk and recommend adjustments in the private equity portfolio as needed in order

to adequately manage such risk. The Private Equity Consultant will address concentration risk in the Annual Private Equity Strategic Plan.

It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel), and break-up fees on potential Co-investments. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

c) Secondary market purchases – purchases of private equity related interests in which one or more of the original parties sells their ownership stake(s) or interests, as a single interest or a pool of interests. Such interests can take the form of: 1) Limited Partnership Interests; 2) Co-investments; 3) General Partner interests; 4) Separately Managed Accounts; 5) Direct Ownership of Portfolio Companies; or 6) a combination of the above.

   It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel and broker-dealers), and break-up fees on potential secondary transactions. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

d) LACERS will also consider sales of partnership fund interests on the secondary market or to other limited partner(s) or potential buyer(s).

e) Other privately structured investments deemed appropriate within LACERS' risk profile as determined by the Private Equity Consultant.

2. Limitation on Percent of Partnership's Total Commitment

LACERS' commitment to any given partnership shall not exceed 20% of total commitments (by all limited partners and any other investors including the GP, excluding any co-investments) in that partnership. Any commitments in excess of this threshold will require pre-approval by the Board.

These limitations shall not apply to specially constructed partnerships (such as a fund of one or two); or separately managed accounts (SMAs) where LACERS is the sole limited partner.

3. Diversification

The Private Equity Consultant, on behalf of LACERS, will seek to appropriately diversify the Private Equity Portfolio in order to manage risk based on the following guidelines:

a) Up to 15% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may be attributable to partnerships by the same manager at the time the commitment is made.

b) Up to 25% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may consist of co-investments and secondary opportunities.

c) The Private Equity Consultant shall appropriately diversify the Portfolio across vintage years when possible.

d) The Private Equity Consultant shall appropriately diversify the Portfolio with respect to geographic distribution.

e) The Private Equity Consultant shall monitor Portfolio investments with respect to GICS industry sector exposure as compared to the Cambridge Associates US Private Equity Index with the understanding that industry sector exposure at an investment fund level will be managed at the discretion of the general partner.

f) Private Equity Sub-asset Classes

(1) Assets committed to venture capital shall be appropriately diversified across the stages of venture capital (e.g., early-stage, mid-stage, late-stage, and growth equity).

(2) Assets committed to corporate finance/buyouts shall be appropriately diversified by target company size (e.g., mega, large, mid, and small).

In addition to the diversification criteria listed above, LACERS' Board will adopt optimal sub-asset allocation targets, which will be updated pursuant to the Annual Private Equity Strategic Plan.

4. **Illiquidity**

Private equity investments are not designed to meet the short-term liquidity needs of LACERS. The investments in this asset class are illiquid until the general partner, subject to the provisions of the partnership agreement, decides to sell fund investments and distribute proceeds to limited partners.

5. **Distributions**

Staff is responsible for the final disposition of distributions from partnerships.

E. **Review of Investment Guidelines**

The Private Equity Consultant and Staff periodically will review the above private equity investment guidelines and recommend changes if necessary.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

F. Roles and Responsibilities

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Strategy/Policy	• Select Private Equity Consultant. • Approve asset class funding level. • Review and approve the Private Equity Annual Strategic Plan which includes allocation targets and ranges.	• In consultation with Private Equity Consultant and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.	• Help develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.
Investment Management and Monitoring	• Review semi-annual, annual, and other periodic monitoring reports and plans. • Review Commitment Notification Reports.	• Review quarterly, annual and other periodic monitoring reports prepared by the Private Equity Consultant. • Conduct meetings with existing managers periodically. • Attend annual partnership meetings when appropriate. • Fund capital calls and manage distributions. • Review Private Equity Consultant's recommendations on partnership amendments and consents. • Execute partnership amendments and consents. • Manage and approve the wind-down and/or dissolve private equity fund investment(s) with private equity consultant's concurrence. • Manage and execute the sale of partnership interest on the secondary market or to other limited partner(s) or potential buyer(s). • Prepare Commitment Notification Reports for Board.	• Maintain regular contact with existing managers in the portfolio to ascertain significant events within the portfolio. • Recommend amendments and consents to Staff for approval. • Provide quarterly, annual, and other periodic monitoring reports and plans.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Investment Selection	• Review investment analysis reports. • Review and approve investments in partnerships of amounts greater than \$150 million prior to investment. • Review and approve direct co-investment opportunities that exceed \$50 million. • Review and approve the sale of any one existing partnership fund on the secondary market exceeding \$50 million in Fair Market Value. • Review and approve a simultaneous sale of multiple partnership fund interests in a packaged structure.	• Refer investments and forward to Private Equity Consultant for preliminary screening. • Conduct meetings with prospective or existing general partners representing new investment opportunities. • Conduct due diligence with general partners to better ascertain risk and return profile, as determined by the Chief Investment Officer. • In conjunction with Private Equity Consultant, invest up to and including \$150 million in partnerships without Board approval. If Staff opposes and Private Equity Consultant disagrees, refer to Board for decision. • In conjunction with Private Equity Consultant, make recommendations to Board for approval for investments over \$150 million. • In conjunction with Private Equity Consultant, review and concur with direct co-investment opportunities up to and including \$50 million. • In conjunction with Private Equity Consultant, review and concur with the approval of sale of existing partnership funds on the secondary market up to and including \$50 million in Fair Market Value. • General Manager or designee with signature authority will execute agreements and other legal or business documents to effectuate the transaction closing. • Ensure review of relevant fund documents by the City Attorney and/or external legal counsel.	• Conduct appropriate analysis and due diligence on investments. • Prepare investment reports for Board consideration on investments exceeding \$150 million. • With Staff concurrence, approve investments of up to and including \$150 million. • With Staff concurrence, approve direct co-investment opportunities up to and including \$50 million. • Present to Staff recommendations pertaining to the sale of existing partnership funds on the secondary market exceeding \$50 million in Fair Market Value. Such transactions shall be brought to the Board for review and approval. • Provide investment analysis reports for each new investment and for sales of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s). • Communicate with Staff regarding potential investment opportunities undergoing analysis and due diligence. • Coordinate meetings with general partners at the request of Staff. • Advise on and negotiate investment terms.

XI. PRIVATE REAL ESTATE INVESTMENT POLICY

This Real Estate Investment Policy sets forth a general framework for managing LACERS' investments in real estate. This policy provides that the LACERS' real estate program shall be planned, implemented, and monitored through the coordinated efforts of the Board, the General Fund Consultant, Staff, the Real Estate Consultant, and the Investment Managers. Additionally, this policy is subject to the guidelines set forth by LACERS in the Ethical Contracting Compliance Policy and in the Third Party Marketing and Referrals Disclosure Policy, as amended from time to time by the Board, or as stated under applicable laws or regulations.

The Real Estate Consultant, along with Staff, shall prepare an Annual Real Estate Strategic Plan, as defined below, to be considered and acted upon by the Board that will address the specific goals and guidelines to be achieved and followed in the Real Estate Portfolio each year. The Annual Real Estate Strategic Plan shall be consistent with the guidelines set forth in this policy.

A. Real Estate

For purposes of this policy, real estate shall be defined to include investments that are private equity or debt positions in real property. Investments may be leveraged or unleveraged. As further set forth in this policy, LACERS will invest primarily in discretionary commingled funds (e.g., limited liability companies, real estate investment trusts, and limited partnerships) owned with other suitable institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds). As further set forth in this policy, LACERS also may invest in real estate assets on a direct ownership basis through a discretionary separate account vehicle. Such investments will be evaluated on a case by case basis, but at a minimum, need to provide a compelling opportunity, which is consistent with the Real Estate Portfolio's investment objectives and overrides or outweighs the benefits of commingled fund investments.

B. Fiduciary Standards

The investment and management of the Real Estate Portfolio shall be accomplished in a manner consistent with the "prudent person" standard of fiduciary care. This level of care requires that all LACERS' fiduciaries act reasonably to accomplish the stated investment objectives and to safeguard the System on behalf of LACERS' participants and their beneficiaries. The implementation of this Real Estate Policy, including the selection of investment managers, shall be completed in a manner that enhances the Real Estate Portfolio's diversification, thereby reducing risk by limiting exposure to any one investment, manager, real estate property type, geographic region, or other defined risk factor.

C. Scope

This Real Estate Policy sets forth the objectives, policies, and processes and procedures related to the implementation and oversight of the Real Estate Portfolio. Specifically, the objectives outlined herein define the desired risk level and return expectations governing the Real Estate Portfolio; the policies provide guidelines governing investment styles to manage defined risk exposures within the asset class; the investment processes and procedures and roles and responsibilities describe the investment process and allocation of duties among the Board, Staff, the Managers, and the Real Estate Consultant.

LACERS has engaged the Real Estate Consultant on a non-discretionary basis to assist the Board and Staff to implement and revise this policy when necessary. The Real Estate Consultant's duties and responsibilities, which are further defined in Section XI.H include selecting Managers, including performing due diligence and recommending new investments; monitoring existing investments; and generally providing advice to Staff and the Board with respect to the Portfolio. The Real Estate Consultant shall conduct a review of this policy, in conjunction with the Board and Staff, at a minimum of once per year, and set forth any strategic and tactical recommendations in the Annual Real Estate Strategic Plan.

D. **Investment Objectives**

The main investment objective with respect to the Real Estate Portfolio is to maximize returns given the defined level of risk, as determined by the Board. While it is necessary to use active asset management strategies to maximize total investment returns (i.e., income and appreciation returns), investment principal is to be safeguarded within the Portfolio's framework of prudence and managed risk. Although real estate investments are illiquid and have a long-term holding period, investing in this asset class should improve the System's fund level risk-adjusted returns by enhancing overall diversification, which reduces total portfolio risk. Specifically, the objectives of LACERS with respect to the Real Estate Portfolio include the following:

1. **Attractive Risk-Adjusted Returns**

To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns. As discussed in Section XI.G below, the benchmarks for the Portfolio will be the NFI-ODCE Index plus 80 basis points.

2. **Increased Portfolio Diversification/Reduced Portfolio Risk**

To use real estate to enhance overall diversification and, in turn, reduce overall risk of the System's assets, given the historically low to negative return correlations that exist between real estate and other asset classes.

3. **International Investments**

To access international real estate markets through private equity and debt real estate investments. By so doing, the Real Estate Portfolio will obtain exposure to diverse economies, populations, and currencies.

4. **Significant Current Cash Yields**

To invest in real estate assets, which will generate a significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value add and core investments.

5. **Inflation-Hedge**

To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation.

6. **Preservation of Principal**

To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

E. **Investment Guidelines**

LACERS shall establish a long-term target allocation to real estate (the “Target Allocation”). The Target Allocation will fluctuate according to the relative values among the Real Estate Portfolio and the allocations to other asset classes of LACERS. To accomplish and maintain the Target Allocation, the Real Estate Consultant may recommend committing in excess of the Target Allocation percentage in order to meet full allocation objectives. The Real Estate Portfolio allocation percentage actually achieved quarterly may vary from the Target Allocation within a reasonable range as determined by the Board and Staff from time to time.

