

## **Notice of Public Meeting**

### The Board of Retirement

of the San Mateo County Employees' Retirement Association will meet on

### Tuesday, June 3, 2025, at 10:00 A.M.

PUBLIC SESSION - The Board will meet in Public Session at 10:00 a.m.

- 1. Call to Order, Roll Call and Miscellaneous Business
  - 1.1 Appointment by Chair of Ad Hoc Nominating Committee for Board Officers
- 2. Oral Communications
  - 2.1 Oral Communications from the Board
  - 2.2 Oral Communications from the Public

#### 3. Approval of the Minutes

3.1 Approval of Board Meeting Minutes from April 22, 2025

#### 4. Approval of the Consent Agenda\*

- 4.1 Disability Retirements (none)
- 4.2 Survivor Death Benefits
- 4.3 Service Retirements
- 4.4 Continuances
- 4.5 Deferred Retirements

- 4.6 Member Account Refunds
- 4.7 Member Account Rollovers
- 4.8 Member Account Redeposits
- 4.9 Acceptance of Trustees' Reports of Educational Activities

#### 5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda
- 5.2 Review of Funding Dashboard

#### 6. Investment Services

- 6.1 Report on Quarterly Investment Performance for the Period Ended March 31, 2025
- 6.2 Report on Preliminary Monthly Portfolio Performance for the Period Ended April 30, 2025
- 6.3 Report on Real Estate Manager Annual Reviews
- 6.4 Report on SamCERA's Risk Dashboard
- 6.5 Approval of Resolution Amending SamCERA's Investment Policy
- Approval of Proposed Alternative Investments (Confidential Under Gov. Codes §54956.81 and §7928.710, to be heard in Closed Session, C2)

#### 7. Board & Management Support

- 7.1 Approval of Budget
- 7.2 Presentation and Discussion of Disability Data and Statistics

#### 8. Management Reports

- 8.1 Chief Executive Officer's Report
- 8.2 Assistant Executive Officer's Reports
- 8.3 Chief Investment Officer's Report
- 8.4 Chief Legal Counsel's Report

# Notice of Public Meeting Page 2 of 2

**CLOSED SESSION** – The Board may meet in closed session prior to adjournment

- C1 Consideration of Disability Items, if any, removed from the Consent Agenda
- C2 Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code § 54956.81 and §7928.710, see item 6.7)
- C3 Threat to Public Services or Facilities (pursuant to pursuant to Gov. Code § 54957)
  Consultation with: Retirement Technology Officer Diane Webster

#### 9. Report on Actions Taken in Closed Session

#### 10. Adjournment in Memory of the Following Deceased Members:

April 6, 2025	<b>Human Services</b>
April 16, 2025	Sheriff's Office
April 16, 2025	Hospital
April 17, 2025	<b>Human Services</b>
April 19, 2025	Health Services
April 22, 2025	<b>Human Services</b>
April 23, 2025	Planning Commission
April 25, 2025	<b>Housing Division</b>
April 27, 2025	Social Services
April 25, 2025	<b>Human Services</b>
April 29, 2025	Public Works
May 12, 2025	Mental Health
May 16, 2025	Sheriff's Office
	April 16, 2025 April 16, 2025 April 17, 2025 April 19, 2025 April 22, 2025 April 23, 2025 April 25, 2025 April 27, 2025 April 25, 2025 April 29, 2025 May 12, 2025

Scott Hood, Chief Executive Officer

(\* ALL ITEMS ON THE CONSENT AGENDA ARE APPROVED BY ONE ROLL CALL MOTION UNLESS A REQUEST IS MADE BY A BOARD MEMBER THAT AN ITEM BE WITHDRAWN OR TRANSFERRED TO THE REGULAR AGENDA. ANY ITEM ON THE REGULAR AGENDA MAY BE TRANSFERRED TO THE CONSENT AGENDA. ANY 4.1 ITEMS REMOVED FROM THE CONSENT AGENDA WILL BE TAKEN UP UNDER CLOSED SESSION; ALL OTHER ITEMS REMOVED FROM THE CONSENT AGENDA WILL BE TAKEN UP UNDER ITEM 5.1.)

**THE BOARD MEETS AT 100 MARINE PARKWAY, SUITE 160**, WHICH IS LOCATED ON THE SE CORNER OF TWIN DOLPHIN & MARINE PARKWAY IN REDWOOD CITY. Detailed directions are available on the "Contact Us" page of the website <a href="www.samcera.org">www.samcera.org</a>. Free Parking is available in all lots in the vicinity of the building. A copy of the Board of Retirement's open session agenda packet is available for review at the SamCERA offices and on our website unless the writings are privileged or otherwise exempt from disclosure under the provisions of the California Public Records Act. Office hours are Monday through Thursday 7 a.m. – 6 p.m.

In compliance with the California Government Code and the Americans with Disabilities Act: SamCERA's facilities and board and committee meetings are accessible to individuals with disabilities. Contact SamCERA at (650) 599-1234 at least three business days prior to the meeting if (1) you need special assistance or a disability-related modification or accommodation, including auxiliary aids or services, in order to participate in this meeting; or (2) you have a disability and wish to receive the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting in an alternative format. Notification in advance of the meeting will enable SamCERA to make reasonable arrangements to ensure full accessibility to this meeting and the materials related to it.

Posted: May 28, 2025

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 1.1

**TO:** Board of Retirement

FROM: Scott Hood, Chief Executive Officer

**SUBJECT:** Appointment by Chair of Ad Hoc Nominating Committee for Board Officers

#### Recommendation

Accept the Chair's report on the appointment of an Ad Hoc Committee to nominate Board officers for the 2025-2026 fiscal year to be presented for election at the July meeting. The Chair appoints Katherine O'Malley, Kurt Hoefer and Robert Raw, Chair to the Ad Hoc Nominating Committee.

#### **Background**

In general, at or around the May meeting, the Chair appoints an Ad Hoc Committee to nominate Board officers for the next fiscal year. The election of Board officers takes place at the first meeting in July. Article 1 of the *Regulations of the Board of Retirement* provides for the election of three Board officers: Chair, Vice Chair and Secretary, as follows:

- **1.1. Election of Chair:** At the first regular meeting in July, the Board of Retirement shall elect one of its members chair for a term of one year or until his or her successor is duly elected and qualified. The Chair shall preside at all meetings of the Board, shall appoint all committees and shall perform all duties incidental to that office.
- **1.2. Election of Vice Chair:** At the first regular meeting in July, the Board of Retirement shall elect one of its members vice chair for a term of one year or until his or her successor is duly elected and qualified. In the Chair's absence or inability to act, the Vice Chair shall take the place and perform the duties of that office.
- **1.3. Election of Secretary:** At the first regular meeting in July, the Board of Retirement shall elect one of its members secretary for a term of one year or until his or her successor is duly elected and qualified. The Secretary shall attest to Resolutions and other such documents for the Board. In the Chair's and Vice Chair's absence or inability to act, the Secretary shall take the place and perform the duties of the Chair.

Board officers traditionally serve one-year terms. Also, by tradition, the Board attempts to alternate between appointed and elected trustees in each officer position. In general, the officers tend to move up "through the steps" to eventually become Chair. Exceptions have occurred when a trustee does not serve a full term or does not continue on the Board for an additional term. (See the table below.)

	<u>Chair</u>	Vice-Chair	<u>Secretary</u>
2001-02	Bill Cottle	Tom Bryan	Bette Stuart
2002-03	Tom Bryan	Donna Colson	Alma Salas
2003-04	Donna Colson	Alma Salas	Bette Stuart
2004-05	Alma Salas	Ken Lewis	Tom Bryan
2005-06	Ken Lewis	Tom Bryan	<b>Emily Tashman</b>
2006-07	Tom Bryan	<b>Emily Tashman</b>	Bette Stuart
2007-08	Tom Bryan	<b>Emily Tashman</b>	Jim Hooley
2008-09	Emily Tashman	David Wozniak	Sandie Arnott
2009-10	Margaret Jadallah	Al David	Sandie Arnott
2010-11*	Al David	Sandie Arnott	Natalie Kwan Lloyd
2011-12	Al David	Sandie Arnott	Natalie Kwan Lloyd
2012-13	Sandie Arnott	Natalie Kwan Lloyd	Lauryn Agnew
2013-14	Natalie Kwan Lloyd	Lauryn Agnew	Paul Hackleman
2014-15	Lauryn Agnew	Paul Hackleman	Michal Settles
2015-16	Paul Hackleman	Michael Settles	Natalie Kwan Lloyd
2016-17	Paul Hackleman	Mark Battey	Shirley Tourel
2017-18	Mark Battey	Shirley Tourel	David Spinello
2018-19	Sandie Arnott	Kurt Hoefer	Al David
2019-20	Kurt Hoefer	Al David	Robert Raw
2020-21	Al David	Robert Raw	Katherine O'Malley
2021-22	Robert Raw	Katherine O'Malley	Mark Battey
2022-23	Katherine O'Malley	Mark Battey	Alma Salas
2023-24	Mark Battey	Alma Salas	Elaine Orr
2024-25	Alma Salas	Kimathi Marangu	Sandie Arnott

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION APRIL 22, 2025 – REGULAR BOARD MEETING MINUTES

#### 2504.1.0 Call to Order, Roll Call and Miscellaneous Business

**Call to Order:** Alma Salas, Chair, called the Regular Meeting of the Board of Retirement to order at 10:00 a.m.

#### **Roll Call:**

Present: Sandie Arnott (arrived at 10:24 a.m.), Laurel Finnegan, Kurt Hoefer, Kimathi Marangu, Katherine O'Malley, Rachel Perkel, Robert Raw, and Alma Salas.

Absent: Nicole McKay and Elaine Orr.

Alternates: April DeCarsky.

Staff: Michael Coultrip, Lili Dames, Scott Hood, Jenny Lukan, Elizabeth LeNguyen, Doris Ng, Paul

Okada, and Gladys Smith.

Consultants and speakers: Joe Abdou (Verus); Craig Glyde (Milliman).

- 2504.2.1 **Oral Communications from the Board:** None.
- 2504.2.2 **Oral Communications from the Public:** None.
- 2504.2.3 **Announcement of Ad Hoc CEO succession Planning Committee:** Ms. Salas announced to the Board that the appointments to the Ad Hoc CEO Succession Planning Committee are as follows:
  - Sandie Arnott, Chair; Kurt Hoefer; Nicole McKay.

Ms. Perkel asked if the Board could receive updates on milestones met by the Committee and what the typical size for a committee is. Ms. Salas responded that there are 3-4 members per the charter.

2504.3.1 **Approval of Board Meeting Minutes from March 25, 2025:** Ms. Salas asked if there were any changes or corrections, or objections, to the minutes from the regular meeting held on March 25, 2025. There were no changes, corrections, or objections presented.

**Action:** Ms. O'Malley moved to approve the minutes from the March 25, 2025, regular Board meeting. The motion was seconded by Mr. Raw and carried with a vote of 7-0-0, with trustees Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.

2504.4.0 **Approval of the Consent Agenda:** Ms. Salas asked if there were any items to be removed for discussion from the Consent Agenda. Ms. Finnegan requested that Item 4.1 be removed for discussion in closed session.

Action: Mr. Hoefer moved to approve the remaining items on the Consent Agenda. The motion was seconded by Mr. Marangu and carried with a vote of 7-0-0, with trustees Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.

- 2504.4.1 **Disability Retirements:** Heard in closed session.
- 2504.4.2 Survivor Death Benefits: None.

#### 2504.4.3 **Service Retirements:**

Name	Effective Retirement Date	Department
Dohn, Linda	February 18, 2025	Def'd - San Mateo County Health
Friedman, Paul	February 27, 2025	Public Works
Gutierrez, Lupe	January 16, 2025	San Mateo County Health
Imperial, Carbelle	March 1, 2025	San Mateo County Libraries
James, Keith	February 26, 2025	Deferred - Sheriff's Office
Masterson, Andrea	March 1, 2025	San Mateo County Health
Menez, Blaise	March 1, 2025	Aging and Adult Services
O'Kelly, Christine	February 14, 2025	Behavioral Health
Richardson, Douglas	February 9, 2025	Sheriff's Office
Silva, Angel	December 23, 2024	Deferred - Public Works
Zalmai, Megan	March 1, 2025	Courts

#### 2504.4.4 **Continuances:**

Survivor's Name	Beneficiary of:
Marsh, Julia	Marsh, Jr, Robert
Schauer, Audrey	Schauer, Donald

#### **2504.4.5 Deferred Retirements:**

Name	Retirement Plan Type
Albin, Rebecca	S5, Vested - Reciprocity
Calderon, Yesska	G5, Vested - Reciprocity
DeSerpa, Jennifer	P5, Vested - Reciprocity
Henricks, Mason	G7, Non-Vested - Reciprocity
Herman, Kristin	G7, Vested
Liu, Yaner	G7, Non-Vested – Reciprocity
Morris, Peter	G5, Vested Auto Defer – Code 31700
Ramos, Jamie	G4, Vested Auto Defer – Code 31700
Sharma, Ravikash	G4/S4, Vested Auto Defer – Code 31700

#### 2504.4.6 **Member Account Refunds:**

Name	<b>Retirement Plan Type</b>
Arroliga Hernandez, Jocelyn	G7, Non-vested
Davis, Debra Marie	G4, Non-vested
Hernandez Ramirez, Christopher	G7, Vested
Moran, Brian	G7, Vested
Namini, Arianna	G7, Non-vested
Noor Eissa, Chris	S7, Non-vested
Pereira, Anthony	G7, Non-vested
Robles-Moncada, Hector (FBO:Robles-	G4, Vested
Moncada, Norma)	
Sapenter III, William B.	G7, Non-vested
Ueda, Stuart	G7, Non-vested
Wheeler, Regina	G7, Non-vested

#### 2504.4.7 Member Account Rollovers:

NameRetirement Plan TypeHo, Thuy ThanhG7, Non-vestedTang, LucyG7, Non-vested

- 2504.4.8 Member Account Redeposits: None.
- 2504.4.9 **Acceptance of Trustees' Reports of Education Activities:** The Board accepted the submitted report for educational activities attended by Ms. DeCarksy and Mr. Raw.
- 2504.4.10 **Report on Proxy Voting Summary for the Year Ended December 31, 2024:** The Board accepted the Proxy Summary Report for the year ended December 31, 2024.
- 2504.4.11 **Approval to Renew Fiduciary Liability Insurance:** The Board authorized the renewal of the fiduciary liability insurance coverage with RLI/Chubb Insurance Corporations through May 27, 2026.
- 2504.4.12 **Approval of Resolution Amending the Regulations of the Board of Retirement:** The Board approved a resolution amending Board Regulation 2.1 to provide that the incoming Board Chair consider the continuity of committees when appointing committee members.
- 2504.4.13 Approval of Resolution Authorizing Agreement with Financial Knowledge Network, LLC: The Board approved a resolution authorizing the Chief Executive Officer to enter into a new agreement with Financial Knowledge Network, LLC for member financial education services.
- 2504.5.1 Consideration of Agenda Items, if any, Removed from the Consent Agenda: Item 4.1.
- 2504.5.2 **Approval of Assumptions for the June 30, 2025 Valuation:** Mr. Glyde from Milliman, Inc. presented Milliman's April 2025 Presentation on Economic Assumptions for the 2025 Valuation to the Board. The Board discussed the recommendation.

Action: Mr. Hoefer moved to approve Milliman, Inc.'s recommendation that no changes be made to the existing assumptions. The motion was seconded by Mr. Marangu and carried with a vote of 8-0-0, with trustees Arnott, Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.