Eligible real estate funds will range from core open-end funds to opportunistic closed-end funds, and may also include separate investment accounts with selected fund managers; however, the Real Estate Portfolio will be comprised primarily of commingled fund vehicles. Separate accounts represent opportunities wherein LACERS would be the sole or significant equity sponsor for an investment manager pursuing a specifically targeted opportunity or defined strategy. As the sole or significant equity sponsor, LACERS would likely be entitled to voting and control rights generally not available to commingled fund investors.

The following investment guidelines set forth investment parameters consistent with the risk and return objectives of the Real Estate Portfolio.

1. **Portfolio Composition – Risk Strategy Mix**

The Real Estate Portfolio shall be comprised of two different but complementary risk/return categories or risk strategies. These categories or risk strategies are referred to as core and non-core, as defined below. These categories or risk strategies generally define the risk and return levels as low, medium, and high risk associated with institutional real estate investments.

a) **Core and Core Plus**

Core

Equity investment in operating and substantially-leased (i.e., at least at market occupancy levels) institutional quality real estate in the traditional property types (i.e., apartment, office, retail, industrial, and hotel). Core investments may also include high-quality, non-traditional property types (i.e. student housing, medical office, and self-storage) that produce stable income with low risk. Assets are located in significant metropolitan markets with reasonable population sizes and economies. Net returns historically have been in the 6% to 9% range (net of fees) with annual standard deviation near 8.0%. Of note, core investments typically feature current income as a large portion of overall return (i.e., up to 70%), and appreciation that generally matches or exceeds inflation. Low leverage is utilized (i.e., 50% or less on a portfolio basis). Core debt investments include first mortgage loans secured by the previously defined core equity real estate assets. Such mortgage loans are either newly originated or are existing but performing loans with reasonable borrowers (e.g., credit), reasonable terms (e.g., loan to value of less than 50% and debt service coverage of 1.25 or greater) and institutional-quality management (e.g., an institutional investment manager with reasonable experience and track record in managing first mortgage loan investments). During periods of market illiquidity, core equity investments can provide high going-in income returns and provide a reasonable inflation-hedge so long as markets are not over-supplied.

Core Plus

Core Plus investments typically will target a higher leverage ratio (around 50% on a loan-to-value basis) and allocate slightly more to non-operating real estate investments, around 20%.

b) **Non-Core**

Value Add

Value add investments are functional, high quality assets with specific property issues, such as high vacancy, significant upcoming lease expirations, or below market rents. These are debt or equity investments that typically require rehabilitation, redevelopment, development, lease-up, and/or repositioning. Levered returns historically have been in the 10% to 14% range (net of fees). Value add investments also typically feature both current income and appreciation as components of overall return, and frequently involve the repositioning of distressed assets (i.e., not fully leased and operating) and potentially the purchase of interests in real estate operating companies (“REOCs”). Value add investments typically are expected to generate above-core returns through the leasing-up of a property, which increases the end value by increasing in-place income and, in many cases, ultimately decreasing the capitalization rate upon disposition. Value add investments are typically more dependent on appreciation returns than core investments, with purchase prices based on in-place income or asset replacement cost (i.e., at a discount to replacement cost). During periods of market illiquidity, value equity investments can provide high going-in income returns and pricing at significant discounts to replacement costs. During periods of market liquidity, value equity investments include new development projects (i.e., acquire land, obtain entitlements, construct building and lease or sell), which require significant expertise and underwriting. Moderate leverage is utilized for these investments (i.e., targeting 50% to 65% on a portfolio basis).

Opportunistic

Equity or debt investment in real estate properties, operating companies, and other investment vehicles involving significant investment risk, including real estate, financial restructuring, and non-real estate risk. Levered returns have been 15% or higher (net of fees) with significant annual standard deviation. Opportunistic investing includes distressed assets, financial restructurings, and/or financial engineering opportunities (e.g., foreclosing on a mortgage and selling the equity interest) and potentially the purchase of REOCs. Opportunistic investments typically have even greater appreciation potential than value add investments (e.g., 50% of total returns); correspondingly, these investments offer a higher return potential and a higher risk profile than core or value add investments. In many cases, since appreciation is the primary goal of opportunistic investing, many are originated with little if any in-place income and therefore less current income as a portion of total return. These investments historically have experienced higher return performance during periods of market illiquidity (e.g., early 1990's in the U.S.). Higher leverage is used (i.e., up to 80% with some funds).

Core and core plus and non-core exposure targets shall be evaluated at a minimum of once per year and set forth in an Annual Real Estate Strategic Plan and approved by the Board. When making investment recommendations, the Real Estate Consultant shall evaluate the impact of the prospective investment on the Real Estate Portfolio's risk/return exposures based on the existing portfolio net asset value.

2. **Risk Mitigation**

a) **Leverage**

Leverage is a significant risk factor that shall have exposure guidelines and monitoring requirements, as set forth in Section XI.E.7 of this Real Estate Policy.

b) **Diversification**

Diversification is an important tool in reducing real estate portfolio risk and accomplishing superior risk-adjusted returns. The Real Estate Portfolio shall be diversified by risk factors which can be reduced through diversification (e.g., geographic region and property type). Diversification reduces the impact on the portfolio of any one investment or any single investment manager to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio.

It is expected that at various points in time, the Real Estate Portfolio may have a significant exposure to a single property type or location to take advantage of opportunities available in the market which are projected to generate superior returns. When making investment recommendations, the Real Estate Consultant shall consider as part of its investment recommendation the impact on Real Estate Portfolio diversification and risk and return. As part of the Annual Real Estate Strategic Plan, the Real Estate Consultant shall provide annually, or more frequently when market conditions require, the risk factor (e.g., property type and region) ranges which it believes provide reasonable diversification given the expected market conditions. The following describe the various diversification guidelines that will be utilized.

Property Type

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information, and industry indices' diversification. Property type portfolio exposure levels have had a significant impact on institutional investor returns since property types have performed differently during economic cycles.

Real estate investments may include investments other than the traditional property types, such as healthcare facilities, manufactured housing, infrastructure, timber and farmland. The Real Estate Consultant shall include a section in each Annual Real Estate Strategic Plan, reviewing the Real Estate Portfolio's property-type exposures and investment objectives relating thereto.

Geographic Region

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information and industry indices' diversification. The importance of location to the long-term value of real estate is based on local economic fundamentals and the other risk attributes (e.g., weather, earthquake and local government impact) of regional areas.

The Real Estate Consultant shall include in each Annual Real Estate Strategic Plan investment guidelines and targets related to the Real Estate Portfolio's allocation to geographic regions.

3. **Investment Life Cycle**

Investment life cycle refers to the stage of development of a real estate investment. The stages of development include the following: (1) land or pre-development (i.e., un-entitled or partially entitled land); (2) development/redevelopment (i.e., in process of entitling or constructing improvements); (3) leasing (i.e., less than full or market occupancy); and (4) operating (i.e., greater than market occupancy). As a result of the risks associated with development, at no time shall the Real Estate Portfolio have an exposure exceeding 30% to total non-operating investments (i.e., the total of pre-development/land, development/redevelopment and leasing). Also, the Real Estate Consultant shall monitor the Real Estate Portfolio's exposure to different life cycles through the quarterly performance report, which shall indicate the Real Estate Portfolio's non-operating investment exposure and whether a non-compliance issue exists.

4. **Permissible Investment Structures/Vehicles and Private Allocations**

The Real Estate Portfolio may include private real estate equity and debt investments. Private equity real estate investments may include any investment made in equity interests in real estate assets (i.e., land and assets deriving most of their income return from rents paid by tenants subject to lease agreements) or companies through private placements, including REOCs and Real Estate Investment Trusts (“REITs”). Typical property types include the following: office, retail, rental apartments, for sale residential, industrial and hotel. Private debt investments may include structured investments, which provide for stated preferred returns, which may be accrued or paid on a current basis. Private debt investments may also include loans secured by senior or junior mortgage or deed of trust agreements.

5. **Investment Vehicles**

Investment vehicle exposure ranges shall be used to mitigate portfolio risk including enhancing portfolio liquidity. The following discussion provides a summary of the advantages and disadvantages of the investment vehicles, which shall be used in developing the Real Estate Portfolio.

a) **Open-End Commingled Funds**

The open-end fund investments shall be made primarily to provide (1) reasonable property type and geographic diversification, (2) exposure to larger properties (i.e., over $50 million) or certain countries, and (3) reasonable liquidity (i.e., ability to redeem within 90 days). The Real Estate Consultant shall complete reasonable due diligence in evaluating open-end commingled funds consistent with this policy. Open-end commingled fund vehicles may include, but are not limited to, insurance company separate accounts, group trusts, limited liability companies, single purpose corporations or any other vehicle that is determined by the Real Estate Consultant to be consistent with the Real Estate Policy.

b) **Closed-End Commingled Funds**

The closed-end fund investments shall be made primarily to obtain exposure to reasonably diversified portfolios of value add and opportunistic investments. The primary advantages of closed-end funds are that they provide access to talented management teams with focused niche value add and opportunistic strategies. Also, management teams typically co-invest and rely on incentive fees, which combined enhance the alignment of investor and manager interests. The Real Estate Consultant shall complete reasonable due diligence in selecting closed-end fund investments. Co-investment by the manager of a fund or by investors in the fund is acceptable providing: (1) the co-investor(s) have similar investment objectives regarding risk/return exposures and holding periods, (2) control and voting rights with respect to investment decisions are deemed reasonable, and (3) reasonable buy/sell or other agreements exist to allow for the resolution of investor disagreements. Closed-end funds typically have terms of no less than seven years and are therefore illiquid.

c) **Separate Account Vehicles**

Separate accounts may be used to make private equity/debt investments. Separate accounts offer the primary advantage of control over the manager, the strategy, the asset investment and sales decisions, and the capital. The Real Estate Consultant shall complete reasonable due diligence in selecting the Managers for direct investment separate accounts.

Direct Investments

LACERS may make direct equity/debt investments using separate account vehicles; however, such investments require careful consideration. Transaction costs and management expenses are high and there may be a significant time commitment by the Staff. Separate account direct investments shall be made only when the opportunity is compelling, as determined by the Staff, the Real Estate Consultant, and the Board. To be compelling, a direct investment needs to: (1) be in compliance with this Real Estate Policy; (2) be consistent with the strategic needs of LACERS, as set forth in the Annual Real Estate Strategic Plan; and (3) present an investment opportunity that provides benefits to LACERS that outweigh or override those provided by commingled funds, as previously described. The Real Estate Consultant shall assist the Staff with any direct investments by recommending a Manager and by completing an independent report, which summarizes and evaluates the manager due diligence completed. The report shall include a summary of findings and conclusions and shall be retained by the Staff on file for review.

Direct investments shall also include any private REOC investments. These include full or joint venture ownership of an operating company, which may be used to acquire a single asset, to implement a niche investment strategy or to serve another purpose as defined by the Real Estate Consultant and approved by the Staff and the Board.

Each direct investment strategy, fee structure and level of investment discretion shall be defined by the Real Estate Consultant and approved by the Staff and the Board. The Manager shall complete an annual budget review, as defined by the Real Estate Consultant, and a hold/sell analysis, for each direct investment. Since the sale or refinancing of a direct investment interest is required to return invested capital, such investments are considered illiquid.

6. **Manager/Investment Concentration**

LACERS shall limit its exposure to any single Manager or investment, and be subject to other investment restrictions to reduce risk, as further defined below.

a) **Maximum Manager Allocation**

No single manager (including any allocation to pooled funds and/or separate accounts) shall be allocated more than thirty percent (30%) of the Real Estate Portfolio's total allocation at the time of the prospective investment commitment. The allocation amount calculation shall include all of the Real Estate Portfolio's investment commitments remaining to the Manager plus the net asset value of the existing investments at the time of measurement or at the time of a prospective investment allocation.

b) **Maximum Investment Commitment**

The Real Estate Portfolio's maximum investment commitment to a non-core commingled fund or a separate account Manager shall be limited to fifteen percent (15%) of the Real Estate Portfolio's allocation to real estate at the time of the prospective investment commitment.

c) **Commingled Fund Guidelines**

The Real Estate Portfolio's investment in a single open-ended commingled fund shall not exceed twenty percent (20%) of the total net market value of the commingled fund at the time of the prospective investment. The Real Estate Portfolio's investment in a single closed-end commingled fund shall not exceed twenty percent (20%) of the total investor commitments to the fund at the time of closing of the commitment period of the prospective investment. LACERS shall not consider investments in a commingled fund that has less than $150 million in committed capital inclusive of LACERS pending commitment.

d) **Maximum Individual Separate Account Investment**

The Real Estate Portfolio's maximum investment in any single separate account investment shall be limited to a maximum of ten percent (10%) of the Real Estate Portfolio's total allocation to real estate at the time of the prospective separate account investment, unless otherwise approved by the Board.

The Real Estate Consultant and the Staff shall be responsible for reviewing separate account allocations and commingled fund terms to ensure they are consistent with or have incorporated the applicable restrictions previously described. Even though a prospective commingled fund or separate account allocation may be in compliance with the Real Estate Policy restrictions, the Real Estate Consultant shall complete reasonable due diligence with respect to each prospective investment to determine whether it is appropriate for recommendation to the Staff and the Board. The Real Estate Consultant may consider a number of factors in determining whether investments are reasonable and appropriate for institutional investors, including the following: the level of investment by institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds); the size of the organization; the experience of key personnel; the track record of key personnel in investments comparable to the strategy to be undertaken; and the financial condition of the firm.

7. **Leverage**

Leverage is a significant risk factor, the importance of which is magnified during an economic downturn when decreasing property values and stricter lending terms can lead to unexpected increased leverage levels and decreased equity interests. The Real Estate Consultant shall set forth reasonable leverage targets given market conditions in the Annual Real Estate Strategic Plan. When making a new investment recommendation, the Real Estate Consultant shall consider the impact on the Portfolio's leverage guidelines and targets at the time of the prospective investment.

Additionally, the Real Estate Consultant shall monitor the Real Estate Portfolio's leverage to evaluate compliance with the above stated guidelines through the quarterly performance report.

8. **Specialized Investments**

LACERS has in the past, and as determined by the Staff, the Board, and the Real Estate Consultant, may continue to allocate to unique investment strategies and/or investment firms, as further described below.

a) **Unique Investment Strategies**

Unique investment strategies include those that have collateral benefit objectives, which include job creation, community development, green or environmental objectives (e.g., reduce the use of carbon based fuels), and underserved market initiatives (e.g., defined by geography such as urban or inner city and by demographics such as minority or lower income areas). While such strategies offer attractive benefits, the Real Estate Consultant shall focus its evaluation on whether the expected return projected for the investment is reasonable given the level of risk. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation is reasonable and consistent with that of a comparable real estate strategy not providing the same collateral benefits.

b) **Unique Managers**

Unique Managers include those that are Emerging Managers pursuant to the LACERS Emerging Investment Manager Policy. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation to the unique Manager is reasonable. In so doing, the Real Estate Consultant needs to evaluate comprehensively any factors of the unique Manager that may adversely affect investment performance and conclude that such factors are not likely to affect return performance materially and adversely.

A. **Investment Processes And Procedures**

1. **Real Estate Manager Selection Process**

Section 12 GLOSSARY

The following discussion describes the process by which LACERS selects Managers and investments.

a) **Universe of Potential Manager Candidates**

The Real Estate Consultant, pursuant to the Annual Real Estate Strategic Plan, will initiate a Manager search by creating a global list of potential candidates for selection based on the Staff and Real Estate Consultant's initial search criteria. The Real Estate Consultant shall provide information from its databases regarding the candidates to be reviewed with the Staff. The Staff will set forth any additional candidates to be considered. The Real Estate Consultant and the Staff will consolidate their lists to create a single list of potential candidates.

b) **Minimum Manager Qualifications**

The Manager requirements include that the Manager have $200 million of assets at a minimum under management and no less than three (3) years of real estate investment experience or a demonstrable track record of three (3) years of real estate investment experience.

c) **Manager Candidate Summaries**

The Real Estate Consultant shall complete a brief summary of the Manager candidates, including descriptions of their meeting Manager criteria established by the Real Estate Consultant and the Staff relating to the Managers' organization, track record, personnel, alignment of interests, terms and fees. The Real Estate Consultant will screen these summaries and recommend the finalists for further due diligence to the Staff.

d) **Due Diligence**

After the Staff and the Real Estate Consultant select the finalists, the Real Estate Consultant shall complete a comprehensive due diligence review. The comprehensive due diligence review includes an in-depth analysis of the firm's background, organization, personnel, strategy and other related factors. The Real Estate Consultant shall invite the Staff to participate in completing due diligence activities.

e) **Selection and Approval**

After completing the due diligence report, the Staff and Real Estate Consultant will recommend a candidate for consideration to the Board, which will make the final decision.

f) **Term Negotiation**

The Staff, Real Estate Consultant and the legal counsel will negotiate the Manager contract and propose a side letter if necessary. The final contract shall be executed by LACERS' General Manager or the appropriate party or parties authorized by the Board.

2. **Monitoring Process and Performance Measurement**

The Real Estate Consultant and the Staff, when available, will meet with managers on a periodic basis to determine the progress being made in the fund. These discussions may occur at annual investor meetings or in face-to-face or telephone meetings either at the Manager's or the Real Estate Consultant's offices.

Investment Managers will send financial reports and capital account statements on a regularly scheduled basis to the Real Estate Consultant and LACERS. Semi-annual Portfolio Performance Review Reports ("PPR") shall be prepared by the Real Estate Consultant and formally presented to the Board. The PPR is a comprehensive reporting and evaluation system addressing each investment. The PPR system shall provide such information as may be required by LACERS to understand and administer its investments and shall include attributes for both the Managers and the total portfolio. These attributes include: income, appreciation, gross and net returns for the portfolio and each manager, cash flow, internal rate of return calculations, diversification, comparisons to relevant industry performance indices, and information reporting standards.

G. **Benchmark Returns**

While no return objectives are stated by strategy, relative performance comparisons will be made to various indices to provide additional perspective on performance and/or facilitate attribution analysis. The return objectives are as follows:

LACERS' Real Estate Portfolio Benchmark Guideline	
Strategy	**Return Objectives Over Rolling 5-year Periods**
Core Real Estate	NFI-ODCE Index
Non-Core Real Estate	NFI-ODCE Index + 200 basis points
Timber	NCREIF Timberland Index, gross of fees

Portfolio Benchmark

With respect to private real estate investments, The Real Estate Consultant, the Staff and the Board shall use the NFI-ODCE plus 80 basis points over a rolling 5-year period as its benchmark.

H. **Roles and Responsibilities**

The following duties have been established to manage the risks involved with investing in real estate. Set forth below is the delegation of the major roles and responsibilities of each participant:

1. **Duties of the Board**

   a) Establish the role of the real estate investment program in light of the total System objectives.

b) Consider and act upon the allocation to real estate and approve any adjustments to the allocation which may from time to time be necessary.

c) Review, consider, and act upon the Annual Real Estate Policy (objectives, policies and procedures) and the Annual Real Estate Strategic Plan for the real estate program.

d) Interview, consider, and act upon the Staff recommendations for selection, retention and removal of the Managers and/or the Real Estate Consultant and the selection of Manager investments.

e) Review the real estate portfolio on a semi-annual basis to evaluate the investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan.

2. **Duties of the Staff**

a) Update and communicate with the Board and Investment Managers on issues and matters of the Policy.

b) Provide the Board with education and analysis that is independent from the Real Estate Consultant to the extent time and resources allow.

c) Be familiar with the asset class and stay informed of developments in industry as they occur.

d) Oversee the Real Estate Consultant's preparation of the Annual Real Estate Strategic Plan for the real estate program. Present and recommend, along with the Real Estate Consultant, the Real Estate Policy and Annual Real Estate Strategic Plan to the Board.

e) Oversee and review the performance of the Real Estate Consultant and the Managers on a periodic basis and discuss findings with the Board.

f) Bring any non-conforming items or significant issues to the attention of the Board.

g) Document and monitor funding procedures.

h) Complete any other activity as directed by the Board.

i) Conduct or assist in conducting due diligence on prospective investment opportunities as LACERS' resources permit.

j) Prepare investment documentation with the Real Estate Consultant.

3. **Duties of the Manager**

a) Adhere to reporting and performance measurement standards and comply with generally accepted accounting principles ("GAAP") applied on a fair market value basis.

b) Execute and perform its duties under the terms of the investment vehicle documents.

c) Provide timely requests for capital contributions.

d) Provide quarterly financial statements, annual reports and other investment information requested by the Staff and/or the Real Estate Consultant.

e) Conduct annual meetings to discuss important developments regarding investment and management issues.

4. **Duties of the Real Estate Consultant**

LACERS engaged the Real Estate Consultant on a non-discretionary basis to select new investments, to monitor existing investments, and to provide advice in accordance with the investment objectives for the real estate portfolio. The Real Estate Consultant's services to LACERS may include but are not limited to the following:

a) Report directly to the Board and Staff on matters of policy.

b) Bring any non-conforming items or significant issues to the attention of the Staff and the Board.

c) Complete due diligence on potential investments and preparation of the due diligence report.

d) Monitor the performance of the real estate portfolio and compliance with approved policy.

e) Prepare the Annual Real Estate Strategic Plan for the real estate program, in consultation with the Staff, and present the Annual Real Estate Strategic Plan to the Board for review.

f) Review proposed real estate investments and recommend prudent investments, structure and controls. Monitor investments and ventures through completion and disposition, including satisfaction of conditions to funding, partnership and financial issues.

g) Assist Staff with the review and preparation of documents related to new investments approved by the Board consistent with the Real Estate Consultant's recommendation.

h) Prepare reports on a periodic basis for the Board to evaluate investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan. The evaluation system shall provide such information as may be required by LACERS to understand and administer its investments.

i) Assist the Staff in the Annual Real Estate Strategic Plan portfolio review.

j) Provide Board and Staff with topical research and education on investment subjects that are relevant to LACERS.

k) Review the Real Estate Policy annually and notify LACERS if any revisions are needed thereto.

l) Monitor and report on risk.

m) Provide ongoing real estate education information and seminars to the Board.