- 2504.6.1 Report on Preliminary Monthly Portfolio Performance for the Period Ended March 31, 2025: Mr. Coultrip reported that SamCERA's preliminary return for March was -1.1%, bringing the preliminary trailing twelve-month net return ending March to 6.6%. SamCERA's estimated market value as of March was \$6.86 billion, while the actuarial funded ratio as of June 30, 2024, was 87.6%. This item was informational and for discussion only, no action was taken.
- 2504.6.2 **Report on Currency Hedge Manager Annual Review:** Ms. Ng reviewed the meeting notes of the annual review of SamCERA's currency hedge manager, Record Currency Management Limited. The meeting took place on March 6<sup>th</sup> and included a firm/organizational update, investment process review, and performance review and attribution. The firm discussed the departure of its CIO this year and his replacement. This item was informational and for discussion only, no action was taken.
- 2504.6.3 **Report on Cash Overlay (Parametric) Annual Review:** Ms. Ng reviewed the meeting notes of the annual review of SamCERA's overlay manager, Parametric Portfolio Associates. The meeting took place on March 6<sup>th</sup> and included a firm/organizational update, investment process review, and

- performance review and attribution. There were no major concerns identified during the review. This item was informational and for discussion only, no action was taken.
- 2504.6.4 **Report on Custodian (Northern Trust) Annual Review:** Ms. Ng reviewed the meeting notes of the annual review of SamCERA's custodian bank, Northern Trust. The meeting took place on March 6<sup>th</sup> and included a firm/organizational update, global custody overview, and a service performance review. There were no major concerns identified during the review. This item was informational and for discussion only, no action was taken.
- 2504.6.5 **Report on SamCERA's Annual Portfolio Review:** Mr. Coultrip presented the SamCERA Annual Portfolio Review report for calendar year 2024. The review covered the following areas: Total Portfolio Absolute Performance, Total Portfolio Relative Performance, Composite Relative Performance, Total Fund Historical Performance and Risk, Two-Stage Portfolio Assessment, Investment Manager Dashboard, Summary of Rebalancing Activities. This item was informational and for discussion only, no action was taken.
- 2504.6.6 Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §7928.710, see item C2): This item was heard in Closed Session at 11:47 a.m. and Open Session was reconvened at 12:15 p.m. See Closed Session report under C2.
- 2504.7.1 **Approval of Resolution Amending Board Education Policy:** Mr. Hood reviewed the proposed revisions to the education policy. Ms. Salas called for a motion to approve the Resolution Amending Board Education Policy.
  - Action: Mr. Raw moved to approve the Resolution Amending Board Education Policy. The motion was seconded by Ms. O'Malley and carried with a vote of 8-0-0, with trustees Arnott, Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.
- 2504.7.2 **Approval of Resolution Amending Board Portable Electronic Device Policy:** Mr. Hood reviewed the proposed revisions to the portable electronic device policy. Ms. Salas called for a motion to approve the Resolution Amending Board Portable Electronic Device Policy.
  - Action: Mr. Hoefer moved to approve the Resolution Amending Board Portable Electronic Device Policy. The motion was seconded by Ms. Finnegan and carried with a vote of 8-0-0, with trustees Arnott, Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.
- 2504.7.3 Approval of Amendments to the American Express Corporate Services Resolution: Mr. Hood reviewed the proposed amendments to the American Express Corporate Services Resolution. Ms. Salas called for a motion to approve the Amendment of American Express Corporate Services Credit Card Resolution.
  - Action: Ms. Perkel moved to approve the Amendment of American Express Corporate Services Credit Card Resolution. The motion was seconded by Ms. Arnott and carried with a vote of 8-0-0, with trustees Arnott, Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.
- 2504.7.4 **Discussion of Proposed California Legislation, AB 1439 & AB 1383:** Mr. Hood reviewed draft legislation pending before the California State Assembly. This item was informational and for discussion only, no action was taken.

2504.7.5 Selection of and Direction for SamCERA Voting Delegates at the SACRS Spring Business Meeting:
Mr. Hood discussed staff's recommendation to designate Alma Salas, Board Trustee, as the Voting
Delegate and himself, as the Alternate Voting Delegate to cast SamCERA's votes at the SACRS
business meeting on May 16, 2025. Ms. Salas called for a motion to approve staff's recommendation
to designate Alma Salas, Board Trustee, as the Voting Delegate and Scott Hood, CEO, as the Alternate
Voting Delegate to cast SamCERA's votes at the SACRS business meeting on May 16, 2025.

Action: Mr. Hoefer moved to approve staff's recommendation to designate Alma Salas, Board Trustee, as the Voting Delegate and Scott Hood, CEO, as the Alternate Voting Delegate to cast SamCERA's votes at the SACRS business meeting on May 16, 2025. The motion was seconded by Ms. O'Malley and carried with a vote of 8-0-0, with trustees Arnott, Finnegan, Hoefer, Marangu, O'Malley, Perkel, Raw, and Salas all in favor; none opposed; none abstained.

- 2504.8.1 Chief Executive Officer's Report: Mr. Hood congratulated Tat-Ling Chow and her extended team including Chezelle Milan, Doris Ng, Lili Dames, Hollie Song-Duell, Charlyn He, Susan Fong, Mike Coultrip, Natasha Jeong, and Gladys Smith on their Certificate of Achievement for Excellence in Financial Reporting from GFOA, for the 28<sup>th</sup> year in a row. Mr. Hood reminded the Board about SACRS Spring Conference taking place May 13<sup>th</sup> through May 16<sup>th</sup>. Mr. Hood also congratulated Doris Ng and Lizbeth Valdez on 10 years with the County. Mr. Hood reported that at next month's regular meeting (June 3<sup>rd</sup>) agenda items will include the liability dashboard, appointment of the ad hoc nominating committee, and disability statistics. Lastly, Mr. Hood reported that he will be updating the SamCERA history presentation that shows data elements and how they've changed over time and will bring it to the Board.
- 2504.8.2 **Assistant Executive Officer's Report:** Ms. Smith reported to the Board that the filing period for the election for the Retiree and Alternate Retiree seats closes on Monday, April 28<sup>th</sup>. Ms. Smith reported to the Board that staff is very close to implementing multi-factor authentication and hoping it will be fully implemented by the June Regular Board Meeting. Ms. Smith also reported to the Board that the Request for Proposal (RFP) for a Project Manager for the new pension system has been released and now staff is waiting for all the proposals to come in. Ms. Smith reported to the Board that Sandie Arnott is being recognized by the Board of Supervisors on May 20<sup>th</sup> for her excellent work as Treasurer for the County. Ms. Smith also reported to the Board that Natasha Jeong has had some losses in her family and extended condolences. Lastly, Ms. Smith recognized Jenny Lukan for Administrative Professionals Day.

Ms. Lukan reminded the Board about the amount due for the non-recourse fiduciary liability insurance and about the Ethics Certificates that need to be signed and returned to her. Ms. Lukan reported that she received the hotel information for IFEBP. Ms. Lukan reported on upcoming education opportunities including SACRS Spring Conference in Rancho Mirage in May, IFEBP Washington Legislative Update in Washington, DC in May, NCPERS Annual Conference with NAF and TEDS pre-conferences in Denver in May, and CALAPRS Trustees Round Table, which is virtual in May, IFEBP Institutes in Nashville in June, SACRS/UC Berkeley in July, and NCPERS Public Pension Forum at the University of Chicago in August. She will send an email with all the information mentioned.

2504.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported to the Board that staff is scheduled to release the Investment Consultant RFP in mid-May, and they are working on updating the document from the last time. The schedule for the RFP to receive proposals back by June 30<sup>th</sup>, first screening of proposals in early August, on-site visits the rest of the year, finalist presentations and selection in December, and contract negotiations in January and February. Mr. Coultrip reported to the Board that due to the volatility of the market, the initial plan for the Panagora Low Volatility Strategy of selling half the exposure at the end of March and the remainder at the end of June did not happen and is being held for other opportunities. Lastly, Mr. Coultrip reported to the Board that real estate

manager reviews are scheduled for Thursday, May  $1^{st}$  with INVESCO Core at 8 am, and Stockbridge at 10:00 am. The following week core equity manager reviews are scheduled for May  $8^{th}$  with PGIM Quantitative LLC at 9:30 am and BlackRock at 11:00 am. Ms. Ng will send the invitations.

2504.8.4 **Chief Legal Counsel's Report:** Mr. Okada reported to the Board that ahead of the June Regular Meeting, Ms. Lukan will be sending out the update of educational hours. The final report will be posted at the end of the fiscal year.

Ms. Salas reported to the Board that she will not be in attendance at the June Regular Meeting.

C1 Consideration of Disability Items, if any, removed from the Consent Agenda: Item 4.1

The Board met in Closed Session at 10:07 a.m. regarding the service-connected disability retirement application of Jean-Pierre Martinez de Vargas. Neither the member nor the member's counsel was present.

Board members discussed staff's recommendation and inquired as to the Board's potential actions. Following discussion, there was a motion and a second to refer this matter to a hearing officer for proposed findings and recommendations. The motion was approved by a vote of 5-2-0:

Ayes: Finnegan, Marangu (Vice Chair), O'Malley, Raw, and Salas (Chair)

Nos: Hoefer, Perkel

Abstain: None

Absent: Arnott (Secretary), Orr

Motion carried 5-2-0

There were no other disability retirement matters heard in Closed Session and the Board reconvened to Open Session at 10:14 a.m.

C2 Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §7928.710, see item C2):

The Board entered Closed Session at 11:47 a.m. for the approval of proposed alternative investments:

Regarding a commitment to Diameter Dislocation Fund III, as part of SamCERA's opportunistic credit portfolio within the Growth category, staff recommended a \$20 million increase in its initial \$40 million proposed commitment for a total commitment of \$60 million. Regarding such recommendation, there was a motion by Marangu and a second by Perkel to approve such \$60 million commitment:

Ayes: Arnott (Secretary), Finnegan, Hoefer, Marangu (Vice Chair), O'Malley, Perkel,

Raw, and Salas (Chair)

Nos: None
Abstain: None
Absent: Orr
Motion carried 8-0-0

No other matters were heard in Closed Session and the Board exited Closed Session at 12:15 p.m.

2504.9.0 **Reports on Actions Taken in Closed Session:** Mr. Okada reported on Items C1 and C2 above. There were no additional closed session items.

2504.10 **Adjournment:** Ms. Salas adjourned the meeting at 12:42 p.m. in memory of Natasha Jeong's family members and the deceased members listed below.

Oryall, Robert	January 31, 2025	Crystal Springs Rehab
Wilkinson, Robert	March 1, 2025	Social Services
Kurzuk-Howard, Gladys	March 10, 2025	Hospital
Miller, Francene	March 15, 2025	Controller's Office
Teixeira, Elaine	March 17, 2025	Public Works
Tye, Philip	March 25, 2025	Probation
Alvarado, Francisco	March 26, 2025	Human Services
Bagneschi, John	March 27, 2025	General Services
Abbeduto, James	March 28, 2025	Aging & Adult Services
Sisler, Nancy	March 29, 2025	Chope Hospital
Tanaka, Toshiko	March 31, 2025	District Attorney's Office

Alma R. Salas Board Chair

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Items 4.1- 4.9

**TO:** Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager

**SUBJECT:** Approval of Consent Agenda Items 4.1 – 4.9

#### **4.1 Disability Retirements**

None.

#### **4.2 Survivor Death Benefits**

None.

#### **4.3 Service Retirements**

The Board ratifies the service retirement for the individuals listed below as follows:

Name	Effective Retirement Date	Department
Alvarado, Walter	April 1, 2025	Courts
Alvidrez, Yvonne	March 28, 2025	Human Resources
Aram, Sanam	March 29, 2025	Probation
Bagis, John	March 29, 2025	Sheriff's Office
Beaman, Marsha	March 29, 2025	Human Services Agency
Bettis, Mark	March 5, 2025	Parks Department
Bloede, Carolyn	March 29, 2025	Office of Sustainability
Cancio, Edward	March 29, 2025	Information Services Department
Castillo, Maria R	March 29, 2025	Probation
Chang, Yueh Chuan	March 29, 2025	San Mateo County Health
Chow, Mark	April 1, 2025	Public Works
Cracchiolo, Angelo	March 29, 2025	San Mateo County Health
D'Amato, Nina	April 30, 2025	Deferred - Courts
De La Cerda, Monica	September 25, 2023 (RDA)	Def'd – District Attorney's Office
De La Cerda, Victor	March 28, 2025	Sheriff's Office
DiDonato, Damon	April 11, 2025	Deferred – Planning and Building

Dieli, Martha	April 11, 2025	San Mateo County Health
Emil, Darrick	April 1, 2025	Parks Department
Enright, Michael	October 2, 2024	Deferred- Public Works
Ereno, Maria	March 22, 2025	San Mateo County Health
Finau, Unaloto	March 29, 2025	Courts
Fong, Douglas	March 29, 2025	Mental Health
Foronda, Leslie	March 29, 2025	District Attorney's Office
Franks, Edith	March 28, 2025	Deferred - Social Services
Fuentes, Virginia	March 29, 2025	San Mateo County Health
Gaitan, Victor	March 4, 2025	Correctional Health
Garcia, Victor	February 3, 2025	Def'd - San Mateo County Health
Geltmaker, Matthew	April 1, 2025	Public Health
Gilmore, Meg	April 1, 2025	San Mateo County Health
Goldsby, Stacy	March 31, 2025	Deferred - Public Health
Grady, Elizabeth	March 29, 2025	San Mateo County Health
Grogan, Michael	March 7, 2025	Sheriff's Office
Guerrero, Juan C	March 22, 2025	Public Works
Gutierrez, Marilyn	March 22, 2025	Courts
Howard, Larry	March 11, 2025	Sheriff's Office
Jacobs, Rachel	March 29, 2025	Probation
Jacuinde, Ana Rosa	March 29, 2025	Probation
Jones, Sharon Y	March 29, 2025	Public Health
Kot, Ricky	March 29, 2025	Aging and Adult Services
Kubinski, Raquel	April 12, 2025	Correctional Health
Lakisic, Berhaudin	March 22, 2025	San Mateo County Health
Lal, Suresh	April 21, 2025	Def'd - County Attorney's Office
Larsen, Stacy	March 28, 2025	Human Services Agency
Lee, Edward	April 1, 2025	Deferred - Mental Health
Lee, Sandra KW	March 29, 2025	San Mateo County Libraries
Leong, Katherine	March 27, 2025	Human Resources
Levas, Joseph	March 30, 2025	Sheriff's Office
Macario, Marilou	March 29, 2025	Human Services Agency

Macias-Rodriguez, Luz	March 29, 2025	Family Health
Marta, Felipe	March 29, 2025	Human Services Agency
Martinez, Sonia	March 29, 2025	Probation
Masic, Mirsad	April 1, 2025	Def'd - San Mateo County Health
Masinsin, Josephine	March 29, 2025	San Mateo County Health
McClure, Mary	March 29, 2025	Human Services Agency
McMillan-Rea, Karina	April 1, 2025	Deferred - Courts
Merz, Jeffrey	April 15, 2025	Deferred – Planning and Building
Nolan, Valerie	March 29, 2025	Mental Health
Obolnikov, Marina	March 4, 2025	Mental Health
O'Brien, Theresa	March 10, 2025	Deferred - Courts
O'Connell, James	March 29, 2025	Public Health
Ochoa, Maria Elena	May 1, 2025	Aging & Adult Services
Outman, Jennifer	April 1, 2025	Public Safety
Perez, Lupita	March 29, 2025	Probation
Perras, Mpho	April 7, 2025	Deferred - Probation
Poltun, Raisa	March 29, 2025	San Mateo County Health
Pomeroy, Debra	March 29, 2025	Human Services Agency
Reece, Rogelio	April 1, 2025	Sheriff's Office
Rey, Janet	March 15, 2025	Courts
Richwood, Wallace	April 1, 2025	Probation
Rivera, Krissandra	March 28, 2025	Family Health
Rodriguez, Jesse V	March 29, 2025	Human Services Agency
Rodriguez Resendiz, Pilar	April 14, 2025	Deferred - Mental Health
Rogers, Louise	March 29, 2025	San Mateo County Health
Rouan, Elizabeth	March 29, 2025	Environmental Health
Sandoval, Octavio	April 1, 2025	Deferred - Probation
Savadkohi, Shawn	March 28, 2025	Def'd - San Mateo County Health
Sheridan, Joseph	March 29, 2025	Sheriff's Office
Smith, Gregory	March 30, 2025	Environmental Health
Soubirous, Ana	April 24, 2025	Deferred - Public Works
Spinello, David	March 30, 2025	Sheriff's Office
·	1	•

Springer, Kim	March 29, 2025	Public Works
Talakai, Epulenea (Melieni)	March 29, 2025	Public Health
Tom, Roger	March 29, 2025	Public Works
Torres, Lenora	March 29, 2025	Family Health
Vaughn, Geraldine	March 29, 2025	San Mateo County Health
Verber, David	March 28, 2025	Sheriff's Office
Verdan, Maria	March 28, 2025	Information Services Department
Viereck, Alexander	April 9, 2025	Public Works
Walter-Rosas, Deborah	April 10, 2025	County Attorney's Office
Wong, Eliza	March 22, 2025	Courts
Yapching, Mercedes	March 29, 2025	Controller's Office
Yelich, Scott	March 30, 2025	Public Works

#### 4.4 Continuances

The Board ratifies the granting of a continuance to the following individuals:

Survivor's Name	Beneficiary of:
Apple, Tracy	Reubens, Jennifer
Alvarado, Mary M	Alvarado, Francisco X
Bagneschi, Julie	Bagneschi, John
Butts, John	Abbeduto, James
Chang, Clara	Chang, Paul
Fretty, Clement	Fretty, Roberta
Silva, Julieta	Silva, Charles
Stevens, Irene	Gallegos, Cooper
Sutter, Karen	Sutter, Henry
Vargas, Janie	Vargas, Thomas

#### **4.5 Deferred Retirements**

The Board ratifies the deferred retirements as listed below for the following individuals:

Name	Retirement Plan Type
Barton, Jenna	G5, Vested Auto Defer – Code 31700
Bastain, Geary	S5, Vested Auto Defer – Code 31700
Businger, Gregory	S4, Vested Auto Defer – Code 31700

Creed, Heather	G7, Vested - Reciprocity	
De Leon, Angela	G4, Vested Auto Defer – Code 31700	
Erickson, Alice	G7, Vested Auto Defer – Code 31700	
Escobedo, Ramses	G5, Vested Auto Defer – Code 31700	
Fwu, Wan	G5, Vested - Reciprocity	
Ge, Sizhi	G7, Non-Vested - Reciprocity	
Hannen, Monica	G7, Non-Vested - Reciprocity	
Koshi-Lum, Jessica	G7, Non-Vested - Reciprocity	
Lainez, Yazmin	G7, Vested Auto Defer – Code 31700	
Mulvihill, Bradley	S7, Vested	
Ochoa, Sierra, Jose	G7, Vested Auto Defer – Code 31700	
Plaut, Zachary	G4, Vested Auto Defer – Code 31700	
Rawley, Joshua	G7, Vested	
Reis, Thomas	G7, Non-Vested - Reciprocity	
Rios, Luis	S5, Vested Auto Defer – Code 31700	
Rodriguez, Rosendo	G4, Non - Vested - Reciprocity	
Torres, Jolene	G7, Non-Vested - Reciprocity	

#### **4.6 Member Account Refunds**

The Board ratifies the refunds as listed below for the following individuals:

Name	Retirement Plan Type
Alfaro, Natasha P.	G7, Non-vested
Bell, Cloud	G7, Non-vested
Bongato, Jean	G4, Non-vested
Bravo, Stephanie	G7, Non-vested
Butler, Kenisha	G7, Non-vested
Cabalona, Raymund	G7, Non-vested
Cedeno, Martin	G7, Non-vested
Chavez, Esperanza	G2, Vested
Davis, Heather	G7, Non-vested
Davis, Timothy	P7, Vested
Edgerton, Jeffrey	G7, Non-vested

Ference-Luongo, Debra	G1, Vested
Horace, Matilda	G7, Non-vested
Leung, Wing-Wah	G5, Non-vested
Montanez, Kimberly	G7, Non-vested
Murray, Ana	G7, Non-vested
Quijada, Jocelyn	G7, Non-vested
Rahmati, Mamoon	S7, Non-vested
Stoltenberg, Stephanie	G7, Non-vested
Zandate, Marisol	G7, Non-vested

#### **4.7 Member Account Rollovers**

The Board ratifies the rollovers as listed below for the following individuals:

Name	Retirement Plan Type	
Chen, Anny	G7, Non-vested	
Nagy, Christopher	S7, Non-vested	
Nammar, Jeneen	G7, Non-vested	

#### **4.8 Member Account Redeposits**

Name	Retirement Plan Type
Dahlberg, Christina	G7

#### 4.9 Acceptance of Trustees' Reports of Educational Activities

See attached.

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 4.9

**TO:** Board of Retirement

FROM: Jenny Lukan, Retirement Executive Secretary

**SUBJECT:** Trustees' Reports of Educational Activities

#### Recommendation

Accept the following report from Board of Retirement trustees who have recently attended educational events.

#### Background

SamCERA's Education Policy Section 1D states "Prior to the next regularly scheduled meeting of the Board following the Board member's participation in an educational activity, the Board member shall submit for inclusion on the Consent Agenda, a summary written report on the content of educational activities. The report shall substantially reflect the information contained in the attached sample report."

#### Discussion

Laurel Finnegan and Kimathi Marangu attended the following educational event and their reports are attached:

• IFEBP Investments Institute, April 30 – May 1, 2025

Elaine Orr attended the following educational event and her report is attached:

Milken Institute Global Conference, May 4 – May 7, 2025

Laurel Finnegan, Rachel Perkel, and Alma Salas attended the following educational event and their reports are attached:

SACRS Spring Conference, May 13 – May 16, 2025

Kimathi Marangu attended the following educational event and his report is attached:

NCPERS, NAF Program Modules 1&2, May 17 – May 18, 2025

Katherine O'Malley attended the following educational event and her report is attached:

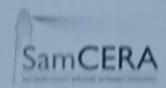
NCPERS, NAF Program Modules 3&4, May 17 – May 18, 2025

#### **Attachments**

Trustees' Education Proof of Participation Certificate and Summary



Trustee Name		Date(s) of Event		
Laurel Finnegan		4/29/25-5/2/25		
Education Event Name				
Investments Institute				
Event Provider				
IFEBP				
Type of Participation:	Eligible Credit:			
Attended Event ☑		you participated in: 10.25		
Listened to Audio/Watched Video □	1	if the provider issues an education		
	certificate that reflects o	different hours.)		
This event satisfies the following required Government Code section 31522.8:	ments of the Board of Ret	irement's Education Policy and		
Topic: (Check all that apply)				
☐ Fiduciary responsibilities	☐ Disability e	<i>v</i> aluation		
☐ Ethics	☐ Fair hearing	gs		
$\square$ Benefits administration	☐ Pension fur	nd governance		
☐ Actuarial matters	☐ New board	member orientation		
☐ Pension funding	☐ Pension funding ☐ Other:			
$ ot\!$	ment			
program management				
Summary Report				
What concepts or information did you least strong portfolios through assest managemen		red income investments, opportunities in	n Public Equity,	
Al and potential impacts on the market, privat	te equity and private credit in	vestments.		
Would you recommend this event to oth	er trustees?			
Í Yes □ No □ Maybe				
You may provide additional comments to SamCERA's CEO.				
By signing below, I certify that I participa claim the indicated amount of education		bed above and am entitled to		
Trustee Signature (print this form and sign)  Date			$\neg$	
Laurel Finnegan 5/6/25				
		, . ,		



Trustee Name		Date(s) of Event
KIMATHI MARANGU		ARGL 30-MAYL, 2025
Education Event Name		
INVESTMENTS	INSTITUTE	
Event Provider		
INTERNATIONA	2 FOUNDATION	4
Type of Participation:	Eligible Credit:	8
Attended Event. ★ Listened to Audio/Watched Video □	Total hours for sessions you p	provider issues an education
elateried to Addicy Wateried Video Es	certificate that reflects differe	
This event satisfies the following require Government Code section 31522.8:	ements of the Board of Retireme	nt's Education Policy and
Topic: (Check all that apply)  X Fiduciary responsibilities	☐ Disability evaluat	ion
□ Ethics	☐ Fair hearings	
Renefits administration	Pension fund gov	
XActuarial matters	□ New board memi	
Pension funding		macro economits
Pension fund investments and invest program management	tillette	
Summary Report		
What concepts or information did you le ECONOMIC UPDATE DIVE FIXED INCOME, PERME ECONO VE VALUE, PRIMATE ECONO	earn about? CRSIFICATION, LIQUIDI	TY MANAGEMENT
FIXED INCOME, PEAL ESTA	TE, INTERNATIONAL E	QUITES, GROWTH
VE VALUE, PRIVATE EQUI	TY AND PRIVATE C	REDIT OPPORTUNITES
Would you recommend this event to oth	er trustees?	
Xves 🗆 No	☐ Maybe	
You may provide additional comments to	SamCERA's CEO.	
By signing below, I certify that I participa claim the indicated amount of education	ted in the activities described ab credit hour(s).	ove and am entitled to
Trustee Signature (print this form and si	(gn) Date	-11/10000
Ely.	0	5/6/2025
NOTE: Please return this completed form Board packet, so it can be included in tha	to SamCERA's Executive Secreta	



Trustee Name		Date(s) of Event	
Elaine ov		may 4-7 2005	
Education Event Name			
	to Bullion a Ca	Ce 10 ace	
micken Institute Grobal Conference			
Event Provider  Miller Ihshh	ite		
Type of Participation:	Eligible Credit:		
Attended Event	Total hours for sessions you	participated in: 11	
Listened to Audio/Watched Video □	(Staff may adjust hours if th	ne provider issues an education	
	certificate that reflects diffe	erent hours.)	
This event satisfies the following requirements of the Board of Retirement's Education Policy and Government Code section 31522.8:  Topic: (Check all that apply)    Fiduciary responsibilities			
Summary Report			
What concepts or information did you le Public and provate Nigher education - Impact to VC/PE AI - etnics, perace	markets - fir	esony, who will lead?	
Would you recommend this event to other trustees?			
Maybe □ No □ Maybe			
You may provide additional comments to	SamCERA's CEO.		
By signing below, I certify that I participal claim the indicated amount of education		above and am entitled to	
Trustee Signature (print this form and s	ign) Dat		
5000	(A	10412. 2025	



Trustee Name		Date(s) of Event		
Laurel Finnegan		5/13/25 - 5/16/25		
Education Event Name				
State Association of County Retire	State Association of County Retirement Systems (SACRS) Spring Conference			
Event Provider		orte, epinig comercine		
SACRS				
Type of Participation:				
Attended Event ☑	_	s you participated in: 12 hours 15 minute		
Listened to Audio/Watched Video □	(Staff may adjust hours	s if the provider issues an education		
	certificate that reflects	different hours.)		
This event satisfies the following requirer Government Code section 31522.8: <b>Topic:</b> (Check all that apply)	ments of the Board of Re	tirement's Education Policy and		
☑ Fiduciary responsibilities	☐ Disability (	evaluation		
☐ Ethics				
☐ Benefits administration	☑ Pension fu	und governance		
☑ Actuarial matters				
☑ Pension funding	☐ Other:			
$ ot\!$	ment			
program management				
Summary Report				
What concepts or information did you lea	arn about?			
Investment opportunities in Ag, BitCoin, weight				
current geopolitical impacts, foreign investme		a), corporate governance		
litigation, legislative updates that could impact retirement systems.				
Would you recommend this event to other	er trustees?			
☑ Yes ☐ No ☐ Maybe				
You may provide additional comments to SamCERA's CEO.				
By signing below, I certify that I participated in the activities described above and am entitled to claim the indicated amount of education credit hour(s).				
Trustee Signature (print this form and sign)  Date				
		5/19/25		
Laurel Finnegan		0/11/20		



Trustee Name		Date(s) of Event	
RachelPerkel		5/14-5/16/2025	
Education Event Name	·		
SACRS Sprin	a Conference		
Event Provider			
SACRS	•		
Type of Participation:	Eligible Credit:	0	
Attended Event (9	Total hours for sessions yo	51/15	
Listened to Audio/Watched Video □	(Staff may adjust hours if certificate that reflects dif	the provider issues an education ferent hours.)	
This event satisfies the following require	ements of the Board of Retire	ement's Education Policy and	
Government Code section 31522.8:			
Topic: (Check all that apply)			
Fiduciary responsibilities	☐ Disability eva	luation	
☐ Ethics	☐ Fair hearings		
☐ Benefits administration	☐ Pension fund	governance	
☐ Actuarial matters	☐ New board m	ember orientation	
Pension funding	□ Other:		
Pension fund investments and inves	tment		
program management			
Summary Report			
What concepts or information did you le	earn about?		
Good governance best F		20	
investment Iglopee po			
Farming bitcom in	romation		
Achaniae informati	ion on SACRS pla	uns us others outside cr	
Would you recommend this event to ot	her trustees?		
☐ Yes ☐ No	☐ Maybe		
You may provide additional comments t	o SamCERA's CEO.		
By signing below, I certify that I particip claim the indicated amount of education		ed above and am entitled to	
Trustee Signature (print this-form and	sign) Da	ate ,	
Racleal k- (Sitel		5/19/2025	



Trustee Name		Date(s) of Event
Alma Salas		05/14:2026
Education Event Name		
SACRS SPRING CONFERENCE		
Event Provider		
SACRS		
Type of Participation:	Eligible Credit:	
Attended Event I	Total hours for sessions	you participated in: 14
Listened to Audio/Watched Video □	(Staff may adjust hours certificate that reflects	if the provider issues an education different hours.)
This event satisfies the following requirer Government Code section 31522.8:  Topic: (Check all that apply)	ments of the Board of Ret	tirement's Education Policy and
☐ Fiduciary responsibilities	📮 Disability e	evaluation
☐ Ethics	☐ Fair hearin	
☐ Benefits administration	🗔 Pension fu	nd governance
□ Actuarial matters □ New board member orientation		member orientation
☐ Pension funding ☐ Other:		
☐ Pension fund investments and investment		
program management		
Summary Report		
What concepts or information did you learn about?		
Legislative update, bitcoin, sound money, and institutional adoption, Systematic risk. Operation benefit breakouts. Geopolitics and international finance. A holistic view on investing in Asia and how Asia impacts earnings around the globe. Corporate governance legislation a fiduciary framework. Public pension plan, health check, suckers versus the nation, disability training beyond the application, the human experience of disability retirement.		
Would you recommend this event to other	er trustées?	
□ Yes □ No □ Maybe		
You may provide additional comments to SamCERA's CEO.		
By signing below, I certify that I participated in the activities described above and am entitled to claim the indicated amount of education credit hour(s).		
Trustee Signature (print this form and si	ign)	Date
Alma Ri- Jalan		5/19/25
JA11111 1) [/41 04		



Trustee Name	Date(s) of Event					
Kimathi Marangu	May17-18 2025					
Education Event Name						
NCPERS Accredited Fiduciary NAF Program						
Event Provider						
NCPERS University						
Type of Participation:	Eligible Credit:					
Attended Event 🗹	Total hours for sessions you participated in:					
Listened to Audio/Watched Video □	(Staff may adjust hours if the provider issues an education certificate that reflects different hours.)					
This event satisfies the following requirements of the Board of Retirement's Education Policy and Government Code section 31522.8:  Topic: (Check all that apply)  If Fiduciary responsibilities  If Fair hearings  If Benefits administration  If Pension fund governance  If New board member orientation  If Pension funding  If Pension fund investments and investment program management  Summary Report  What concepts or information did you learn about?						
Board Governance, Role of the Board, Board Performance, Investment Approach and ESG Considerations,  External Advisors, Financial Reporting and Disclosure, Alternative Investing						
Would you recommend this event to other	er trustees?					
☑ Yes □ No	☐ Maybe					
You may provide additional comments to SamCERA's CEO.						
By signing below, I certify that I participated in the activities described above and am entitled to claim the indicated amount of education credit hour(s).						
Trustee Signature (print this form and sign)		Date				
Kimathi Marangu		5/21/2025				



Trustee Name		Date(s) of Event				
Katherine OMalley		May 17-18, 2025				
Education Event Name						
NAF Modules 3&4						
Event Provider						
NCPERS						
Type of Participation:	Eligible Credit:					
Attended Event ☑	Total hours for sessions you participated in: 13					
Listened to Audio/Watched Video □	(Staff may adjust hours if the provider issues an education certificate that reflects different hours.)					
This event satisfies the following requirer	ments of the Board of Retiren	nent's Education Policy and				
Government Code section 31522.8:						
Topic: (Check all that apply)						
☑ Fiduciary responsibilities	☐ Disability evalu	evaluation				
☐ Ethics ☐ Fair hearings						
$\square$ Benefits administration $\square$ Pension fund governance						
☐ Actuarial matters	☐ New board me	mber orientation				
☑ Pension funding	☐ Other:					
☑ Pension fund investments and investr	ment					
program management						
Summary Report						
What concepts or information did you learn about? Risk Management - Audit priorities, Effective Communication						
Human Capital - Succession Planning, Emplo	yment contracts & Compensation	1,				
Alternative Pension Management Models.						
Would you recommend this event to other	er trustees?					
☑ Yes □ No	□ Maybe					
You may provide additional comments to SamCERA's CEO.						
By signing below, I certify that I participated in the activities described above and am entitled to						
claim the indicated amount of education credit hour(s).						
Trustee Signature (print this form and signature)	gn) Dat	e				
Katheure OMallers		05/21/2025				
	Y					

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 5.2

**TO:** Board of Retirement

**FROM:** Scott Hood, Chief Executive Officer

**SUBJECT:** Report on Quarterly Funding Progress for the Period Ended March 31, 2025

#### Recommendation

Accept the quarterly funding update report for the period ended March 31, 2025.

#### Discussion

Milliman Inc. developed a funding dashboard by which two data points could be projected for the coming fiscal year based on the fund's assumptions, investment performance and certain economic and demographic data for the period measured. The two data points that can be projected are the funded ratio and the employer contribution rate. Subsequent to the initial dashboard, Milliman added the ability to project out for the next nine years for the same data points.

Attached is the FY 2024-25 Q3 dashboard showing the projected funded status and employer contribution rate utilizing current data and assuming all assumptions are met for the remainder of the fiscal year. The second page shows a ten-year projection utilizing the same data.

After the first three quarters, the funded status is projected to remain essentially the same as projected in the recent valuation. Q3 shows an improvement over Q2, which is due largely to the portfolio's positive return during Q3. The positive return also shortens the projection of when the fund is expected to reach 100% funded by another year over the last quarter to 2034. This is two years sooner than projected at the recent valuation. The aggregate employer contribution rate is projected to increase slightly (.1%) due to a larger than expected number of active employees on the payroll. The factor that impacts the funding ratio the most is the deferred investment losses.