5. **Duties of Legal Counsel**

The legal counsel selected by LACERS along with the Office of the Los Angeles City Attorney will represent LACERS and will review all real estate related documents and provide advice for special investment situations as needed.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

X. PRIVATE EQUITY INVESTMENT POLICY

A. Introduction

This Private Equity Investment Policy ("Private Equity Policy") sets forth guidelines that provide a general framework for selecting, building, and managing LACERS' investments in private equity, including corporate finance/buyout, special situations (including distressed debt, distressed turnaround and mezzanine strategies), venture capital and growth equity, co-investments, secondary market transactions, and other privately structured investments with the return and risk characteristics of private equity.

B. Investment Objectives

1. Return

On a relative basis, the return objective for the LACERS' private equity portfolio ("Private Equity Portfolio") is 300 bps over the Russell 3000 Index net of fees, expenses, and carried interest.

Returns are measured over the life of the partnership and become meaningful for periods past the J-Curve. The valuation methodology used by general partners should conform to industry and regulatory standards. Performance will be measured using standard industry metrics such as IRR (internal rate of return), TVPI (total value to paid in capital), and MOIC (multiple on invested capital.) Additionally, the IRR performance in the first few years of a partnership's life may be negative due to the J-curve effect.

2. Risk

Private equity investments are illiquid and have a long-term holding period. When invested alongside publicly traded assets, the asset class increases diversification and reduces risk at the System level. Nonetheless, LACERS expects that the Private Equity Consultant will take all appropriate measures to assume risks that are sufficiently compensated by expected return. Such measures include, but are not limited to, diversification (as detailed in Section X.D.3 below) and due diligence.

C. Scope

The Private Equity Consultant, with Staff concurrence, shall select new investments, monitor and advise on the sale of existing private equity investments, and provide recommendations and program advice in accordance with the Private Equity Policy. The Private Equity Policy establishes the framework for the management of the Private Equity Portfolio. The Private Equity Consultant will be evaluated annually as consultant and investment manager for the Private Equity Portfolio based upon the following factors: portfolio performance; quality of analytical and technical work; expertise in the private equity asset class; responsiveness to requests from the LACERS Board of Administration ("Board") and LACERS Investment Staff ("Staff"); availability to attend Board meetings and meetings with Staff with reasonable advance notice; consulting and advising on LACERS' portfolio, including information on

selected private equity related topics; identifying and mitigating risks; and proactively informing Staff of new investment opportunities or risks in the marketplace.

The Private Equity Consultant will evaluate and recommend investment transactions pursuant to the roles and responsibilities defined in Section X.F. With Staff concurrence on a recommendation from the Private Equity Consultant, LACERS may effect investments in new partnerships up to and including $50 million and for all follow-on partnerships up to and including $100 million. With Staff concurrence, recommended investments in excess of these amounts must be presented to the Board for approval. Non-U.S. dollar commitments to private equity partnerships shall be equal or less than the maximum U.S. dollar-equivalent limits as of the day Staff concurs with the Private Equity Consultant. However, non-U.S. dollar commitments to private equity partnerships may exceed the U.S. dollar currency equivalent maximum commitment limits after the date of Staff's concurrence due to foreign currency exchange rate fluctuations, and require no further Board approval.

D. Investment Guidelines

1. Eligible Investments

LACERS will invest in limited partnership interests of pooled vehicles as well as separate accounts, funds of one (or similar structures together with a limited number of other LPs), special purpose vehicles (SPVs), and other investment structures such as limited liability companies, investment trusts, separate accounts, and other corporate structures (unless otherwise stated in this Policy) covering the broad spectrum of private investments as follows:

a) Private equity partnerships – Investments in corporate finance/buyout, special situations, venture capital and growth equity, secondaries, and co-investment funds. Special situations is a broad investment strategy, which includes mezzanine and distressed debt partnerships, fund-of-funds (both direct and secondary), industry-focused, and multi-stage partnerships;

b) Direct co-investments – Investments made alongside general partners directly in underlying assets and securities, usually with discounted management fees and carried interest. Co-investments may be structured as securities held directly by LACERS ("direct co-investments") or as an interest in a vehicle managed by a General Partner that invests in such underlying assets and securities.

Direct co-investments shall be made on the same or better terms as provided to the Limited Partnership that is investing in the same transaction.

Co-investing can increase concentration risk because the company in which the limited partner is investing directly may also be a company held in a private equity fund in which the limited partner has also invested. Therefore, the Private Equity Consultant will monitor co-investments for concentration risk and recommend adjustments in the private equity portfolio as needed in order

to adequately manage such risk. The Private Equity Consultant will address concentration risk in the Annual Private Equity Strategic Plan.

It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel), and break-up fees on potential Co-investments. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

c) Secondary market purchases – purchases of private equity related interests in which one or more of the original parties sells their ownership stake(s) or interests, as a single interest or a pool of interests. Such interests can take the form of: 1) Limited Partnership Interests; 2) Co-investments; 3) General Partner interests; 4) Separately Managed Accounts; 5) Direct Ownership of Portfolio Companies; or 6) a combination of the above.

   It may be necessary for LACERS to incur due diligence costs, expenses (including legal counsel and broker-dealers), and break-up fees on potential secondary transactions. The estimated magnitude of these items shall be 1) reasonable and consistent with industry standards as determined by the Private Equity Consultant; and, 2) approved by the Chief Investment Officer in advance of any commitment.

d) LACERS will also consider sales of partnership fund interests on the secondary market or to other limited partner(s) or potential buyer(s).

e) Other privately structured investments deemed appropriate within LACERS' risk profile as determined by the Private Equity Consultant.

2. **Limitation on Percent of Partnership's Total Commitment**

LACERS' commitment to any given partnership shall not exceed 20% of total commitments (by all limited partners and any other investors including the GP, excluding any co-investments) in that partnership. Any commitments in excess of this threshold will require pre-approval by the Board.

These limitations shall not apply to specially constructed partnerships (such as a fund of one or two); or separately managed accounts (SMAs) where LACERS is the sole limited partner.

3. **Diversification**

The Private Equity Consultant, on behalf of LACERS, will seek to appropriately diversify the Private Equity Portfolio in order to manage risk based on the following guidelines:

a) Up to 15% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may be attributable to partnerships by the same manager at the time the commitment is made.

b) Up to 25% of the Private Equity Portfolio's total exposure (fair market value plus unfunded commitments) may consist of co-investments and secondary opportunities.

c) The Private Equity Consultant shall appropriately diversify the Portfolio across vintage years when possible.

d) The Private Equity Consultant shall appropriately diversify the Portfolio with respect to geographic distribution.

e) The Private Equity Consultant shall monitor Portfolio investments with respect to GICS industry sector exposure as compared to the Cambridge Associates US Private Equity Index with the understanding that industry sector exposure at an investment fund level will be managed at the discretion of the general partner.

f) Private Equity Sub-asset Classes

(1) Assets committed to venture capital shall be appropriately diversified across the stages of venture capital (e.g., early-stage, mid-stage, late-stage, and growth equity).

(2) Assets committed to corporate finance/buyouts shall be appropriately diversified by target company size (e.g., mega, large, mid, and small).

In addition to the diversification criteria listed above, LACERS' Board will adopt optimal sub-asset allocation targets, which will be updated pursuant to the Annual Private Equity Strategic Plan.

4. **Illiquidity**

Private equity investments are not designed to meet the short-term liquidity needs of LACERS. The investments in this asset class are illiquid until the general partner, subject to the provisions of the partnership agreement, decides to sell fund investments and distribute proceeds to limited partners.

5. **Distributions**

Staff is responsible for the final disposition of distributions from partnerships.

E. **Review of Investment Guidelines**

The Private Equity Consultant and Staff periodically will review the above private equity investment guidelines and recommend changes if necessary.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

F. Roles and Responsibilities

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Strategy/Policy	• Select Private Equity Consultant. • Approve asset class funding level. • Review and approve the Private Equity Annual Strategic Plan which includes allocation targets and ranges.	• In consultation with Private Equity Consultant and General Fund Consultant, develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.	• Help develop policies, procedures, guidelines, allocation targets, ranges, assumptions for recommendation to the Board.
Investment Management and Monitoring	• Review quarterly, annual, and other periodic monitoring reports and plans. • Review Commitment Notification Reports.	• Review quarterly, annual and other periodic monitoring reports prepared by the Private Equity Consultant. • Conduct meetings with existing managers periodically. • Attend annual partnership meetings when appropriate. • Fund capital calls and manage distributions. • Review Private Equity Consultant's recommendations on partnership amendments and consents. • Execute partnership amendments and consents. • Manage and approve the wind-down and/or dissolve private equity fund investment(s) with private equity consultant's concurrence. • Manage and execute the sale of partnership interest on the secondary market or to other limited partner(s) or potential buyer(s). • Prepare Commitment Notification Reports for Board.	• Maintain regular contact with existing managers in the portfolio to ascertain significant events within the portfolio. • Recommend amendments and consents to Staff for approval. • Provide quarterly, annual, and other periodic monitoring reports and plans.