Below the graphs are charts of the factors that impact each of the data points and the amount each factor has on the projection.

Also attached are select peer comparison slides derived from a presentation by Cheiron at the SACRS Spring Conference.

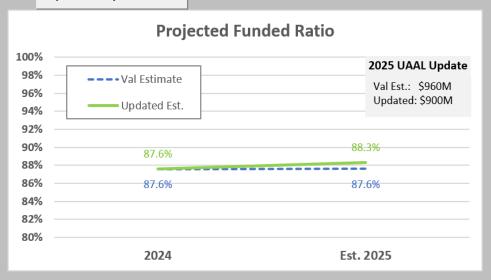
#### **Attachments**

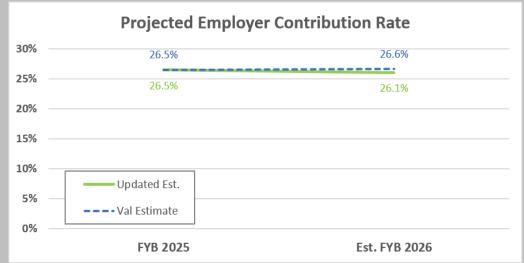
Q3 2025 Funding Dashboard Peer Comparison Slides

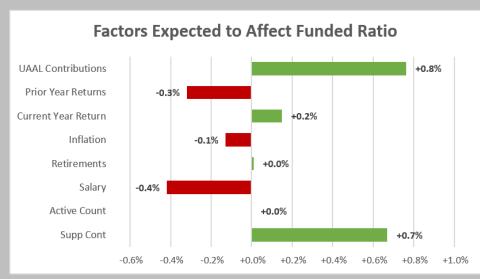
# SamCERA Funding Dashboard

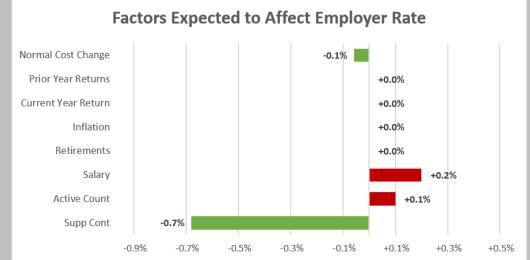
**Update Graph Formats** 

SamCERA Projected Funding for June 30, 2025 Valuation (based on Information as of March 31, 2025)









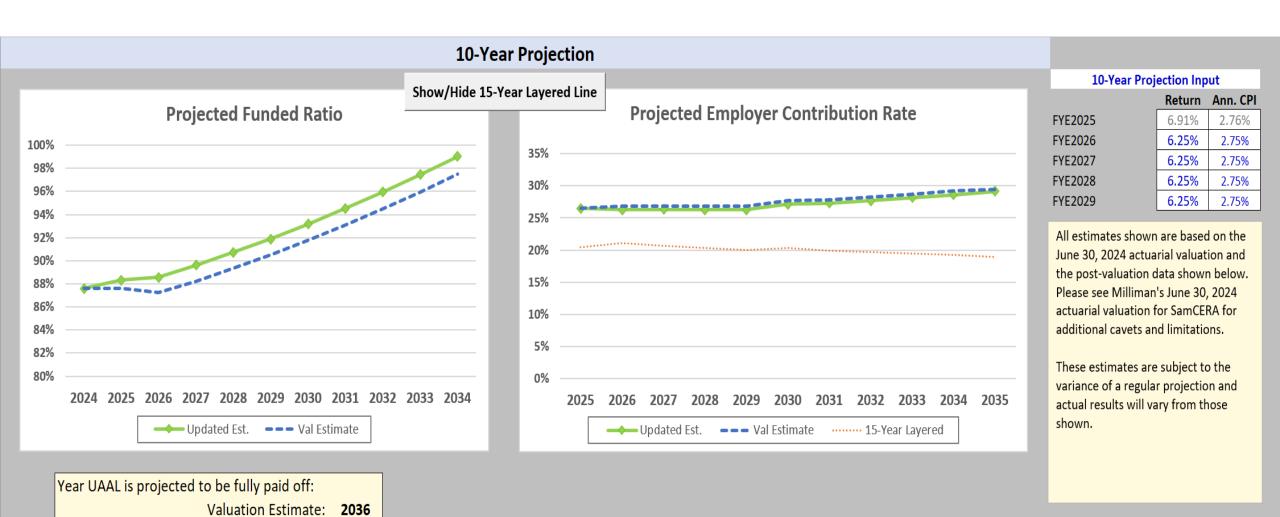
Estimates are subject to the variance of a regular projection; actual results will vary from those shown. Store Results **Hide / Show Prior** Input **Completed Quarter** 3/31 Est. Return FYTD 5.30% 4.00% Est. Return (1st Half) Service Retirements to Date 197 5,657 **Active Member Count** CPI 2024 Oct Dec Aug Annual 349.29 349.37 348.001 348.417 **Investment Return Assuption** 6.25% Supplemental Contrib (\$mil.) 50 Post-Valuation Data Return Fiscal Year - First Half 4.00% Fiscal Year- Full Year (Est.) 6.91% Inflation for 2024 Assumed 2.50% Actual 2.76% Service Retirements in Fiscal Year Assumed 265 247 Salary Increase Assumed 3.25% Est. 4.22% **Active Members** 

5,528 Est.

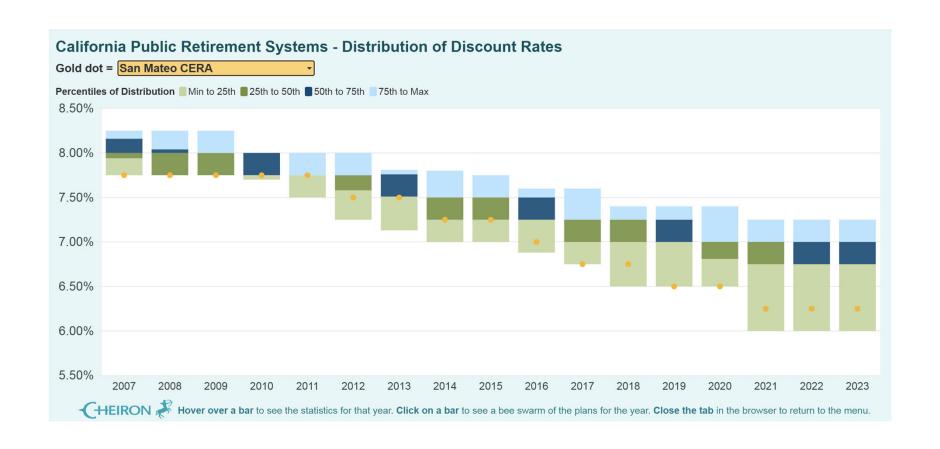
Assumed

5,657

# SamCERA Funding Dashboard, cont



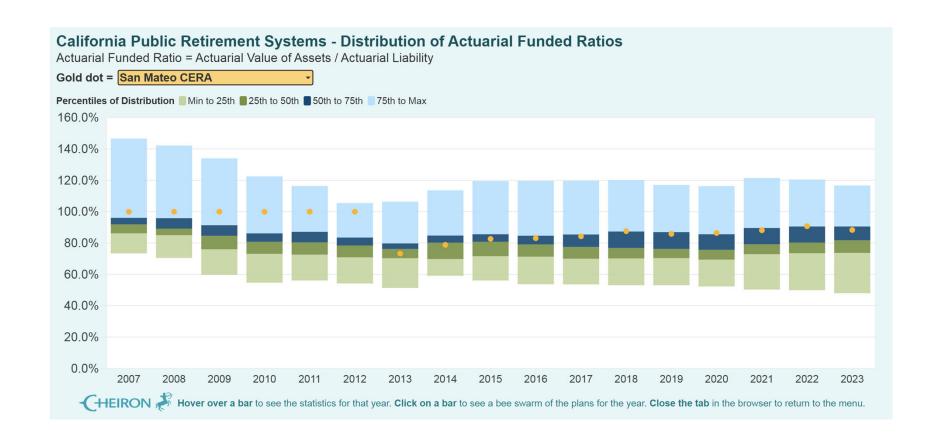
Updated Estimate: 2035



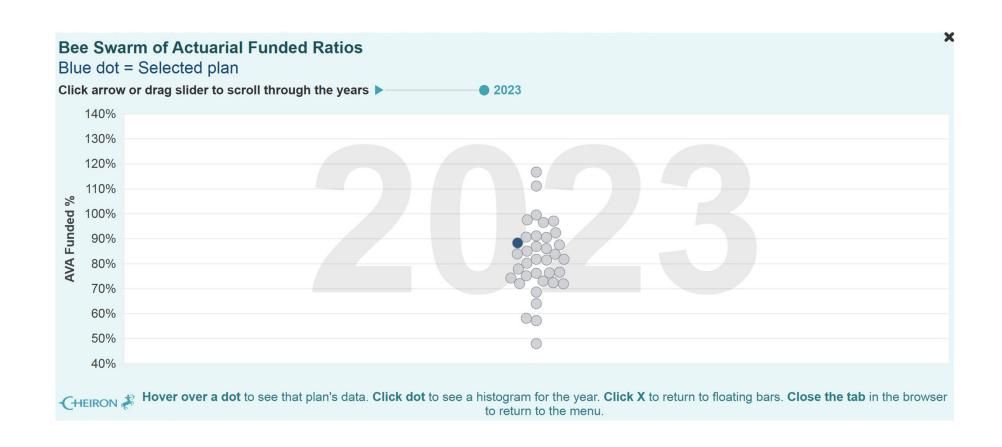
## SamCERA Peer Comparison- Discount Rate



## SamCERA Peer Comparison- Discount Rate



## SamCERA Peer Comparison- Funded Ratio



## SamCERA Peer Comparison- Funded Ratio

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 6.1

**TO:** Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer Michael R. Coultrip

**SUBJECT:** Report on Quarterly Investment Performance Report for the Period Ended

March 31, 2025

#### Recommendation

Accept Verus Advisory's quarterly performance report for the period ended March 31, 2025.

#### Discussion

The 1st quarter net total return for the SamCERA portfolio was 1.3%, which was 80 bps higher than the 0.5% policy benchmark return. As can be seen on page 23, the growth portfolio (domestic equity) and the inflation hedge portfolio (private real assets) were the main contributors to relative performance.

John Nicolini and Joe Abdou will present the report to the Board and will be available for questions.

#### Attachment

Verus Quarterly Performance Report Ending 3/31/2025







**PERIOD ENDING: March 31, 2025**Investment Performance Review for

**San Mateo County Employees' Retirement Association** 

## Table of Contents



#### **VERUSINVESTMENTS.COM**

SEATTLE 206.622.3700 CHICAGO 312.815.5228 PITTSBURGH 412.784.6678 LOS ANGELES 310.297.1777 SAN FRANCISCO 415.362.3484

Market Environment	ТАВІ	Diversifying	TAB IV
Total Fund	TAB II	Inflation Hedge	TAB V
Growth	TAB III	Appendix	TAB VI

# 1st quarter summary

#### THE ECONOMY

- The threat and implementation of tariffs by the U.S. administration has been more aggressive than expected. A string of weak economic data, along with these policy decisions, have triggered a greater likelihood of recession. So far, the core aspects of the economy—employment, consumption, wage gains—remain fairly solid, while household and business sentiment has dropped substantially. It is not yet clear how souring sentiment will translate to the real economy.
- U.S. inflation drifted lower towards the Federal Reserve 2% target. Inflation was 2.4% YoY in March, and core inflation rose 2.8%. But tariffs implemented by the Trump administration and an escalating trade war with China may push inflation upward. Given recent moves by the U.S. administration, most investors appear to expect weaker economic growth in 2025 and moderately higher inflation. This puts the Fed in a difficult position.

### **EQUITY**

— A change in tariff policy near the end of Q1 shocked markets and led to severe selloffs across global markets, with U.S. equities taking the worst of the losses. Growth stocks, notably the Magnificent 7, have led the market downward. Small capitalization stocks underperformed large caps. Businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy.

#### **FIXED INCOME**

- The 10-year U.S. Treasury yield fell from 4.55% to 4.23% during the quarter, reflecting somewhat of a reversal of the economic optimism of Q4.
- Credit spreads widened during the quarter, and lower quality spreads saw larger shifts. High yield bond spreads rose by 41bps to 3.53%, while investment grade spreads rose to 1.0%. Despite recent widening events, credit spreads across all ratings remain below long-term historical averages.

#### **ASSET ALLOCATION ISSUES**

- Sentiment quickly shifted in a negative direction in March as investors witnessed weaker-than-expected economic data in a variety of places and tariff standoffs between the U.S. and our largest trading partners flooded headlines.
   Many S&P 500 price targets have been adjusted lower due to fears of trade policy drag on the economy.
- Implied bond market volatility showed an extreme jump towards the end of Q1. Competing theories exist as to the cause, with some market participants attributing the move to fluctuations in foreign demand for U.S. dollars due to radical shifts in U.S. trade policy. Other investors believe these moves have been more driven by hedge fund trading and an unwinding of 'basis trades'—a levered trading strategy that tries to take advantage of differences between current Treasury price and the price reflected in futures contracts.

Tariff
negotiations &
weakness in
certain
economic data
have led to fears
of imminent
recession

For now, core economic dataemployment, spending, wages-are fairly solid



# U.S. economics summary

- Real GDP growth was negative during Q1, falling from 2.4% to -0.3% quarter-over-quarter annualized. The slowdown was driven by a substantial increase in imports relative to exports. Less government spending contributed to the weak figure, a notable change from past years where higher spending was an ongoing support. Consumer spending also slowed down.
- Investors witnessed broadly weaker economic data. This, along with the multifront U.S. trade tariff war, casts a shadow over sentiment and may be affecting business behavior due to heightened uncertainty. While fear is high, the core fundamentals of the economy remain relatively good—solid employment, decent spending, and low household debt levels. Investors will be watching closely for the way in which souring sentiment impacts the economy.
- The Federal Reserve kept rates steady, but communicated that weaker economic growth and moderately higher inflation is likely in store, due to U.S. administration tariff and trade policy.

- Lower growth and rising inflation places the Fed in a very difficult position regarding rate policy.
- U.S. inflation fell during Q1 towards the Federal Reserve 2% target. Inflation came in at 2.4% year-over-year in March, and core inflation rose 2.8%. Shelter prices (housing) has been the largest contributor to inflation, but in March showed a lower price rise of 2.5% annualized.
- Labor market conditions were strong in Q1. Unemployment remained low at 4.2%. The reductions in government workforce will likely have an impact on labor data for many months into the future, but the size of planned cuts relative to the total U.S. workforce is not enough to change the overall picture.
- Sentiment reversed abruptly in Q1 as households and businesses expressed substantial fears around tariffs. The University of Michigan Sentiment Index is now -30% below November 2024 levels, while NFIB Small Business Sentiment is nearly back to pre-election levels.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.0% 3/31/25	2.9% 3/31/24
Inflation	2.8%	3.8%
(CPI YoY, Core)	3/31/25	3/31/24
Expected Inflation (5yr-5yr forward)	<b>2.6</b> % 3/31/25	2.4% 3/31/24
Fed Funds Target	4.25–4.50%	5.25–5.50%
Range	3/31/25	3/31/24
10-Year Rate	<b>4.2</b> % 3/31/25	<b>4.3</b> % <i>3/31/24</i>
U-3	<b>4.2%</b>	3.9%
Unemployment	3/31/25	3/31/24
U-6	7.9%	7.3%
Unemployment	3/31/25	3/31/24



# International economics summary

- Major economies around the world face acute risks of economic slowdown due to the imposed tariffs of the U.S. administration (this includes the U.S. economy, of course). That risk comes at a time when many countries already struggle with lower growth and structural headwinds. Outcomes of trade negotiations, and the time it takes for conclusions to be reached, will likely have a notable impact on near-term growth. In short, tariff outcomes will be hugely important.
- Eurozone economies grew only 1.2% YoY in Q4. Expectations are for continued very weak growth of 0.9% in 2025, according to ECB staff, as of March. This forecast aligns with the consensus economists forecast. Trade and geopolitical uncertainty may create an additional drag on the region since these forecasts assume U.S./China tariffs but no U.S./EU tariffs. A prolonged trade war between the U.S. and the Eurozone could mean even greater economic drag.

- German elections concluded with a win for the conservative Christian Democratic Union (CDU) and its alliance the Christian Social Union (CSU) with 28.6% of the vote. A two-way coalition with the runner-up Alternative for Germany (AFD) is unlikely to form despite its impressive rise in popularity.
- On February 5th, the Bank of England (BOE) decided with a seven-two vote to cut interest rates by 25bps to 4.5%. This marked the third consecutive cut over the past six months. The BOE cited cooler-than-expected December inflation as a main contributing factor.
- As the U.S. administration appears to be focusing maximum pressure on China regarding trade and business practices, the intense market volatility experienced in early April could be setting the stage for the remainder of 2025. Some estimates put China's economic growth rate this year at perhaps 4% or even 3%, below the 5% stated goal of the Chinese Communist Party.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United	2.0%	2.4%	<b>4.2</b> % <i>3/31/25</i>
States	3/31/25	3/31/25	
Eurozone	1.2%	2.2%	6.1%
	12/31/24	3/31/25	2/28/25
Japan	2.8%	3.7%	2.4%
	12/31/24	2/28/25	2/28/25
Canada	1.5%	2.6%	6.7%
	12/31/24	2/28/25	3/31/25
BRICS	5.2%	1.7%	5.4%
Nations	12/31/24	3/31/25	3/31/25
Brazil	3.4%	5.5%	6.8%
	3/31/25	3/31/25	2/28/25
Russia	3.1%	10.3%	2.4%
	9/30/24	3/31/25	2/28/25
India	6.2%	3.3%	7.1%
	12/31/24	3/31/25	12/31/24
China	5.4%	(0.1%)	5.4%
	12/31/24	3/31/25	2/28/25

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.



# Equity environment

- Domestic equities delivered substantial underperformance during Q1 (S&P 500 -4.3%) relative to international developed (MSCI EAFE +6.9%) and emerging market equities (MSCI EM +2.9%)—a notable change in trend from recent years. The S&P 500 entered a technical correction mid-March.
- A sentiment shift away from U.S. stocks and towards foreign markets occurred in recent months, as tariff concerns spooked investors and contributed to recession fears. At the same time, certain European governments have indicated a greater willingness to invest in local economies, possibly generating better economic growth. This contributed to a rotation out of U.S. market and into Europe.
- Growth stocks, notably the Magnificent 7, have led the market downward, although small capitalization stocks still underperformed large caps.

- Businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy.
- Chinese markets climbed in February on the heels of the DeepSeek launch in January, when President Xi Jinping reportedly met with tech leadership. Also, signs that the real estate bear market may be easing, and that consumer spending may be turning upward, generating impressive Q1 returns.
- Market-priced volatility jumped in early March as tariff announcements, trade negotiations, and fears of general economic weakness spooked markets, leading to a broad selloff of U.S. assets. As trade fears intensified in the first week of April, global markets saw one of the most sudden drops in modern history which sent the VIX to 52.

	QTD TO	TAL RETURN	1 YEAR TOTAL RETURN			
	(unhedged)	(hedged)	(unhedged)	(hedged)		
U.S. Large Cap (S&P 500)	(4	4.3%)	8.3%			
U.S. Small Cap (Russell 2000)	(!	9.5%)	(4.0%)			
U.S. Equity (Russell 3000)	(4	4.7%)	7.2%			
U.S. Large Value (Russell 1000 Value)	:	2.1%	7.2%			
U.S. Large Growth (Russell 1000 Growth)	(1	1.1%)	7.8%			
Global Equity (MSCI ACWI)	(1.3%)	(2.2%)	7.2%	14.7%		
International Large (MSCI EAFE)	6.9%	3.4%	4.9%	6.8%		
Eurozone (EURO STOXX 50)	10.9%	7.8%	5.5%	8.2%		
U.K. (FTSE 100)	12.1%	6.0%	6.2%	11.7%		
Japan (TOPIX)	1.2%	(2.4%)	(0.6%)	9.2%		
Canada (S&P/TSX)	1.5%	2.5%	9.0%	26.7%		
Emerging Markets (MSCI Emerging Markets)	2.9%	2.5%	8.1%	11.2%		

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 3/31/25 – performance quoted from perspective of U.S. dollar investor

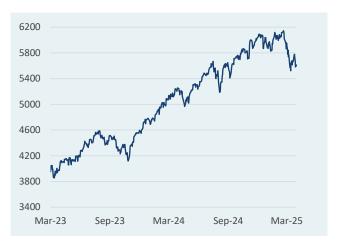


# Domestic equity

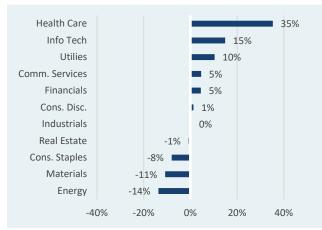
U.S. equities performed poorly in Q1 with the S&P 500 down -4.3% (note: this does not include the dramatic global selloff of early April). In a change of pace from 2024, mega-cap stocks in Q1 acted as a drag on the overall index, as these previously high-flyers struggled on growth and tariff concerns. Domestic equities have notably underperformed both international (MSCI EAFE +6.9%) and emerging markets (MSCI EM +2.9%) year-to-date. Domestic businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy.

Year-over-year earnings growth of the S&P 500 is expected to be 7.3%, according to FactSet as of April 11<sup>th</sup>. During the quarter, analysts lowered EPS estimates slightly more than normal, by -4.2% which compares to the 5-year average adjustment of -3.3%. Materials and consumer discretionary sectors saw the largest adjustments, suggesting signs of expected economic weakness. It is very likely that future corporate earnings guidance will turn negative to reflect the more difficult trade and growth environment.

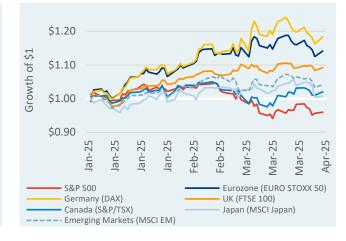
#### **S&P 500 PRICE INDEX**



### S&P 500 EPS GROWTH (YEAR-OVER-YEAR)



#### REGIONAL EQUITY PERFORMANCE (YTD)





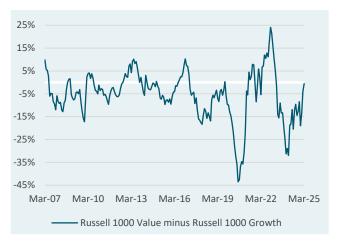
# Domestic equity size & style

Small cap equities underperformed large caps year-to-date (FTSE Russell 2000 -9.5% vs. FTSE Russell 1000 -4.5%), despite a drawdown across mega cap stocks. Value stocks on the other hand outperformed growth stocks substantially (FTSE Russell 1000 Value +2.1% vs FTSE Russell 1000 Growth -10.0%), as many investors tend to seek safer higher dividend paying stocks during riskier environments and heightened recession risk. These effects could be seen in sector performance disparities during the quarter, with energy, utilities, and financials outperforming materially. Information technology was one of the worst performing sectors.

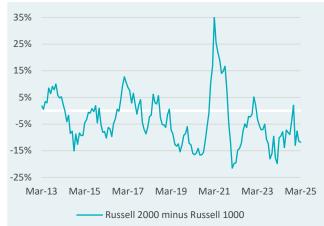
Ongoing style factor volatility may be a feature of Q2, given the historically sudden global market selloff that occurred in early April, which has hit mega cap growth and tech stocks particularly severely.

On a one-year lookback basis, large cap value stocks have become the leader among U.S. style groups, and small cap growth the laggards.

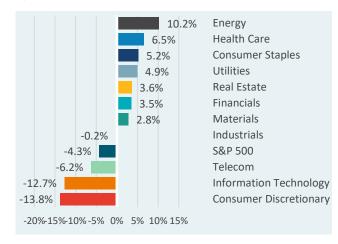
## VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



#### **Q1 PERFORMANCE**





# International developed equity

In a sharp reversal from years of U.S. outperformance, domestic stocks entered technical correction territory in March while non-U.S. stocks— European markets in particular—took the lead. Weakening U.S. conditions and the Trump Administration's "Liberation Day" tariff contributed to a dramatic fall in domestic stocks later in March and the first week of April. European stocks have rallied on hopes for stimulus, easing of debt ceilings, and perhaps investments in greater European independence. Depreciation of the U.S. dollar further fueled international stock outperformance for U.S. investors. For the first time in quite some time, many investors are seeking opportunities outside of the U.S. market.

International developed shares (MSCI EAFE +6.9%) and emerging market equities (MSCI EM +2.9%) both outperformed domestic stocks (S&P 500 - 4.3%).

President Trump's approach of attempting to negotiate with all of America's trade partners all at once places the U.S. in a uniquely difficult economic position. For example, while China faces a trade war with only a single trading partner (the United States), here at home we face a trade war with multiple trading partners. It could be argued that the negative economic impacts on the U.S. from this trade war could be much larger than the negative economic impacts that many other countries will endure.

#### INTERNATIONAL DEVELOPED EQUITY



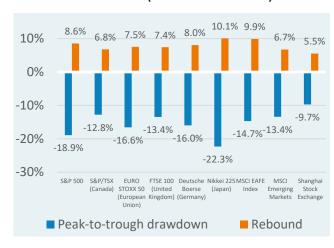
Source: MSCI, as of 3/31/25

#### REGIONAL STOCK PERFORMANCE YTD



Source: Verus, Bloomberg, as of 3/31/25

#### **REGIONAL RETURNS (PEAK-TO-TROUGH)**



Source: Verus, Bloomberg, as of 4/14/25



# Emerging market equity

Emerging market equities (MSCI EM +2.9%) delivered moderately positive returns in Q1, outperforming U.S. equities, fueled by China's equity rally. Chinese markets climbed notably in February on the heels of the DeepSeek launch in January, when President Xi Jinping reportedly met with tech leaders for the first time in several years. This meeting could help to bolster investor confidence in Chinese tech despite ongoing structural challenges across the local investment landscape. Additionally, signs that the bear market in residential real estate may be easing, and that consumer spending may be turning upward, generated market excitement and an impressive Q1 (MSCI China Index +11.3%).

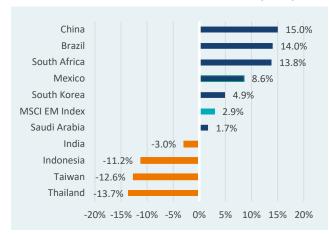
This movement served as a helpful reminder that larger regional markets can have big performance impacts an overall emerging markets allocation.

As the U.S. administration appears to be focusing maximum pressure on China regarding trade and business practices, the intense market volatility experienced in early April seems to set the table for the remainder of 2025. Some estimates put China's economic growth rate this year at perhaps 4% or even 3%, below the 5% target publicized by the Chinese Communist Party.

#### **EMERGING MARKET EQUITY**



### MSCI EM 2025 Q1 COUNTRY RETURNS (USD)



#### CHINA'S COMEBACK





# Fixed income environment

- The 10-year U.S. Treasury yield fell slightly from 4.55% to 4.23% during the quarter, reflecting a reversal in the economic optimism of Q4.
- The Federal Reserve kept rates steady but has communicated an expectation of weaker economic growth and moderately higher inflation in 2025, due to U.S. administration tariffs and trade policy. Falling growth but rising inflation would put the Fed in a very difficult position regarding policy decisions. At the beginning of Q1 investors were expecting two rate cuts in 2025. This has since jumped to 4.
- The yield premium of U.S. Treasuries over that of European debt—German bunds in particular—shrunk materially during the quarter. The dual narratives of weaker-than-expected U.S. growth in 2025, and debt limit easing in Germany which could boost growth, has sent yields of those countries closer to parity.
- Longer duration credit slightly outperformed shorter duration. This behavior likely reflected a shift in

- market sentiment from year end, during which uncertainty in fiscal and monetary policy contributed to a bear steepening of the yield curve. Long duration corporate bonds gained +2.38% while Bank loans added +0.6% and high yield returned +1.0%.
- Credit spreads widened due to risk off movements, and lower quality spreads experienced the largest shifts. High yield bond spreads rose by 41bps to 3.53%, while investment grade spreads rose to 1.0%. Despite recent widening events, credit spreads across all ratings remain below long-term historical averages.
- U.S. Treasury yields showed extreme jumps. Some investors attributed the move to fluctuations in foreign demand for U.S. dollars due to shifts in U.S. trade policy. Others believe these moves have been driven by hedge fund trading and an unwinding of 'basis trades'—a levered trading strategy that tries to take advantage of differences between current Treasury price and prices of futures contracts.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	2.8%	4.9%
Core Plus Fixed Income (Bloomberg U.S. Universal)	2.7%	5.2%
U.S. Treasuries (Bloomberg U.S. Treasury)	2.9%	4.5%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	4.7%	1.3%
U.S. High Yield (Bloomberg U.S. Corporate HY)	1.0%	7.7%
Bank Loans (S&P/LSTA Leveraged Loan)	0.6%	7.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	4.3%	4.0%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	2.2%	6.8%
Mortgage-Backed Securities (Bloomberg MBS)	3.1%	5.4%

Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 3/31/25



## Yield environment

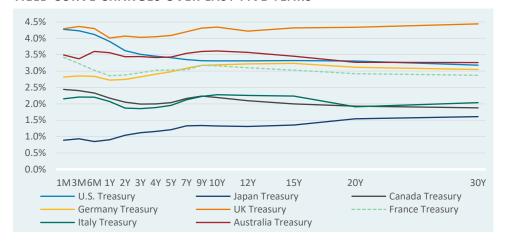
#### U.S. YIELD CURVE



#### **GLOBAL GOVERNMENT YIELD CURVES**



#### YIELD CURVE CHANGES OVER LAST FIVE YEARS



#### IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/25



# Currency

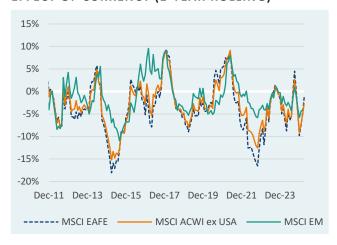
The U.S. dollar fell during Q1 on tariff and trade fears, as well as signs of a weakening economy. This boosted the returns of U.S. investors with unhedged foreign currency exposure. The U.S. Dollar Index was down - 8.5%. Dollar movement is particularly difficult to predict—a slowdown in U.S. economic growth throughout the remainder of the year should have a dampening effect on dollar value, but a global market selloff tends to result in a flight to quality (higher U.S. dollar). A big hike in tariffs imposed by the U.S. should generally push the dollar up as trading partners work to buy dollars, but if this causes a negative shock to the economy and leads to rate cuts from the Federal Reserve then that would be negative for the dollar. The overall net effect of these opposing forces is very complex.

Those without a currency hedging program gained +3.5% from currency moves across international equities (MSCI EAFE) during Q1, but lost -1.9%

over the past year. Currency gains were large across the Euro and British pound, while the Japanese yen moved in the opposite direction.

A more thoughtful portfolio approach to currency exposure has provided lower portfolio volatility and higher returns—a rare proposition. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment in the currency market by investing in currencies with higher interest rates, undervalued currencies, and currencies showing positive price momentum. This approach, represented by the MSCI Currency Factor Mix Index, has offered a positive one-year rolling return over most periods with far lower volatility than an unhedged approach. The past year of intense currency volatility is testament to this approach.