Section 5 PRIVATE EQUITY INVESTMENT POLICY

	Role of the Board	Role of Staff	Role of the Private Equity Consultant
Investment Selection	• Review investment analysis reports. • Review and approve investments in new partnerships of amounts greater than $50 million prior to investment. • Review and approve investments in follow-on partnerships of amounts greater than $100 million prior to investment. • Review and approve direct co-investment opportunities that exceed $50 million. • Review and approve the sale of any one existing partnership fund on the secondary market exceeding $50 million in Fair Market Value. • Review and approve a simultaneous sale of multiple partnership fund interests in a packaged structure.	• Refer investments and forward to Private Equity Consultant for preliminary screening. • Conduct meetings with prospective or existing general partners representing new investment opportunities. • Conduct due diligence with general partners to better ascertain risk and return profile, as determined by the Chief Investment Officer. • In conjunction with Private Equity Consultant, invest up to and including $50 million for new partnerships, and up to and including $100 million for follow-on funds without Board approval. If Staff opposes and Private Equity Consultant disagrees, refer to Board for decision. • In conjunction with Private Equity Consultant, make recommendations to Board for approval for investments over $50 million in new partnerships, or over $100 million in follow-on funds. • In conjunction with Private Equity Consultant, review and concur with direct co-investment opportunities up to and including $50 million. • In conjunction with Private Equity Consultant, review and concur with the approval of sale of existing partnership funds on the secondary market up to and including $50 million in Fair Market Value. • General Manager or designee with signature authority will execute agreements and other legal or business documents to effectuate the transaction closing. • Ensure review of relevant fund documents by the City Attorney and/or external legal counsel.	• Conduct appropriate analysis and due diligence on investments. • Prepare investment reports for Board consideration on investments exceeding $50 million for new managers, or exceeding $100 million in follow-on funds. • With Staff concurrence, approve investments of up to and including $50 million for new partnerships, and up to and including $100 million in follow-on funds. • With Staff concurrence, approve direct co-investment opportunities up to and including $50 million. • Present to Staff recommendations pertaining to the sale of existing partnership funds on the secondary market exceeding $50 million in Fair Market Value. Such transactions shall be brought to the Board for review and approval. • Provide investment analysis reports for each new investment and for sales of partnership fund interest on the secondary market or to other limited partner(s) or potential buyer(s). • Communicate with Staff regarding potential investment opportunities undergoing analysis and due diligence. • Coordinate meetings with general partners at the request of Staff. • Advise on and negotiate investment terms.

Section 6 PRIVATE REAL ESTATE INVESTMENT POLICY

XI. PRIVATE REAL ESTATE INVESTMENT POLICY

This Real Estate Investment Policy sets forth a general framework for managing LACERS' investments in real estate. This policy provides that the LACERS' real estate program shall be planned, implemented, and monitored through the coordinated efforts of the Board, the General Fund Consultant, Staff, the Real Estate Consultant, and the Investment Managers. Additionally, this policy is subject to the guidelines set forth by LACERS in the Ethical Contracting Compliance Policy and in the Third Party Marketing and Referrals Disclosure Policy, as amended from time to time by the Board, or as stated under applicable laws or regulations.

The Real Estate Consultant, along with Staff, shall prepare an Annual Real Estate Strategic Plan, as defined below, to be considered and acted upon by the Board that will address the specific goals and guidelines to be achieved and followed in the Real Estate Portfolio each year. The Annual Real Estate Strategic Plan shall be consistent with the guidelines set forth in this policy.

A. Real Estate

For purposes of this policy, real estate shall be defined to include investments that are private equity or debt positions in real property. Investments may be leveraged or unleveraged. As further set forth in this policy, LACERS will invest primarily in discretionary commingled funds (e.g., limited liability companies, real estate investment trusts, and limited partnerships) owned with other suitable institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds). As further set forth in this policy, LACERS also may invest in real estate assets on a direct ownership basis through a discretionary separate account vehicle. Such investments will be evaluated on a case by case basis, but at a minimum, need to provide a compelling opportunity, which is consistent with the Real Estate Portfolio's investment objectives and overrides or outweighs the benefits of commingled fund investments.

B. Fiduciary Standards

The investment and management of the Real Estate Portfolio shall be accomplished in a manner consistent with the "prudent person" standard of fiduciary care. This level of care requires that all LACERS' fiduciaries act reasonably to accomplish the stated investment objectives and to safeguard the System on behalf of LACERS' participants and their beneficiaries. The implementation of this Real Estate Policy, including the selection of investment managers, shall be completed in a manner that enhances the Real Estate Portfolio's diversification, thereby reducing risk by limiting exposure to any one investment, manager, real estate property type, geographic region, or other defined risk factor.

C. Scope

This Real Estate Policy sets forth the objectives, policies, and processes and procedures related to the implementation and oversight of the Real Estate Portfolio. Specifically, the objectives outlined herein define the desired risk level and return expectations governing the Real Estate Portfolio; the policies provide guidelines governing investment styles to manage defined risk exposures within the asset class; the investment processes and procedures and roles and responsibilities describe the investment process and allocation of duties among the Board, Staff, the Managers, and the Real Estate Consultant.

LACERS has engaged the Real Estate Consultant on a non-discretionary basis to assist the Board and Staff to implement and revise this policy when necessary. The Real Estate Consultant's duties and responsibilities, which are further defined in Section XI.H include selecting Managers, including performing due diligence and recommending new investments; monitoring existing investments; and generally providing advice to Staff and the Board with respect to the Portfolio. The Real Estate Consultant shall conduct a review of this policy, in conjunction with the Board and Staff, at a minimum of once per year, and set forth any strategic and tactical recommendations in the Annual Real Estate Strategic Plan.

D. **Investment Objectives**

The main investment objective with respect to the Real Estate Portfolio is to maximize returns given the defined level of risk, as determined by the Board. While it is necessary to use active asset management strategies to maximize total investment returns (i.e., income and appreciation returns), investment principal is to be safeguarded within the Portfolio's framework of prudence and managed risk. Although real estate investments are illiquid and have a long-term holding period, investing in this asset class should improve the System's fund level risk-adjusted returns by enhancing overall diversification, which reduces total portfolio risk. Specifically, the objectives of LACERS with respect to the Real Estate Portfolio include the following:

1. **Attractive Risk-Adjusted Returns**

To obtain superior risk-adjusted returns by taking advantage of the inefficiencies of real estate as compared to other asset classes. Active management, value creation and opportunistic strategies, as well as the prudent use of third-party debt, are approved methods for generating expected returns. As discussed in Section XI.G below, the benchmarks for the Portfolio will be the NFI-ODCE Index plus 80 basis points.

2. **Increased Portfolio Diversification/Reduced Portfolio Risk**

To use real estate to enhance overall diversification and, in turn, reduce overall risk of the System's assets, given the historically low to negative return correlations that exist between real estate and other asset classes.

3. **International Investments**

To access international real estate markets through private equity and debt real estate investments. By so doing, the Real Estate Portfolio will obtain exposure to diverse economies, populations, and currencies.

4. **Significant Current Cash Yields**

To invest in real estate assets, which will generate a significant cash return based primarily on current rental income. In general, as a portion of total investment return, higher levels of current income are expected from core and value than opportunistic investments; in contrast, higher levels of appreciation are expected from opportunistic than value add and core investments.

5. **Inflation-Hedge**

To make investments primarily in real estate equity investments that are likely to provide a reasonable hedge against price inflation.

6. **Preservation of Principal**

To achieve meaningful risk-adjusted returns without undue exposure to loss of investment principal.

E. **Investment Guidelines**

LACERS shall establish a long-term target allocation to real estate (the “Target Allocation”). The Target Allocation will fluctuate according to the relative values among the Real Estate Portfolio and the allocations to other asset classes of LACERS. To accomplish and maintain the Target Allocation, the Real Estate Consultant may recommend committing in excess of the Target Allocation percentage in order to meet full allocation objectives. The Real Estate Portfolio allocation percentage actually achieved quarterly may vary from the Target Allocation within a reasonable range as determined by the Board and Staff from time to time.

Eligible real estate funds will range from core open-end funds to opportunistic closed-end funds, and may also include separate investment accounts with selected fund managers; however, the Real Estate Portfolio will be comprised primarily of commingled fund vehicles. Separate accounts represent opportunities wherein LACERS would be the sole or significant equity sponsor for an investment manager pursuing a specifically targeted opportunity or defined strategy. As the sole or significant equity sponsor, LACERS would likely be entitled to voting and control rights generally not available to commingled fund investors.

The following investment guidelines set forth investment parameters consistent with the risk and return objectives of the Real Estate Portfolio.

1. **Portfolio Composition – Risk Strategy Mix**

The Real Estate Portfolio shall be comprised of two different but complementary risk/return categories or risk strategies. These categories or risk strategies are referred to as core and non-core, as defined below. These categories or risk strategies generally define the risk and return levels as low, medium, and high risk associated with institutional real estate investments.

Section 6 PRIVATE REAL ESTATE INVESTMENT POLICY

a) **Core and Core Plus**

Core

Equity investment in operating and substantially-leased (i.e., at least at market occupancy levels) institutional quality real estate in the traditional property types (i.e., apartment, office, retail, industrial, and hotel). Core investments may also include high-quality, non-traditional property types (i.e. student housing, medical office, and self-storage) that produce stable income with low risk. Assets are located in significant metropolitan markets with reasonable population sizes and economies. Net returns historically have been in the 6% to 9% range (net of fees) with annual standard deviation near 8.0%. Of note, core investments typically feature current income as a large portion of overall return (i.e., up to 70%), and appreciation that generally matches or exceeds inflation. Low leverage is utilized (i.e., 50% or less on a portfolio basis). Core debt investments include first mortgage loans secured by the previously defined core equity real estate assets. Such mortgage loans are either newly originated or are existing but performing loans with reasonable borrowers (e.g., credit), reasonable terms (e.g., loan to value of less than 50% and debt service coverage of 1.25 or greater) and institutional-quality management (e.g., an institutional investment manager with reasonable experience and track record in managing first mortgage loan investments). During periods of market illiquidity, core equity investments can provide high going-in income returns and provide a reasonable inflation-hedge so long as markets are not over-supplied.

Core Plus

Core Plus investments typically will target a higher leverage ratio (around 50% on a loan-to-value basis) and allocate slightly more to non-operating real estate investments, around 20%.

b) **Non-Core**

Value Add

Value add investments are functional, high quality assets with specific property issues, such as high vacancy, significant upcoming lease expirations, or below market rents. These are debt or equity investments that typically require rehabilitation, redevelopment, development, lease-up, and/or repositioning. Levered returns historically have been in the 10% to 14% range (net of fees). Value add investments also typically feature both current income and appreciation as components of overall return, and frequently involve the repositioning of distressed assets (i.e., not fully leased and operating) and potentially the purchase of interests in real estate operating companies (“REOCs”). Value add investments typically are expected to generate above-core returns through the leasing-up of a property, which increases the end value by increasing in-place income and, in many cases, ultimately decreasing the capitalization rate upon disposition. Value add investments are typically more dependent on appreciation returns than core investments, with purchase prices based on in-place income or asset replacement cost (i.e., at a discount to replacement cost). During periods of market illiquidity, value equity investments can provide high going-in income returns and pricing at significant discounts to replacement costs. During periods of market liquidity, value equity investments include new development projects (i.e., acquire land, obtain entitlements, construct building and lease or sell), which require significant expertise and underwriting. Moderate leverage is utilized for these investments (i.e., targeting 50% to 65% on a portfolio basis).

Opportunistic

Equity or debt investment in real estate properties, operating companies, and other investment vehicles involving significant investment risk, including real estate, financial restructuring, and non-real estate risk. Levered returns have been 15% or higher (net of fees) with significant annual standard deviation. Opportunistic investing includes distressed assets, financial restructurings, and/or financial engineering opportunities (e.g., foreclosing on a mortgage and selling the equity interest) and potentially the purchase of REOCs. Opportunistic investments typically have even greater appreciation potential than value add investments (e.g., 50% of total returns); correspondingly, these investments offer a higher return potential and a higher risk profile than core or value add investments. In many cases, since appreciation is the primary goal of opportunistic investing, many are originated with little if any in-place income and therefore less current income as a portion of total return. These investments historically have experienced higher return performance during periods of market illiquidity (e.g., early 1990's in the U.S.). Higher leverage is used (i.e., up to 80% with some funds).

Core and core plus and non-core exposure targets shall be evaluated at a minimum of once per year and set forth in an Annual Real Estate Strategic Plan and approved by the Board. When making investment recommendations, the Real Estate Consultant shall evaluate the impact of the prospective investment on the Real Estate Portfolio's risk/return exposures based on the existing portfolio net asset value.

2. **Risk Mitigation**

a) **Leverage**

Leverage is a significant risk factor that shall have exposure guidelines and monitoring requirements, as set forth in Section XI.E.7 of this Real Estate Policy.

b) **Diversification**

Diversification is an important tool in reducing real estate portfolio risk and accomplishing superior risk-adjusted returns. The Real Estate Portfolio shall be diversified by risk factors which can be reduced through diversification (e.g., geographic region and property type). Diversification reduces the impact on the portfolio of any one investment or any single investment manager to the extent that an adversity affecting any one particular area will not impact a disproportionate share of the total portfolio.

It is expected that at various points in time, the Real Estate Portfolio may have a significant exposure to a single property type or location to take advantage of opportunities available in the market which are projected to generate superior returns. When making investment recommendations, the Real Estate Consultant shall consider as part of its investment recommendation the impact on Real Estate Portfolio diversification and risk and return. As part of the Annual Real Estate Strategic Plan, the Real Estate Consultant shall provide annually, or more frequently when market conditions require, the risk factor (e.g., property type and region) ranges which it believes provide reasonable diversification given the expected market conditions. The following describe the various diversification guidelines that will be utilized.

Property Type

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information, and industry indices' diversification. Property type portfolio exposure levels have had a significant impact on institutional investor returns since property types have performed differently during economic cycles.

Real estate investments may include investments other than the traditional property types, such as healthcare facilities, manufactured housing, infrastructure, timber and farmland. The Real Estate Consultant shall include a section in each Annual Real Estate Strategic Plan, reviewing the Real Estate Portfolio's property-type exposures and investment objectives relating thereto.

Geographic Region

Diversification policy ranges are based on the universe of available real estate investments, institutional investor portfolio information and industry indices' diversification. The importance of location to the long-term value of real estate is based on local economic fundamentals and the other risk attributes (e.g., weather, earthquake and local government impact) of regional areas.

The Real Estate Consultant shall include in each Annual Real Estate Strategic Plan investment guidelines and targets related to the Real Estate Portfolio's allocation to geographic regions.

3. **Investment Life Cycle**

Investment life cycle refers to the stage of development of a real estate investment. The stages of development include the following: (1) land or pre-development (i.e., un-entitled or partially entitled land); (2) development/redevelopment (i.e., in process of entitling or constructing improvements); (3) leasing (i.e., less than full or market occupancy); and (4) operating (i.e., greater than market occupancy). As a result of the risks associated with development, at no time shall the Real Estate Portfolio have an exposure exceeding 30% to total non-operating investments (i.e., the total of pre-development/land, development/redevelopment and leasing). Also, the Real Estate Consultant shall monitor the Real Estate Portfolio's exposure to different life cycles through the quarterly performance report, which shall indicate the Real Estate Portfolio's non-operating investment exposure and whether a non-compliance issue exists.

4. **Permissible Investment Structures/Vehicles and Private Allocations**

The Real Estate Portfolio may include private real estate equity and debt investments. Private equity real estate investments may include any investment made in equity interests in real estate assets (i.e., land and assets deriving most of their income return from rents paid by tenants subject to lease agreements) or companies through private placements, including REOCs and Real Estate Investment Trusts ("REITs"). Typical property types include the following: office, retail, rental apartments, for sale residential, industrial and hotel. Private debt investments may include structured investments, which provide for stated preferred returns, which may be accrued or paid on a current basis. Private debt investments may also include loans secured by senior or junior mortgage or deed of trust agreements.

5. **Investment Vehicles**

Investment vehicle exposure ranges shall be used to mitigate portfolio risk including enhancing portfolio liquidity. The following discussion provides a summary of the advantages and disadvantages of the investment vehicles, which shall be used in developing the Real Estate Portfolio.

a) **Open-End Commingled Funds**

The open-end fund investments shall be made primarily to provide (1) reasonable property type and geographic diversification, (2) exposure to larger properties (i.e., over $50 million) or certain countries, and (3) reasonable liquidity (i.e., ability to redeem within 90 days). The Real Estate Consultant shall complete reasonable due diligence in evaluating open-end commingled funds consistent with this policy. Open-end commingled fund vehicles may include, but are not limited to, insurance company separate accounts, group trusts, limited liability companies, single purpose corporations or any other vehicle that is determined by the Real Estate Consultant to be consistent with the Real Estate Policy.

b) **Closed-End Commingled Funds**

The closed-end fund investments shall be made primarily to obtain exposure to reasonably diversified portfolios of value add and opportunistic investments. The primary advantages of closed-end funds are that they provide access to talented management teams with focused niche value add and opportunistic strategies. Also, management teams typically co-invest and rely on incentive fees, which combined enhance the alignment of investor and manager interests. The Real Estate Consultant shall complete reasonable due diligence in selecting closed-end fund investments. Co-investment by the manager of a fund or by investors in the fund is acceptable providing: (1) the co-investor(s) have similar investment objectives regarding risk/return exposures and holding periods, (2) control and voting rights with respect to investment decisions are deemed reasonable, and (3) reasonable buy/sell or other agreements exist to allow for the resolution of investor disagreements. Closed-end funds typically have terms of no less than seven years and are therefore illiquid.

c) **Separate Account Vehicles**

Separate accounts may be used to make private equity/debt investments. Separate accounts offer the primary advantage of control over the manager, the strategy, the asset investment and sales decisions, and the capital. The Real Estate Consultant shall complete reasonable due diligence in selecting the Managers for direct investment separate accounts.

Direct Investments

LACERS may make direct equity/debt investments using separate account vehicles; however, such investments require careful consideration. Transaction costs and management expenses are high and there may be a significant time commitment by the Staff. Separate account direct investments shall be made only when the opportunity is compelling, as determined by the Staff, the Real Estate Consultant, and the Board. To be compelling, a direct investment needs to: (1) be in compliance with this Real Estate Policy; (2) be consistent with the strategic needs of LACERS, as set forth in the Annual Real Estate Strategic Plan; and (3) present an investment opportunity that provides benefits to LACERS that outweigh or override those provided by commingled funds, as previously described. The Real Estate Consultant shall assist the Staff with any direct investments by recommending a Manager and by completing an independent report, which summarizes and evaluates the manager due diligence completed. The report shall include a summary of findings and conclusions and shall be retained by the Staff on file for review.

Direct investments shall also include any private REOC investments. These include full or joint venture ownership of an operating company, which may be used to acquire a single asset, to implement a niche investment strategy or to serve another purpose as defined by the Real Estate Consultant and approved by the Staff and the Board.

Each direct investment strategy, fee structure and level of investment discretion shall be defined by the Real Estate Consultant and approved by the Staff and the Board. The Manager shall complete an annual budget review, as defined by the Real Estate Consultant, and a hold/sell analysis, for each direct investment. Since the sale or refinancing of a direct investment interest is required to return invested capital, such investments are considered illiquid.

6. **Manager/Investment Concentration**

LACERS shall limit its exposure to any single Manager or investment, and be subject to other investment restrictions to reduce risk, as further defined below.

a) **Maximum Manager Allocation**

No single manager (including any allocation to pooled funds and/or separate accounts) shall be allocated more than thirty percent (30%) of the Real Estate Portfolio's total allocation at the time of the prospective investment commitment. The allocation amount calculation shall include all of the Real Estate Portfolio's investment commitments remaining to the Manager plus the net asset value of the existing investments at the time of measurement or at the time of a prospective investment allocation.

b) **Maximum Investment Commitment**

The Real Estate Portfolio's maximum investment commitment to a non-core commingled fund or a separate account Manager shall be limited to fifteen percent (15%) of the Real Estate Portfolio's allocation to real estate at the time of the prospective investment commitment.

c) **Commingled Fund Guidelines**

The Real Estate Portfolio's investment in a single open-ended commingled fund shall not exceed twenty percent (20%) of the total net market value of the commingled fund at the time of the prospective investment. The Real Estate Portfolio's investment in a single closed-end commingled fund shall not exceed twenty percent (20%) of the total investor commitments to the fund at the time of closing of the commitment period of the prospective investment. LACERS shall not consider investments in a commingled fund that has less than $150 million in committed capital inclusive of LACERS pending commitment.

d) **Maximum Individual Separate Account Investment**

The Real Estate Portfolio's maximum investment in any single separate account investment shall be limited to a maximum of ten percent (10%) of the Real Estate

Portfolio's total allocation to real estate at the time of the prospective separate account investment, unless otherwise approved by the Board.

The Real Estate Consultant and the Staff shall be responsible for reviewing separate account allocations and commingled fund terms to ensure they are consistent with or have incorporated the applicable restrictions previously described. Even though a prospective commingled fund or separate account allocation may be in compliance with the Real Estate Policy restrictions, the Real Estate Consultant shall complete reasonable due diligence with respect to each prospective investment to determine whether it is appropriate for recommendation to the Staff and the Board. The Real Estate Consultant may consider a number of factors in determining whether investments are reasonable and appropriate for institutional investors, including the following: the level of investment by institutional investors (e.g., pension funds, endowments, foundations, and sovereign funds); the size of the organization; the experience of key personnel; the track record of key personnel in investments comparable to the strategy to be undertaken; and the financial condition of the firm.

7. **Leverage**

Leverage is a significant risk factor, the importance of which is magnified during an economic downturn when decreasing property values and stricter lending terms can lead to unexpected increased leverage levels and decreased equity interests. The Real Estate Consultant shall set forth reasonable leverage targets given market conditions in the Annual Real Estate Strategic Plan. When making a new investment recommendation, the Real Estate Consultant shall consider the impact on the Portfolio's leverage guidelines and targets at the time of the prospective investment.

Additionally, the Real Estate Consultant shall monitor the Real Estate Portfolio's leverage to evaluate compliance with the above stated guidelines through the quarterly performance report.