### **EFFECT OF CURRENCY (1-YEAR ROLLING)**



#### **U.S. DOLLAR MAJOR CURRENCY INDEX**



#### EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: MSCI, Verus, as of 3/31/25 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk



## Detailed index returns

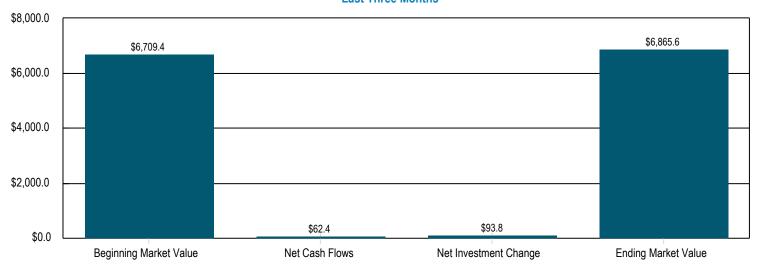
DOMESTIC EQUITY								FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year		Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index								Broad Index							
S&P 500	(5.6)	(4.3)	(4.3)	8.3	9.1	18.6	12.5	Bloomberg US TIPS	0.6	4.2	4.2	6.2	0.1	2.4	2.5
S&P 500 Equal Weighted	(3.4)	(0.6)	(0.6)	4.1	5.2	17.7	10.0	Bloomberg US Treasury Bills	0.3	1.0	1.0	5.1	4.3	2.6	1.9
DJ Industrial Average	(4.1)	(0.9)	(0.9)	7.4	8.8	16.2	11.4	Bloomberg US Agg Bond	0.0	2.8	2.8	4.9	0.5	(0.4)	1.5
Russell Top 200	(6.1)	(4.8)	(4.8)	9.5	10.0	19.2	13.4	Bloomberg US Universal	(0.0)	2.7	2.7	5.2	1.0	0.3	1.8
Russell 1000	(5.8)	(4.5)	(4.5)	7.8	8.7	18.5	12.2	Duration							
Russell 2000	(6.8)	(9.5)	(9.5)	(4.0)	0.5	13.3	6.3	Bloomberg US Treasury 1-3 Yr	0.5	1.6	1.6	5.4	2.8	1.1	1.5
Russell 3000	(5.8)	(4.7)	(4.7)	7.2	8.2	18.2	11.8	Bloomberg US Treasury Long	(0.9)	4.7	4.7	1.3	(7.2)	(7.9)	(0.6)
Russell Mid Cap	(4.6)	(3.4)	(3.4)	2.6	4.6	16.3	8.8	Bloomberg US Treasury	0.2	2.9	2.9	4.5	(0.0)	(1.7)	1.0
Style Index								Issuer							
Russell 1000 Growth	(8.4)	(10.0)	(10.0)	7.8	10.1	20.1	15.1	Bloomberg US MBS	(0.0)	3.1	3.1	5.4	0.6	(0.7)	1.1
Russell 1000 Value	(2.8)	2.1	2.1	7.2	6.6	16.1	8.8	Bloomberg US Corp. High Yield	(1.0)	1.0	1.0	7.7	5.0	7.3	5.0
Russell 2000 Growth	(7.6)	(11.1)	(11.1)	(4.9)	0.8	10.8	6.1	Bloomberg US Agency Interm	0.4	2.0	2.0	5.4	2.5	0.7	1.5
Russell 2000 Value	(6.0)	(7.7)	(7.7)	(3.1)	0.0	15.3	6.1	Bloomberg US Credit	(0.2)	2.4	2.4	4.9	1.1	1.3	2.3
INTERNATIONAL EQUITY								OTHER							
Broad Index								Index							
MSCI ACWI	(4.0)	(1.3)	(1.3)	7.2	6.9	15.2	8.8	Bloomberg Commodity	3.9	8.9	8.9	12.3	(8.0)	14.5	2.8
MSCI ACWI ex US	(0.2)	5.2	5.2	6.1	4.5	10.9	5.0	Wilshire US REIT	(3.6)	1.0	1.0	10.2	(8.0)	11.2	5.3
MSCI EAFE	(0.4)	6.9	6.9	4.9	6.1	11.8	5.4	S&P UBS Leveraged Loan	(0.3)	0.6	0.6	7.0	7.1	8.9	5.0
MSCI EM	0.6	2.9	2.9	8.1	1.4	7.9	3.7	S&P Global Infrastructure	2.1	4.6	4.6	18.8	6.1	13.8	6.5
MSCI EAFE Small Cap	0.5	3.7	3.7	3.1	0.9	9.9	5.3	Alerian MLP	(0.1)	12.2	12.2	23.9	24.7	39.7	5.0
Style Index								Regional Index							
MSCI EAFE Growth	(3.2)	2.1	2.1	(2.6)	2.4	8.5	5.5	JPM EMBI Global Div	(8.0)	2.2	2.2	6.8	3.4	3.5	3.2
MSCI EAFE Value	2.3	11.6	11.6	12.8	9.7	14.8	5.1	JPM GBI-EM Global Div	1.5	4.3	4.3	4.0	2.7	2.3	1.3
Regional Index								Hedge Funds							
MSCI UK	0.7	9.7	9.7	14.4	7.9	13.8	4.9	HFRI Composite	(1.1)	0.8	0.8	5.1	4.7	9.6	5.0
MSCI Japan	0.1	0.3	0.3	(2.1)	5.3	8.8	5.3	HFRI FOF Composite	(1.0)	0.7	0.7	6.1	4.5	7.5	3.7
MSCI Euro	0.1	11.9	11.9	5.4	10.1	14.7	5.9	Currency (Spot)							
MSCI EM Asia	(0.1)	1.3	1.3	9.8	1.9	7.5	4.4	Euro	3.9	4.3	4.3	1.2	(1.0)	(0.3)	0.1
MSCI EM Latin American	4.8	12.7	12.7	(13.6)	(2.0)	11.8	2.6	Pound Sterling	2.5	3.1	3.1	2.2	(0.7)	0.8	(1.4)
								Yen	0.8	5.1	5.1	0.0	(6.7)	(6.3)	(2.2)

Source: Morningstar, HFRI, as of 3/31/25



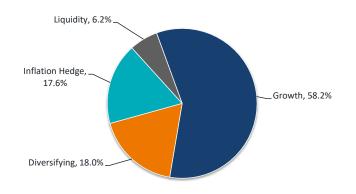
Portfolio Reconciliation										
	3 Mo	1 Yr								
Beginning Market Value	\$6,709,406,873	\$6,416,592,703								
Net Cash Flows	\$62,427,030	-\$25,046,274								
Net Investment Change	\$93,811,979	\$474,099,452								
Ending Market Value	\$6,865,645,882	\$6,865,645,882								

### Change in Market Value Last Three Months



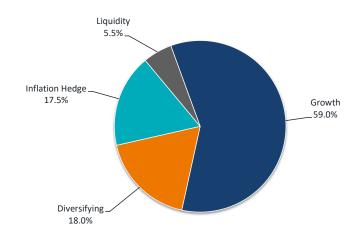


### **Current w/ Overlay**



ASSET ALLOCATION	MARKET VALUE W/ OVERLAY	W/ OVERLAY	W/O OVERLAY
Growth	3,997,584,758	58.2%	57.4%
Diversifying	1,236,665,152	18.0%	17.9%
Inflation Hedge	1,208,288,771	17.6%	17.6%
Liquidity	423,107,202	6.2%	7.1%
TOTAL	6,865,645,882	100.0%	100.0%

### **Target**



ASSET ALLOCATION	W/ OVERLAY	TARGET	DIFF
Growth	58.2%	59.0%	-0.8%
Diversifying	18.0%	18.0%	0.0%
Inflation Hedge	17.6%	17.5%	0.1%
Liquidity	6.2%	5.5%	0.7%
TOTAL	100.0%	100.0%	0.0%

	Statistics Summary 3 Years Anlzd Anlzd Sharpe Information Tracking										
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error						
Total Fund	4.3 (41)	7.3 (18)	0.0 (45)	-0.5 (60)	2.2 (12)						
Policy Index	5.2 (13)	8.5 (35)	0.2 (10)	-	0.0						
Simple Benchmark	3.3 (82)	10.5 (74)	0.0 (74)	-0.6 (73)	2.8 (53)						
InvMetrics Public DB > \$1B Median	4.0	9.1	0.0	-0.3	2.7						
Statistics Summary 5 Years  Anlzd Anlzd Sharpe Information Tracking Standard Standard Datie											
	Anlzd Return		Sharpe Ratio	Information Ratio	Tracking Error						
Total Fund	9.3 (79)	7.2 (9)	0.9 (23)	-0.3 (86)	2.3 (4)						
Policy Index	9.9 (52)	8.0 (25)	0.9 (27)	-	0.0						
Simple Benchmark	9.3 (79)	10.1 (70)	0.7 (90)	-0.1 (73)	2.9 (47)						
InvMetrics Public DB > \$1B Median	9.9	9.1	0.8	0.1	2.9						
		Statistics Summary 10 Years									
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error						
Total Fund	6.3 (63)	7.5 (17)	0.6 (35)	-0.4 (83)	1.8 (1)						
Policy Index	7.1 (29)	7.9 (29)	0.7 (21)	-	0.0						
Simple Benchmark	6.6 (53)	9.3 (69)	0.5 (65)	-0.2 (50)	2.2 (27)						
InvMetrics Public DB > \$1B Median	6.6	8.5	0.6	-0.2	2.5						



- The Total Fund, net of manager fees, returned 1.3% in the first quarter of 2025 and in the ranked 14<sup>th</sup> percentile among other public plans greater than \$1 billion (median of 0.3%). It beat the policy index return of 0.4%. The Total Fund ex Overlay returned 1.3% for the quarter. The Total Fund fiscal year-to-date return of 5.3% lagged the policy index return of 5.6% and ranked in the 7<sup>th</sup> percentile of its peer universe. The three-year return of 4.3% (41<sup>st</sup> percentile) beat the median large public plan (4.0%) and lagged the policy index (5.3%).
- First quarter results were enhanced by the following factors:
  - 1. US Equity composite outperformed, significantly gaining from PanAgora's low volatility which rose 6.3%, outperforming the Russell 1000 which lost -4.5%.
  - 2. The Private Real Asset composite beat the benchmark 3.8% vs -4.2% for the quarter contributing to the Total Fund's outperformance.
- First quarter results were hindered by the following factors:
  - 1. CFM Systematic had a -1.9% for the quarter, which is a reversal from prior quarters. Trend following strategies tend to lag due to higher volatility in the market.

	Market Value	% of Portfolio	3 Mo	Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs	Rank
	6,865,645,882	100.0	1.3	(14)	1.3 (14)	5.3 (7)	7.1 (3)	8.4 (50)	4.3 (41)	9.3 (79)	6.3	(63)
Policy Index				(43)	0.5 (43)	5.6 (5)	8.0 (1)	10.2 (13)	5.2 (13)	9.9 (52)	7.1	(29)
Simple Benchmark			-0.1	(79)	-0.1 (79)	3.9 (67)	5.4 (55)	8.2 (57)	3.3 (82)	9.3 (79)	6.6	(53)
InvMetrics Public DB > \$1B			0.3		0.3	4.3	5.5	8.4	4.0	9.9	6.6	
Total Fund ex Overlay	6,851,355,951	99.8	1.3	(12)	1.3 (12)	5.3 (7)	7.1 (3)	8.3 (52)	4.2 (45)	9.2 (82)	6.2	(66)
Policy Index			0.5	(43)	0.5 (43)	5.6 (5)	8.0 (1)	10.2 (13)	5.2 (13)	9.9 (52)	7.1	(29)
Simple Benchmark			-0.1	(79)	-0.1 (79)	3.9 (67)	5.4 (55)	8.2 (57)	3.3 (82)	9.3 (79)	6.6	(53)
InvMetrics Public DB > \$1B			0.3		0.3	4.3	5.5	8.4	4.0	9.9	6.6	
Growth Portfolio	3,997,584,758	58.2	0.3		0.3	5.7	8.2	11.7	-	-	-	
Blended Growth Index			-0.4		-0.4	5.8	9.3	15.3	7.8	14.4	-	
US Equity	1,642,956,366	23.9	-3.1	(10)	-3.1 (10)	6.2 (3)	9.1 (1)	16.7 (42)	8.6 (9)	17.4 (61)	10.9	(55)
Blended US Equity Index			-4.7	(55)	-4.7 (55)	3.9 (27)	7.2 (13)	17.7 (16)	8.2 (23)	18.2 (27)	11.7	(23)
Russell 3000 Index			-4.7	(55)	-4.7 (55)	3.9 (27)	7.2 (13)	17.7 (16)	8.2 (23)	18.2 (27)	11.8	(16)
BlackRock Russell 1000	959,480,727	14.0	-4.5	(56)	-4.5 (56)	4.1 (35)	7.8 (27)	18.3 (34)	8.7 (39)	18.5 (32)	-	
DE Shaw	289,442,622	4.2	-2.8	(35)	-2.8 (35)	10.0 (6)	15.6 (2)	21.6 (5)	10.5 (12)	19.5 (14)	12.7	(10)
PanAgora Defuseq	227,044,646	3.3	6.3	(1)	6.3 (1)	15.1 (2)	15.4 (2)	12.5 (83)	7.6 (60)	14.6 (86)	-	
Russell 1000 Index			-4.5	(56)	-4.5 (56)	4.1 (35)	7.8 (27)	18.3 (34)	8.7 (39)	18.5 (32)	12.2	(19)
eV US Large Cap Core Equity Median			-4.2		-4.2	2.9	6.0	16.7	8.1	17.2	11.2	
PGIM Quant Solutions	122,559,794	1.8	-8.3	(53)	-8.3 (53)	-0.1 (50)	-2.4 (44)	9.8 (23)	4.1 (24)	17.2 (32)	-	
Russell 2000 Index			-9.5	(76)	-9.5 (76)	-0.8 (56)	-4.0 (56)	7.2 (56)	0.5 (75)	13.3 (78)	6.3	(81)
eV US Small Cap Core Equity Median			-8.2		-8.2	-0.2	-3.1	7.5	2.5	15.5	7.3	
International Equity	1,118,671,641	16.3	3.6	(85)	3.6 (85)	4.8 (56)	6.1 (41)	8.9 (69)	5.1 (40)	11.1 (64)	5.5	(28)
Blended International Equity Index			3.4	(87)	3.4 (87)	4.9 (54)	6.8 (21)	11.3 (13)	6.6 (10)	12.5 (23)	6.1	(17)
International Equity x Currency Overlay	1,117,433,575	16.3	5.0		5.0	5.2	5.9	8.1	4.7	10.8	5.4	
Blended International Equity Index			3.4		3.4	4.9	6.8	11.3	6.6	12.5	6.1	
Baillie Gifford	269,453,985	3.9	1.2	(52)	1.2 (52)	1.1 (49)	0.4 (48)	2.3 (83)	-1.1 (79)	6.5 (89)	4.4	(88)
MSCI ACWI ex US			5.4	(9)	5.4 (9)	5.4 (18)	6.6 (13)	10.2 (16)	5.0 (19)	11.5 (25)	5.5	(68)
MSCI ACWI ex US Growth			2.0	(35)	2.0 (35)	0.6 (54)	1.5 (44)	6.4 (46)	2.1 (45)	8.4 (65)	5.4	(69)
Mondrian	292,443,642	4.3	9.1	(37)	9.1 (37)	10.5 (25)	11.8 (16)	11.9 (44)	7.0 (47)	11.8 (86)	4.6	(75)
MSCI AC World ex USA Value			8.8	(42)	8.8 (42)	10.5 (24)	12.2 (14)	14.2 (20)	8.0 (33)	14.4 (38)	5.4	(54)
MSCI AC World ex USA Index			5.4	(74)	5.4 (74)	5.4 (69)	6.6 (62)	10.2 (53)	5.0 (74)	11.5 (90)	5.5	(50)
BlackRock MSCI ACWI EX-US IMI	545,818,261	7.9	4.9	(62)	4.9 (62)	4.6 (61)	5.8 (54)	9.4 (47)	4.2 (59)	- ' '	-	
MSCI AC World ex USA IMI (Net)			4.6	(65)	4.6 (65)	4.5 (62)	5.5 (60)	9.3 (48)	4.0 (62)	11.0 (66)	5.0	(69)
Record Dynamic Currency Hedge	1,238,066	0.0	-90.4		-90.4	111.5	604.9	-4,711.1	-	-	-	

<sup>\*</sup> Total Fund and asset class aggregates are ranked in InvMetrics universes. Managers are ranked in eVest (eA) manager universes.
\*\* Includes Parametric Minneapolis manager funded in August 2013
See Appendix for Benchmark History