8. **Specialized Investments**

LACERS has in the past, and as determined by the Staff, the Board, and the Real Estate Consultant, may continue to allocate to unique investment strategies and/or investment firms, as further described below.

a) **Unique Investment Strategies**

Unique investment strategies include those that have collateral benefit objectives, which include job creation, community development, green or environmental objectives (e.g., reduce the use of carbon based fuels), and underserved market initiatives (e.g., defined by geography such as urban or inner city and by demographics such as minority or lower income areas). While such strategies offer attractive benefits, the Real Estate Consultant shall focus its evaluation on whether the expected return projected for the investment is reasonable given the level of risk. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation is reasonable and consistent with that of a comparable real estate strategy not providing the same collateral benefits.

b) **Unique Managers**

Unique Managers include those that are Emerging Managers pursuant to the LACERS Emerging Investment Manager Policy. To recommend such an investment to the Staff and the Board, the Real Estate Consultant needs to demonstrate that the expected risk and return of the prospective investment allocation to the unique Manager is reasonable. In so doing, the Real Estate Consultant needs to evaluate comprehensively any factors of the unique Manager that may adversely affect investment performance and conclude that such factors are not likely to affect return performance materially and adversely.

G. Investment Processes And Procedures

1. Real Estate Manager Selection Process

The following discussion describes the process by which LACERS selects Managers and investments.

a) **Universe of Potential Manager Candidates**

The Real Estate Consultant, pursuant to the Annual Real Estate Strategic Plan, will initiate a Manager search by creating a global list of potential candidates for selection based on the Staff and Real Estate Consultant's initial search criteria. The Real Estate Consultant shall provide information from its databases regarding the candidates to be reviewed with the Staff. The Staff will set forth any additional candidates to be considered. The Real Estate Consultant and the Staff will consolidate their lists to create a single list of potential candidates.

b) **Minimum Manager Qualifications**

The Manager requirements include that the Manager have $200 million of assets at a minimum under management and no less than three (3) years of real estate investment experience or a demonstrable track record of three (3) years of real estate investment experience.

c) **Manager Candidate Summaries**

The Real Estate Consultant shall complete a brief summary of the Manager candidates, including descriptions of their meeting Manager criteria established by the Real Estate Consultant and the Staff relating to the Managers' organization, track record, personnel, alignment of interests, terms and fees. The Real Estate

Consultant will screen these summaries and recommend the finalists for further due diligence to the Staff.

d) **Due Diligence**

After the Staff and the Real Estate Consultant select the finalists, the Real Estate Consultant shall complete a comprehensive due diligence review. The comprehensive due diligence review includes an in-depth analysis of the firm's background, organization, personnel, strategy and other related factors. The Real Estate Consultant shall invite the Staff to participate in completing due diligence activities.

e) **Selection and Approval**

After completing the due diligence report, the Staff and Real Estate Consultant will recommend a candidate for consideration to the Board, which will make the final decision.

f) **Term Negotiation**

The Staff, Real Estate Consultant and the legal counsel will negotiate the Manager contract and propose a side letter if necessary. The final contract shall be executed by LACERS' General Manager or the appropriate party or parties authorized by the Board.

2. **Monitoring Process and Performance Measurement**

The Real Estate Consultant and the Staff, when available, will meet with managers on a periodic basis to determine the progress being made in the fund. These discussions may occur at annual investor meetings or in face-to-face or telephone meetings either at the Manager's or the Real Estate Consultant's offices.

Investment Managers will send financial reports and capital account statements on a regularly scheduled basis to the Real Estate Consultant and LACERS. Quarterly Portfolio Performance Review Reports ("PPR") shall be prepared by the Real Estate Consultant. The PPR is a comprehensive reporting and evaluation system addressing each investment. The PPR system shall provide such information as may be required by LACERS to understand and administer its investments and shall include attributes for both the Managers and the total portfolio. These attributes include: income, appreciation, gross and net returns for the portfolio and each manager, cash flow, internal rate of return calculations, diversification, comparisons to relevant industry performance indices, and information reporting standards.

G. **Benchmark Returns**

Section 6 PRIVATE REAL ESTATE INVESTMENT POLICY

While no return objectives are stated by strategy, relative performance comparisons will be made to various indices to provide additional perspective on performance and/or facilitate attribution analysis. The return objectives are as follows:

LACERS' Real Estate Portfolio Benchmark Guideline	
Strategy	**Return Objectives Over Rolling 5-year Periods**
Core Real Estate	NFI-ODCE Index
Non-Core Real Estate	NFI-ODCE Index + 200 basis points
Timber	NCREIF Timberland Index, gross of fees

Portfolio Benchmark

With respect to private real estate investments, The Real Estate Consultant, the Staff and the Board shall use the NFI-ODCE plus 80 basis points over a rolling 5-year period as its benchmark.

H. **Roles and Responsibilities**

The following duties have been established to manage the risks involved with investing in real estate. Set forth below is the delegation of the major roles and responsibilities of each participant:

1. **Duties of the Board**

a) Establish the role of the real estate investment program in light of the total System objectives.

b) Consider and act upon the allocation to real estate and approve any adjustments to the allocation which may from time to time be necessary.

c) Review, consider, and act upon the Annual Real Estate Policy (objectives, policies and procedures) and the Annual Real Estate Strategic Plan for the real estate program.

d) Interview, consider, and act upon the Staff recommendations for selection, retention and removal of the Managers and/or the Real Estate Consultant and the selection of Manager investments.

e) Review the real estate portfolio on a quarterly basis to evaluate the investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan.

2. **Duties of the Staff**

a) Update and communicate with the Board and Investment Managers on issues and matters of the Policy.

b) Provide the Board with education and analysis that is independent from the Real Estate Consultant to the extent time and resources allow.

c) Be familiar with the asset class and stay informed of developments in industry as they occur.

d) Oversee the Real Estate Consultant's preparation of the Annual Real Estate Strategic Plan for the real estate program. Present and recommend, along with the Real Estate Consultant, the Real Estate Policy and Annual Real Estate Strategic Plan to the Board.

e) Oversee and review the performance of the Real Estate Consultant and the Managers on a periodic basis and discuss findings with the Board.

f) Bring any non-conforming items or significant issues to the attention of the Board.

g) Document and monitor funding procedures.

h) Complete any other activity as directed by the Board.

i) Conduct or assist in conducting due diligence on prospective investment opportunities as LACERS' resources permit.

j) Prepare investment documentation with the Real Estate Consultant.

3. **Duties of the Manager**

a) Adhere to reporting and performance measurement standards and comply with generally accepted accounting principles ("GAAP") applied on a fair market value basis.

b) Execute and perform its duties under the terms of the investment vehicle documents.

c) Provide timely requests for capital contributions.

d) Provide quarterly financial statements, annual reports and other investment information requested by the Staff and/or the Real Estate Consultant.

e) Conduct annual meetings to discuss important developments regarding investment and management issues.

4. **Duties of the Real Estate Consultant**

LACERS engaged the Real Estate Consultant on a non-discretionary basis to select new investments, to monitor existing investments, and to provide advice in accordance with the investment objectives for the real estate portfolio. The Real Estate Consultant's services to LACERS may include but are not limited to the following:

a) Report directly to the Board and Staff on matters of policy.

b) Bring any non-conforming items or significant issues to the attention of the Staff and the Board.

c) Complete due diligence on potential investments and preparation of the due diligence report.

d) Monitor the performance of the real estate portfolio and compliance with approved policy.

e) Prepare the Annual Real Estate Strategic Plan for the real estate program, in consultation with the Staff, and present the Annual Real Estate Strategic Plan to the Board for review.

f) Review proposed real estate investments and recommend prudent investments, structure and controls. Monitor investments and ventures through completion and disposition, including satisfaction of conditions to funding, partnership and financial issues.

g) Assist Staff with the review and preparation of documents related to new investments approved by the Board consistent with the Real Estate Consultant's recommendation.

h) Prepare reports on a periodic basis for the Board to evaluate investment performance and to ensure compliance with policy guidelines and approved Annual Real Estate Strategic Plan. The evaluation system shall provide such information as may be required by LACERS to understand and administer its investments.

i) Assist the Staff in the Annual Real Estate Strategic Plan portfolio review.

j) Provide Board and Staff with topical research and education on investment subjects that are relevant to LACERS.

k) Review the Real Estate Policy annually and notify LACERS if any revisions are needed thereto.

l) Monitor and report on risk.

m) Provide ongoing real estate education information and seminars to the Board.

5. **Duties of Legal Counsel**

The legal counsel selected by LACERS along with the Office of the Los Angeles City Attorney will represent LACERS and will review all real estate related documents and provide advice for special investment situations as needed.

LACERS
LA CITY EMPLOYEES'
RETIREMENT SYSTEM

REPORT TO BOARD OF ADMINISTRATION **MEETING: MARCH 22, 2022**
From: Neil M. Guglielmo, General Manager **ITEM: VIII - D**

SUBJECT: **U.S. SECURITIES AND EXCHANGE COMMISSION'S PROPOSED RULES ON PRIVATE FUND ADVISERS AND POSSIBLE ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Board:

1. Consider the attached public comment to the U.S. Securities and Exchange Commission (SEC) supporting the proposed rules to enhance the regulation of private fund advisers; and

2. Authorize the General Manager or his designee to submit the public comment on behalf of LACERS.

Executive Summary

On February 9, 2022, the SEC approved new proposed rules[1] for enhancing the regulation of private fund advisers to improve transparency and reduce potential conflicts of interest. These enhancements include new requirements for quarterly statements detailing performance, fees, and expenses; annual fund audits; adviser-led secondaries; prohibited activities; and preferential treatment of limited partners (LPs). This report includes a summary of the changes along with a draft public comment from LACERS in support of the new rules for Board approval.

Discussion

Background
LACERS is a member of the Institutional Limited Partners Association (ILPA), which represents 500 members and more than $2 trillion in private equity assets under management. ILPA's global policy priorities include ensuring a level playing field for LPs by supporting basic minimum standards and effective regulation of private funds, supporting policies that benefit LPs and the evolution of the private fund industry, and limiting negative impacts of policies and regulatory changes on limited partners. ILPA

[1] https://www.sec.gov/rules/proposed/2022/ia-5955.pdf

has been actively engaged with the SEC's rule making process, and has continually encouraged members to voice support for key initiatives to achieve these goals.

On September 28, 2021, the LACERS Board approved sending an ILPA letter to SEC Chairman Gary Gensler in support of requiring quarterly fee and expense reporting by private fund advisers. As detailed below, these requirements have been included in the SEC's proposed rule, along with other changes that ILPA believes align with the association's global policy priorities.

Summary of Proposed Rule

The SEC is responsible for oversight of 5,037 registered private fund advisers with over $18 trillion in private fund assets under management. The SEC has stated that based on their experience overseeing private fund advisers, there is a need to enhance current regulations with reforms designed to increase visibility into certain practices, establish requirements for practices that have the potential to lead to investor harm, and to prohibit adviser activity that is contrary to public interest and investor protection. The SEC's proposed rules includes five major sections that will impact private fund advisers and limited partners, including a quarterly statement rule, a private fund audit rule, an adviser-led secondaries rule, a prohibited activities rule, and a preferential treatment rule.