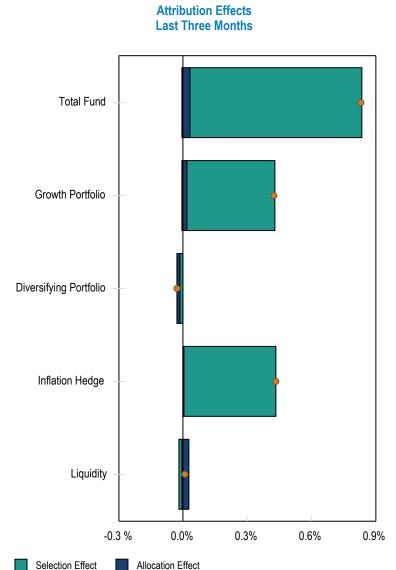
	Market Value	% of Portfolio	3 Mo F	Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs	Rank
Private Equity***	470,415,976	6.9	2.7	(13)	2.7 (13)	5.0 (25)	12.7 (6)	8.3 (14)	1.1 (68)	16.1 (15)	16.5	(5)
Blended Private Equity Index			3.5	(8)	3.5 (8)	14.5 (2)	26.8 (1)	27.9 (1)	11.1 (3)	16.9 (11)	15.3	(8)
Opportunistic Credit	765,540,775	11.2	1.6		1.6	7.3	7.9					
Opportunistic Credit Index			1.4		1.4	6.5	8.1	9.9	5.5	7.0	5.1	
Public Credit	540,156,651	7.9	1.7		1.7	7.9	8.8	9.7	5.0	7.3	5.5	
Blmbg. U.S. Corp: High Yield Index			1.0		1.0	6.5	7.7	9.4	5.0	7.3	5.0	
Beach Point Select	123,719,270	1.8	1.8	(2)	1.8 (2)	8.7 (1)	9.7 (2)	11.3 (3)	5.6 (13)	11.5 (2)	7.9	(1)
Brigade Capital	108,103,138	1.6	0.6	(76)	0.6 (76)	8.4 (2)	8.8 (4)	10.1 (12)	3.7 (88)	9.9 (7)	5.0	(26)
GoldenTree Select Partners	61,571,418	0.9	0.9	(51)	0.9 (51)	-	-	-	-	-	-	
One William Street	70,807,878	1.0	1.9	(1)	1.9 (1)	6.4 (16)	8.5 (7)	-	-	-	-	
Blmbg. U.S. Corp: High Yield Index			1.0	(40)	1.0 (40)	6.5 (14)	7.7 (16)	9.4 (22)	5.0 (30)	7.3 (36)	5.0	(26)
eV US High Yield Fixed Inc Median			0.9		0.9	5.5	6.8	8.7	4.6	6.9	4.6	
PIMCO Diversified	108,455,963	1.6	2.0	(1)	2.0 (1)	6.5 (23)	7.1 (68)	8.0 (87)	3.6 (98)	3.5 (100)	-	
Blmbg. U.S. Corp: High Yield Index			1.0	(53)	1.0 (53)	6.5 (22)	7.7 (35)	9.4 (43)	5.0 (60)	7.3 (57)	5.0	(59)
Eaton Vance Emerging Markets Debt Opportunities Fund	67,498,984	1.0	3.0	(36)	3.0 (36)	9.7 (5)	11.3 (3)	-	-	-	-	
JPM EMB (JEMB) Hard Currency/Local Currency 50-50			3.3	(20)	3.3 (20)	6.1 (60)	5.7 (59)	6.6 (80)	3.5 (68)	3.3 (85)	2.5	(71)
eV Emg Mkts Fixed Inc - Blended Currency			2.8		2.8	6.4	5.9	8.3	4.0	4.7	2.8	
Private Credit	225,384,124	3.3	1.4		1.4	5.8	5.7	6.1	4.9	6.9	-	
Credit Suisse Leveraged Loan Index 1 Qtr Lag			2.3		2.3	6.4	9.1	11.0	6.8	5.7	5.1	
400 Capital Asset Based Term Fund IV	9,625,213	0.1	-		-	-	-	-	-	-	-	
AG CSF ADF II	1,504,231	0.0	-4.8		-4.8	1.6	0.1	9.6	-	-	-	
AG CSF II	28,260,568	0.4	1.1		1.1	10.7	12.3	16.5	9.0	-	-	
AG CSF III	2,654,223	0.0	-		-	-	-	-	-	-	-	
Angelo Gordon Credit Solutions	5,547,122	0.1	0.0	(97)	0.0 (97)	9.0 (1)	9.4 (2)	10.8 (4)	5.5 (18)	13.2 (1)	-	
Blackrock DL Feeder IX-U	39,924,534	0.6	3.4		3.4	4.8	5.1	7.9	6.4	8.2	-	
Comvest Credit Partners VII	19,965,369	0.3	0.0		0.0	5.9	-	-	-	-	-	
PIMCO Private Income	49,832,031	0.7	0.0		0.0	4.2	5.6	6.6	4.6	9.1	-	
TCP Direct Lending VIII	5,236,564	0.1	1.5		1.5	3.8	3.4	5.8	4.6	6.0	-	
White Oak Yield	31,351,708	0.5	0.0		0.0	8.6	10.6	8.1	6.2	6.4	-	
White Oak YSF V	31,482,561	0.5	0.0	(97)	0.0 (97)	0.3 (100)	0.2 (100)	2.1 (100)	0.8 (100)	-	-	
Credit Suisse Leveraged Loan Index 1 Qtr Lag eV US High Yield Fixed Inc Median			2.3 0.9	(1)	2.3 (1) 0.9	6.4 (17) 5.5	9.1 (3) 6.8	11.0 (4) 8.7	6.8 <i>(4)</i> 4.6	5.7 (86) 6.9	5.1 4.6	(21)

San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Diversifying Portfolio	1,236,665,152	18.0	2.8	2.8	5.0	4.3	4.5	-	-	-
Blended Diversifying Index			2.9	2.9	5.2	5.7	4.5	2.7	1.7	2.9
Defensive Fixed Income	875,685,005	12.8	3.1	3.1	4.8	4.4	3.3	0.6	0.2	1.6
Blended Defensive Fixed Income Benchmark			3.2	3.2	4.4	4.0	2.1	-0.2	-0.8	1.2
DoubleLine	275,047,575	4.0	2.9 (42)	2.9 (42)	5.4 (59)	5.7 (71)	4.2 (62)	1.0 (63)	0.1 (62)	-
Blmbg. U.S. Aggregate Index			2.8 (50)	2.8 (50)	4.8 (87)	4.9 (94)	3.3 (85)	0.5 (83)	-0.4 (76)	1.5 (59)
eV US Securitized Fixed Inc Median			2.8	2.8	5.6	6.5	5.3	2.1	1.4	2.1
FIAM Bond	193,797,449	2.8	2.8 (29)	2.8 (29)	4.8 (47)	5.0 (46)	3.9 (27)	0.8 (37)	0.9 (15)	2.2 (8)
NISA Core Bond	295,500,212	4.3	3.1 (6)	3.1 (6)	4.9 (34)	5.0 (55)	3.4 (65)	0.8 (44)	-	-
Blmbg. U.S. Aggregate Index			2.8 (37)	2.8 (37)	4.8 (50)	4.9 (61)	3.3 (78)	0.5 (76)	-0.4 (91)	1.5 (82)
eV US Core Fixed Inc Median			2.7	2.7	4.8	5.0	3.6	0.7	0.3	1.7
NISA Long Treasury	104,080,050	1.5	4.7	4.7	3.1	1.3	-	-	-	-
Blmbg. U.S. Treasury: Long			4.7	4.7	3.1	1.3	-2.5	-7.2	-7.9	-0.6
Absolute Return	360,980,147	5.3	2.0 (12)	2.0 (12)	5.5 (48)	3.6 (81)	6.8 (78)	5.6 (59)	5.5 (83)	1.1 (83)
Absolute Return Custom Index			2.1 (12)	2.1 (12)	6.8 (19)	9.0 (14)	9.2 (64)	8.4 (8)	6.7 (77)	6.0 (20)
CFM Systematic Global Macro	124,306,994	1.8	-1.9 (76)	-1.9 (76)	13.7 (11)	13.8 (15)	8.6 (45)	9.3 (25)	-	-
Graham Quant Macro	114,269,029	1.7	1.9 (41)	1.9 (41)	-9.1 (97)	-11.8 (96)	2.6 (85)	2.7 (69)	5.7 (75)	-
PIMCO MAARS Fund LP	122,404,123	1.8	6.5 (15)	6.5 (15)	11.9 (16)	10.6 (25)	15.3 (14)	12.4 (12)	-	-
Absolute Return Custom Index			2.1 (40)	2.1 (40)	6.8 (37)	9.0 (34)	9.2 (42)	8.4 (27)	6.7 (65)	6.0 (41)
eV Alt All Multi-Strategy Median			1.2	1.2	5.0	6.5	8.0	4.9	8.8	5.4
Inflation Hedge	1,208,288,771	17.6	3.0	3.0	3.9	6.2	1.9	0.7	6.9	
Blended Inflation Hedge Index			0.5	0.5	5.4	6.1	0.9	0.1	7.6	5.5
Real Estate	470,970,792	6.9	0.2 (88)	0.2 (88)	0.2 (88)	-0.5 (81)	-4.5 (63)	-2.9 (55)	2.1 (91)	5.5 (36)
NCREIF ODCE			1.1 (62)	1.1 (62)	2.5 (55)	2.0 (59)	-4.9 (69)	-4.3 (79)	2.9 (75)	5.6 (35)
Harrison Street Core Property	91,227,779	1.3	8.0	0.8	0.9	1.3	-3.0	0.3	3.0	-
Invesco	219,500,234	3.2	-0.8	-0.8	-1.8	-3.2	-7.6	-6.2	0.5	4.6
Invesco US Val IV	94,745	0.0	0.0	0.0	-5.0	-11.1	-32.0	-43.1	-26.7	-
Invesco US Val V	23,581,211	0.3	1.9	1.9	2.0	0.5	-15.0	-11.6	-1.3	-
Invesco US Val VI	26,996,014	0.4	0.0	0.0	3.0	0.3	-2.2	-	-	-
PGIM RE US Debt Fund	72,391,487	1.1	1.8	1.8	5.1	6.9	6.5	6.4	5.9	-
NCREIF ODCE			1.1	1.1	2.5	2.0	-4.9	-4.3	2.9	5.6
Stockbridge Value IV	26,599,512	0.4	0.0	0.0	-2.1	-5.8	-5.3	1.2	-	-
Stockbridge Value V	10,579,810	0.2	0.0	0.0	-2.0	-	-	-	-	-
NCREIF ODCE			1.1	1.1	2.5	2.0	-4.9	-4.3	2.9	5.6



	Market Value	% of Portfolio	3 Mo Rank	YTD	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Real Assets	432,232,776	6.3	3.8	3.8	5.9	12.6	9.5	8.3	11.9	8.3
Blended Private Real Assets Index			-4.2	-4.2	8.9	10.9	8.4	7.3	7.2	6.9
Blended Secondary CA Private RA Index			0.6	0.6	4.7	7.4	6.7	9.1	9.5	7.4
Private Real Asset***	299,672,312	4.4	5.0	5.0	6.1	11.8	9.1	8.1	11.7	-
Brookfield Super-Core Infrastructure Partners	67,907,206	1.0	1.7	1.7	5.5	8.5	8.8	8.4	-	-
KKR Diversified Core Infrastructure Fund	64,653,258	0.9	1.3	1.3	6.1	8.8	7.4	-	-	-
Public Real Assets	305,085,203	4.4	6.6	6.6	8.0	9.7	5.2	1.0	12.0	-
Blended Public Real Assets Index			6.5	6.5	7.8	9.6	5.2	1.0	12.2	5.6
SSgA Custom Real Assets	305,085,203	4.4	6.6	6.6	8.0	9.7	5.2	1.0	12.0	-
SSgA Custom Real Assets Index			6.5	6.5	7.8	9.6	5.2	1.0	12.2	-
Liquidity	423,107,202	6.2	1.2	1.2	3.9	5.1	5.2	-	-	-
Blended Liquidity Index			1.5	1.5	4.4	5.5	4.6	-	-	-
Cash Flow-Matched Liquidity	296,188,290	4.3	1.2	1.2	3.8	5.0	4.9	-	-	-
Bloomberg U.S. Gov/Credit 1-3 Year Index			1.6	1.6	4.6	5.6	4.5	3.1	1.6	1.7
Bloomberg U.S. Credit 1-3 Year Index			1.6	1.6	5.0	6.1	5.4	3.7	2.5	2.2
Insight Investment*	271,538,399	4.0	1.6	1.6	4.3	5.5	5.2	-	-	-
Bloomberg U.S. Credit 1-3 Year Index			1.6	1.6	5.0	6.1	5.4	3.7	2.5	2.2
County Treasury Pool**	24,649,891	0.4	0.2	0.2	1.7	3.1	3.8	2.9	2.3	2.1
90 Day U.S. Treasury Bill			1.0	1.0	3.6	5.0	5.1	4.2	2.6	1.9
Cash & Cash Overlay	188,324,896	2.7	1.2	1.2	3.9	5.3	5.6	4.7	2.9	2.0
90 Day U.S. Treasury Bill			1.0	1.0	3.6	5.0	5.1	4.2	2.6	1.9
General Account	174,033,307	2.5	1.2	1.2	3.9	5.4	5.6	4.7	3.1	2.8
90 Day U.S. Treasury Bill			1.0	1.0	3.6	5.0	5.1	4.2	2.6	1.9



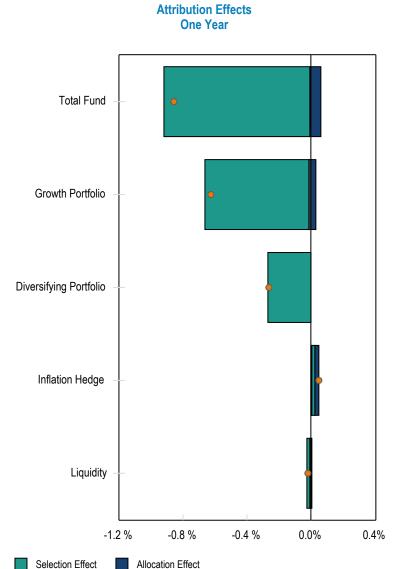
	Performance Attribution
	3 Mo
Wtd. Actual Return	1.3
Wtd. Index Return	0.5
Excess Return	0.8
Selection Effect	0.8
Allocation Effect	0.0
Interaction Effect	0.0

### Attribution Summary Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	0.3	-0.4	0.7	0.4	0.0	0.0	0.4
Diversifying Portfolio	2.8	2.9	-0.1	0.0	0.0	0.0	0.0
Inflation Hedge	3.0	0.5	2.6	0.4	0.0	0.0	0.4
Liquidity	1.2	1.5	-0.3	0.0	0.0	0.0	0.0
<b>Total Fund</b>	1.3	0.5	0.8	8.0	0.0	0.0	0.8

Interaction Effect

Total Effects



	renormance Auribution
	1 Yr
Wtd. Actual Return	7.1
Wtd. Index Return	8.0
Excess Return	-0.9
Selection Effect	-0.9
Allocation Effect	0.1
Interaction Effect	0.0

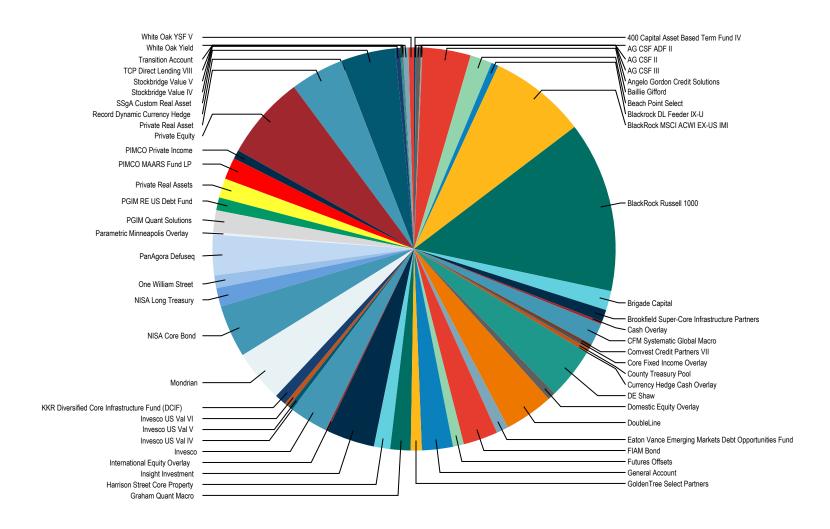
Performance Attribution

## Attribution Summary One Year

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	8.2	9.3	-1.1	-0.6	0.0	0.0	-0.6
Diversifying Portfolio	4.3	5.7	-1.4	-0.3	0.0	0.0	-0.3
Inflation Hedge	6.2	6.1	0.1	0.0	0.0	0.0	0.1
Liquidity	5.1	5.5	-0.4	0.0	0.0	0.0	0.0
<b>Total Fund</b>	7.1	8.0	-0.9	-0.9	0.1	0.0	-0.9

Interaction Effect

Total Effects



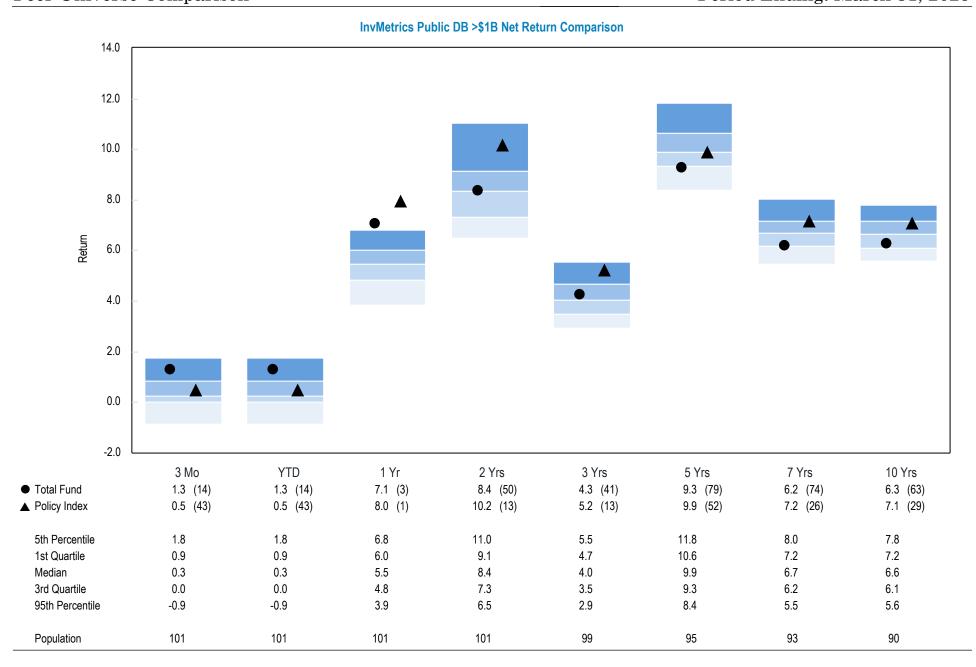


Name	Market Value	% of Portfolio
BlackRock Russell 1000	\$959,480,727	14.0
DE Shaw	\$289,442,622	4.2
PanAgora Defuseq	\$227,044,646	3.3
PGIM Quant Solutions	\$122,559,794	1.8
Domestic Equity Overlay	\$44,428,578	0.6
Baillie Gifford	\$269,453,985	3.9
Mondrian	\$292,443,642	4.3
BlackRock MSCI ACWI EX-US IMI	\$545,818,261	7.9
International Equity Overlay	\$9,717,687	0.1
DoubleLine	\$275,047,575	4.0
FIAM Bond	\$193,797,449	2.8
NISA Core Bond	\$295,500,212	4.3
NISA Long Treasury	\$104,080,050	1.5
Core Fixed Income Overlay	\$7,259,719	0.1
AG CSF ADF II	\$1,504,231	0.0
AG CSF II	\$28,260,568	0.4
AG CSF III	\$2,654,223	0.0
Angelo Gordon Credit Solutions	\$5,547,122	0.1
Beach Point Select	\$123,719,270	1.8
Brigade Capital	\$108,103,138	1.6
GoldenTree Select Partners	\$61,571,418	0.9
PIMCO Diversified	\$108,455,963	1.6
Eaton Vance Emerging Markets Debt Opportunities Fund	\$67,498,984	1.0
400 Capital Asset Based Term Fund IV	\$9,625,213	0.1
Blackrock DL Feeder IX-U	\$39,924,534	0.6
Comvest Credit Partners VII	\$19,965,369	0.3
PIMCO Private Income	\$49,832,031	0.7
TCP Direct Lending VIII	\$5,236,564	0.1
White Oak Yield	\$31,351,708	0.5
White Oak YSF V	\$31,482,561	0.5
Private Equity	\$470,415,976	6.9