The proposed quarterly statement rule will require private fund advisers to prepare a quarterly statement that includes information regarding fees, expenses, and performance. This rule cites the ILPA fee template, which is a standardized financial disclosure framework that is currently in use by many of LACERS' private fund managers, as an example that provides "adequate disclosures to investors." The quarterly statement rule will require detailed information on adviser compensation, fund expenses, and offsets/rebates. It will also require disclosure on portfolio level investments, including ownership percentage and compensation, which may help to identify potential conflicts of interest and enable the monitoring of the application of offsets and rebates. This proposed rule also requires new performance disclosures, such as the impact of fund level subscription facilities, which may boost reported internal rates of return (IRR).

The private fund audit rule will require an annual audit of the financial statements at least annually and upon liquidation, and that these financial statements be distributed to investors promptly after the completion of an audit. The proposed rule will also require SEC notification if the auditor is terminated or issues a modified opinion. While the vast majority of LACERS funds are audited, in a few limited cases the audits have been discontinued in an effort to reduce expenses, particularly for end of life funds with few remaining assets.

Adviser-led secondaries are transactions in which the investor is given the option to either sell their interest in a fund asset, or exchange them for new interests in another vehicle that is also advised by the same general partner. The proposed rule will require that the adviser to these transactions obtain a third party fairness opinion, and that the provider of this fairness opinion disclose any material business relationships with the adviser over the past two years, such as providing audit, consulting, capital raising, or other services that may be considered a conflict of interest.

The prohibited activities rule prohibits advisers from directly or indirectly seeking reimbursement, indemnification, exculpation, or limitation of liability for a breach of fiduciary duty, willful malfeasance, bad faith, or recklessness. This is a core issue that ILPA has been seeking to address since 2019, and is a frequent area of negotiation during the legal documentation phase of private market fund investments. The proposed rule will also prohibit certain fees and expenses being charged to a fund or portfolio investment, such as accelerated payments for services the adviser does not expect to provide, costs related to SEC compliance and government examinations, and fees or expenses charged on a non-pro rata basis. The proposed rule also includes limitations on reducing GP clawbacks by potential tax liabilities, and prohibits adviser borrowing from the fund or using fund assets as collateral.

Finally, the preferential treatment rule prohibits granting preferential terms to certain investors regarding redemptions from the fund and preferential transparency regarding portfolio holdings or exposures. This rule also requires that other preferential terms be disclosed to all investors either by providing redacted side letters or a written summary of the preferential treatment.

Public Comment
ILPA has requested that members who are interested provide public comments by the SEC's deadline on April 11, 2022. Attached for the Board's review is a proposed public comment that has been jointly drafted by staff and the City Attorney.

Strategic Plan Impact Statement

Supporting ILPA's efforts to improve the consistency and transparency of private funds aligns with the Strategic Plan goal of upholding good governance practices which affirm transparency, accountability, and fiduciary duty (Goal V).

Prepared By: Clark Hoover, Investment Officer I, and Robert King, Investment Officer II

NMG/RJ/BF/WL/CH/RK:jp

Attachments:
1. Draft Public Comment from LACERS on SEC proposed rule
2. SEC Fact Sheet: Private Fund Proposed Reforms

LACERS

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March 16, 2022

Ms. Vanessa Countryman
Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549-0609

Re: S7-03-22

Dear Ms. Countryman:

On behalf of the Board of Administration of the Los Angeles City Employees' Retirement System (LACERS), I write to strongly support the Commission's proposed rules concerning Private Fund Advisors; Documentation of Registered Investment Advisor Compliance Reviews. LACERS commends the Commission for drafting and seeking public input on these salutary proposals, which would enhance transparency in private markets, further level the playing field between institutional limited partners and fund managers, and enhance LACERS' ability to fulfill our fiduciary duties and meet our funding objectives as pension fund trustees.

LACERS is a public pension plan sponsored by the City of Los Angeles, which invests approximately $22 Billion in trust funds to provide retirement security to its more than 56,000 public employee participants and their families. To meet LACERS' long term funding goals, we currently deploy an asset allocation strategy that targets 29%, or approximately $6.4 billion, to private market investments managed by fund advisers, nearly all of whom are regulated by the Commission. LACERS recognizes the unique and important value that private market fund advisors offer to investors like LACERS, who invest in a diversified portfolio and prudently weigh the risks and expected returns presented by each investment. The objectives that the proposed rules contained in S7-03-22 seek to achieve resonate deeply with LACERS' objectives as public pension fund trustees.

LACERS is a longstanding member of the Institutional Limited Partners Association (ILPA) and regularly assists ILPA leadership in developing policies to improve investor protections. It is gratifying that the Commission has taken seriously the concerns raised by ILPA over the years and has now taken decisive action to provide these vital investor protections through its rulemaking powers. These proposed rules will significantly increase confidence among institutional investors that fund advisors will act in the best interests of all investors, including by requiring fund advisors to disclose to institutional limited partners like LACERS when a fund adviser treats certain investors differently, and to analyze the ramifications of that disparate treatment.

Given the increasingly important role that private market investments play in the asset allocations and funding targets of institutional investors like LACERS—which role is likely to continue to grow in the years ahead—the proposed rules are essential to protect the right of investors to access information critical to make informed investment decisions. We also applaud the proposed rules' assurance that fund advisors must adhere to the same fiduciary duties which bind investors like LACERS, who themselves invest in private funds as fiduciaries on behalf of members and plan participants.

Finally, LACERS strongly supports the proposed rules' requirements that advisors and managers avoid certain transactions involving inherent conflicts of interest.

LACERS sincerely appreciates the time and effort that the Commission has invested in drafting these proposed rules and supports their swift and complete adoption. Should you have any questions or require further information, please do not hesitate to contact Rodney June, Chief Investment Officer, at rod.june@lacers.org.

Thank you for your consideration.

Sincerely,

Cynthia Ruiz

LACERS Board President

FACT SHEET

Private Fund Proposed Reforms

The Securities and Exchange Commission proposed new rules and amendments under the Investment Advisers Act of 1940 (Advisers Act) to enhance the regulation of private fund advisers. The proposed new rules would:

- Require private fund advisers registered with the Commission to provide investors with quarterly statements detailing information about private fund performance, fees, and expenses;
- Require registered private fund advisers to obtain an annual audit for each private fund and cause the private fund's auditor to notify the SEC upon certain events;
- Require registered private fund advisers, in connection with an adviser-led secondary transaction, to distribute to investors a fairness opinion and a written summary of certain material business relationships between the adviser and the opinion provider;
- Prohibit all private fund advisers, including those that are not registered, from engaging in certain activities and practices that are contrary to the public interest and the protection of investors; and
- Prohibit all private fund advisers from providing certain types of preferential treatment that have a material negative effect on other investors, while also prohibiting all other types of preferential treatment unless disclosed to current and prospective investors.

Additionally, the SEC is proposing to require all registered advisers, including those that do not advise private funds, to document the annual review of their compliance policies and procedures in writing.

Why This Matters

With more than $18 trillion in gross assets, private funds and their advisers play an important role in our financial markets and the lives of everyday Americans. Some of the largest private fund investors include state, municipal, and private pension plans that provide retirement and other benefits to the American public.

Based on the SEC's experience overseeing private fund advisers and the sector's impact on our financial system, our economy, and American investors' savings, there is a need to enhance the regulation of private fund advisers. The proposed reforms are designed to protect private fund investors by increasing their visibility into certain practices, establishing requirements to address practices that have the potential to lead to investor harm, and prohibiting adviser activity that is contrary to the public interest and the protection of investors.

What this Proposal Would Do

Quarterly Statement Rule

The proposal would require registered private fund advisers to distribute a quarterly statement to private fund investors with a detailed accounting of all fees and expenses paid by the private fund during the reporting period. In addition, the statement would disclose information regarding compensation or other amounts paid by the private fund's portfolio investments to the adviser or any of its related persons.

The proposal also would require advisers to provide information regarding the private fund's performance. For liquid funds, the quarterly statement would provide annual net total returns since inception, average annual net total returns over prescribed time periods, and quarterly net total returns for the current calendar year. For illiquid funds, the statement would provide the gross and net internal rate of return and gross and net multiple of invested capital for the illiquid fund to capture performance from the fund's inception through the end of the current calendar quarter.

FACT SHEET | **Private Fund Proposed Reforms**

The proposal is designed to improve the quality of information provided to fund investors and allow them to better assess, monitor, and compare their private fund investments.

Private Fund Audit Rule

The proposal would require registered private fund advisers to cause the private funds they advise to undergo a financial statement audit at least annually and upon liquidation. The proposal would require the audited financial statements to be distributed to investors promptly after the completion of the audit. These audits would provide an important check on the adviser's valuation of private fund assets, which often serve as the basis for the calculation of the adviser's fees, and protect private fund investors against misappropriation of fund assets.

Adviser-Led Secondaries Rule

The proposal would require a registered private fund adviser to obtain a fairness opinion in connection with an adviser-led secondary transaction. In these transactions, advisers often offer existing fund investors the option to sell or exchange their interests in the private fund for interests in another vehicle advised by the adviser. An independent opinion provider would opine on the fairness of the price being offered to the private fund for any assets being sold as part of the transaction. The proposal also would require the adviser to prepare and distribute to the private fund investors a summary of any material business relationships the independent opinion provider has or has had within the past two years with the adviser or any of its related persons. This requirement would provide a check against an adviser's conflicts of interest in structuring and leading a transaction from which it may stand to profit at the expense of private fund investors.

Prohibited Activities Rule

The proposal would prohibit all private fund advisers from engaging in certain activities and practices that are contrary to the public interest and the protection of investors. These practices include:

- Charging certain fees and expenses to a private fund or its portfolio investments, such as fees for unperformed services (e.g., accelerated monitoring fees) and fees associated with an examination or investigation of the adviser;
- Seeking reimbursement, indemnification, exculpation, or limitation of its liability for certain activity;
- Reducing the amount of an adviser clawback by the amount of certain taxes;
- Charging fees or expenses related to a portfolio investment on a non-pro rata basis; and
- Borrowing or receiving an extension of credit from a private fund client.

Prohibiting these practices would address conflicts of interest that could reasonably lead to fraud and investor harm because they incentivize an adviser to place its interests ahead of the private fund's interests.

Preferential Treatment Rule

The proposal would prohibit all private fund advisers from providing preferential terms to certain investors regarding redemptions from the fund or information about portfolio holdings or exposures. It also would prohibit all private fund advisers from providing other preferential treatment unless disclosed to current and prospective investors. This proposal is designed to protect investors by prohibiting specific types of preferential treatment that have a material, negative effect on other investors.

Books and Records Rule Amendments

The proposal includes amendments to the books and records rule under the Advisers Act that require advisers to retain records related to the proposed rules. The amendments would facilitate the SEC's ability to assess an adviser's compliance with the proposed rules.

Compliance Rule Amendments

The proposal includes amendments to the compliance rule under the Advisers Act that require all registered advisers, including those that do not advise private funds, to document their annual review in writing.

Additional Information:

The public comment period will remain open for 60 days following publication of the proposing release on the SEC's website or 30 days following publication of the proposing release in the Federal Register, whichever period is longer.