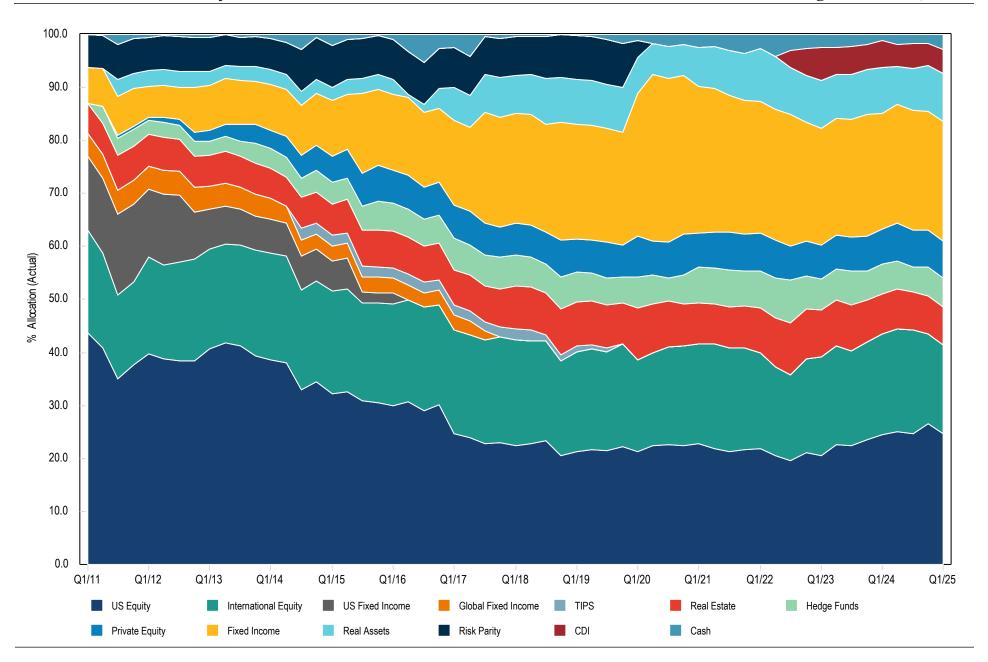


Name	Market Value	% of Portfolio
CFM Systematic Global Macro	\$124,306,994	1.8
Graham Quant Macro	\$114,269,029	1.7
PIMCO MAARS Fund LP	\$122,404,123	1.8
Harrison Street Core Property	\$91,227,779	1.3
Invesco	\$219,500,234	3.2
Invesco US Val IV	\$94,745	0.0
Invesco US Val V	\$23,581,211	0.3
Invesco US Val VI	\$26,996,014	0.4
PGIM RE US Debt Fund	\$72,391,487	1.1
Stockbridge Value IV	\$26,599,512	0.4
Stockbridge Value V	\$10,579,810	0.2
Private Real Assets	\$299,672,312	4.4
Brookfield Super-Core Infrastructure Partners	\$67,907,206	1.0
KKR Diversified Core Infrastructure Fund	\$64,653,258	0.9
SSgA Custom Real Asset	\$305,085,203	4.4
Insight Investment	\$271,538,399	4.0
County Treasury Pool	\$24,649,891	0.4
General Account	\$174,033,307	2.5
Cash Overlay	\$14,289,931	0.2
Transition Account	\$1,656	0.0
Futures Offsets	-\$61,405,983	-0.9
Total Fund	\$6,865,645,882	100.0

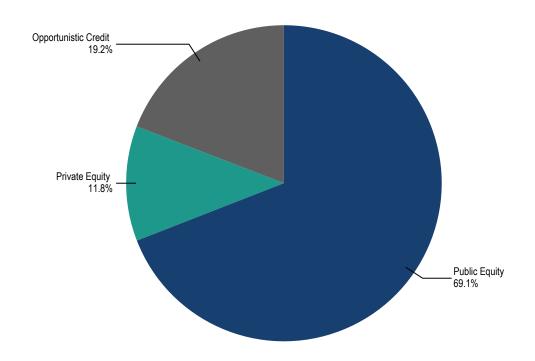












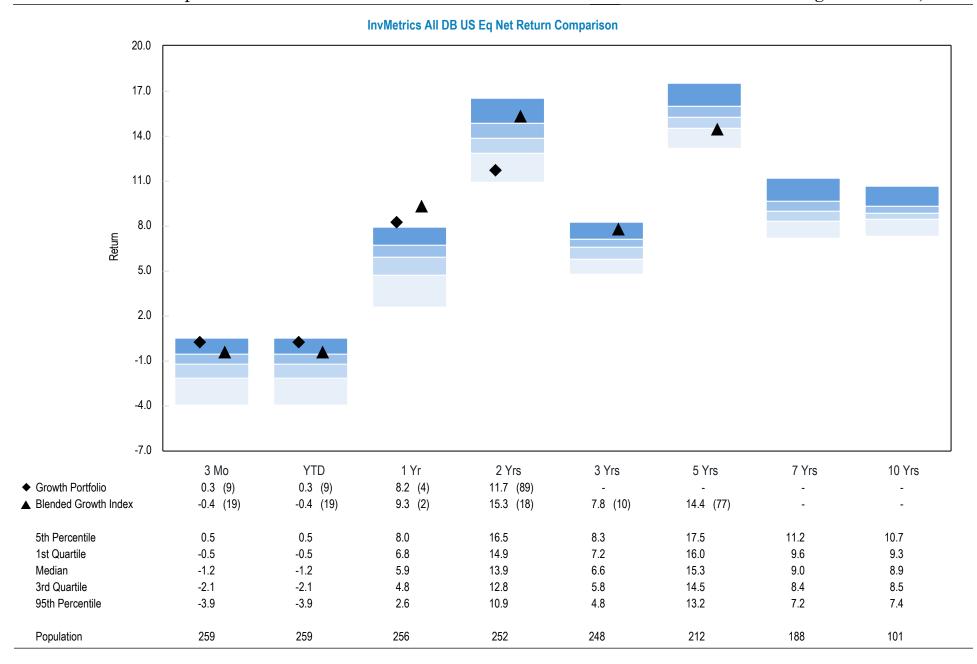
			Manager Contribution to
	Actual \$	Actual %	Excess Return %
US Equity	\$1,642,956,366	41.1%	0.7%
International Equity	\$1,118,671,641	28.0%	0.1%
Private Equity	\$470,415,976	11.8%	-0.1%
Opportunistic Credit	\$765,540,775	19.2%	0.0%
Actual vs. Policy Weight Difference			0.0%
Total	\$3,997,584,758	100.0%	0.7%



## Statistics Summary 3 Years

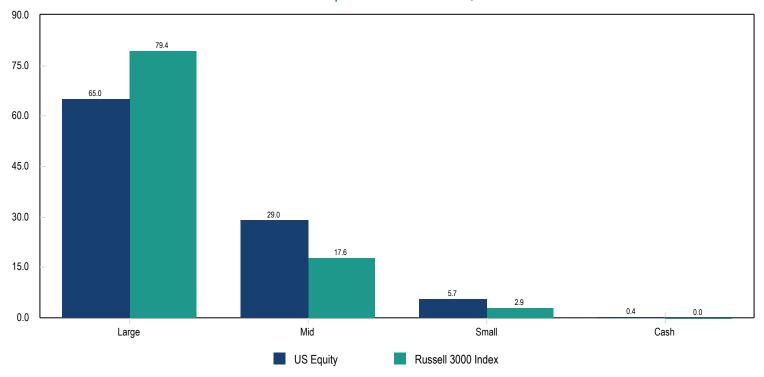
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Growth Portfolio	8.2	6.8	0.5	-0.5	2.2
Blended Growth Index	9.3	7.1	0.6	-	0.0
US Equity	9.1	12.4	0.4	0.9	1.8
Blended US Equity Index	7.2	12.7	0.2	-	0.0
International Equity	6.1	8.2	0.2	-0.3	2.2
Blended International Equity Index	6.8	6.3	0.3	-	0.0
Private Equity	12.7	7.2	1.0	-0.8	14.8
Blended Private Equity Index	26.8	10.8	1.8	-	0.0
Opportunistic Credit	7.9	2.2	1.3	-0.1	1.5
Opportunistic Credit Index	8.1	2.6	1.2	-	0.0













	Characteristics	
	Portfolio	Benchmark
Number of Stocks	2,215	2,960
Wtd. Avg. Mkt. Cap \$M	269,073.9	782,366.5
Median Mkt. Cap \$M	4,172.2	1,983.4
Price/Earnings ratio	18.9	24.4
Current Yield (%)	2.0	1.4
Beta (5 Years, Monthly)	0.9	1.0
Price/Book ratio	2.9	4.5
Return on Equity (%)	8.7	13.8

Top Holdings	Top Holdings		Best Performers		ormers
	(%)		Return (%)		Return (%)
Berkshire Hathaway Inc	2.4	thyssenkrupp AG	160.1	Neumora Therapeutics Inc	-90.6
JPMorgan Chase & Co	1.7	FuboTV Inc	131.7	ModivCare Inc	-88.9
Microsoft Corp	1.3	agilon health inc	127.9	Solo Brands Inc	-85.3
Exxon Mobil Corp	1.3	Corcept Therapeutics Inc	126.7	LanzaTech Global Inc	-82.3
UnitedHealth Group	1.2	Rheinmetall AG	123.9	Aligos Therapeutics Inc	-79.3
Johnson & Johnson	1.1	Accolade Inc	104.1	Kodiak Sciences Inc	-71.8
NVIDIA Corporation	1.0	908 Devices Inc	103.6	CARGO Therapeutics Inc	-71.8
Walmart Inc	1.0	Radius Recycling Inc	92.7	Energy Vault Holdings Inc	-69.5
Apple Inc	0.9	Thales SA	84.8	Fluence Energy Inc	-69.5
Procter & Gamble Co (The)	0.7	Root Inc	83.8	Inozyme Pharma Inc	-67.1



### **US Equity Performance Attribution vs. Russell 3000 Index**

		Attribution Effects			Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1	0.0	0.1	0.0	8.7	8.0	3.9	3.4
Materials	0.0	0.0	0.1	0.0	-0.5	1.1	4.0	2.3
Industrials	-0.1	-0.1	0.0	0.0	-3.3	-2.6	9.8	9.4
Consumer Discretionary	0.3	0.3	0.0	0.0	-10.6	-13.3	11.3	11.4
Consumer Staples	0.1	0.0	0.1	0.0	5.3	4.8	6.3	5.3
Health Care	0.1	0.1	0.0	0.0	5.8	4.6	10.4	10.4
Financials	-0.1	0.0	-0.1	0.0	1.8	1.9	13.4	14.2
Information Technology	0.7	0.4	0.3	-0.1	-11.5	-13.0	25.7	29.9
Communication Services	0.5	0.5	0.0	0.0	-0.8	-6.2	8.6	8.9
Utilities	0.2	0.0	0.2	0.0	7.4	5.3	3.8	2.3
Real Estate	-0.1	0.0	0.0	0.0	1.2	2.6	2.3	2.6
Other	0.0	0.0	0.0	0.0	-4.3	0.0	0.1	0.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Total	2.0	1.3	0.7	-0.1	-2.7	-4.7	100.0	100.0



**U.S. Effective Style Map** 



	Portfolio	Benchmark
Number of Stocks	871	1,007
Wtd. Avg. Mkt. Cap \$M	189,838.9	818,426.8
Median Mkt. Cap \$M	13,056.5	14,052.4
Price/Earnings ratio	19.8	24.9
Current Yield (%)	2.1	1.4
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.8	4.6
Return on Equity (%)	9.9	14.4

Top Holdings		Best Performers		Worst Performers	
	(%)		Return (%)		Return (%)
Berkshire Hathaway Inc	3.9	MP Materials Corp	56.5	Fortrea Holdings Inc	-59.5
JPMorgan Chase & Co	2.8	Medical Properties Trust Inc	54.7	Astera Labs Inc	-54.9
Exxon Mobil Corp	2.1	CVS Health Corp	52.8	Wolfspeed Inc	-54.1
UnitedHealth Group	1.8	GRAIL Inc	43.1	BILL Holdings Inc	-45.8
Johnson & Johnson	1.6	Okta Inc	33.5	Globant SA	-45.1
Walmart Inc	1.5	Philip Morris International Inc	33.1	New Fortress Energy Inc	-45.0
Procter & Gamble Co (The)	1.2	National Fuel Gas Co	31.4	Marvell Technology Inc	-44.2
Bank of America Corp	1.1	Newmont Corporation	30.5	Freshpet Inc	-43.8
Chevron Corp	1.1	Concentrix Corp	29.4	Everus Construction Group Inc	-43.6
Philip Morris International Inc	1.0	BJ's Wholesale Club Holdings Inc	27.7	Trump Media & Technology Group Corp	-42.7



	Portfolio	Benchmark
Number of Stocks	196	1,007
Wtd. Avg. Mkt. Cap \$M	83,953.1	818,426.8
Median Mkt. Cap \$M	25,658.0	14,052.4
Price/Earnings ratio	13.8	24.9
Current Yield (%)	3.1	1.4
Beta (5 Years, Monthly)	0.7	1.0
Price/Book ratio	2.4	4.6
Return on Equity (%)	3.3	14.4

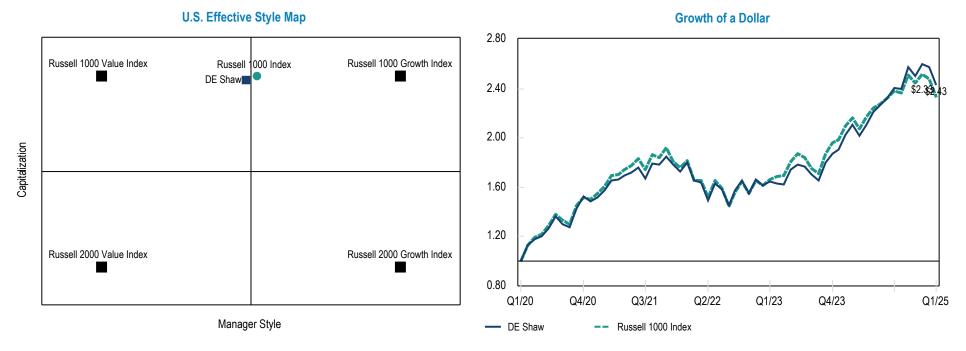
Top Holdings		Best Performers		Worst Performers	
	(%)		Return (%)		Return (%)
Shell Plc	2.1	thyssenkrupp AG	160.1	Recruit Holdings Co Ltd	-27.7
Sony Group Corporation	1.7	Rheinmetall AG	123.9	Disco Corp	-25.9
Novartis AG	1.7	Thales SA	84.8	Advantest Corp	-25.8
Siemens AG	1.6	Societe Generale Group	59.0	Wix.com Ltd	-23.9
TotalEnergies SE	1.6	Just Eat Takeaway.com N.V.	53.2	Sodexo S A	-22.1
Allianz SE	1.6	SSAB Corp	52.6	Novo Nordisk A/S	-20.2
SAP SE	1.6	Evolution Mining Ltd	50.4	Tate & Lyle PLC	-17.9
ASML Holding NV	1.5	Banco Santander SA	44.8	GN Store Nord A/S	-16.5
Commonwealth Bank of Australia	1.4	UniCredit SpA	39.5	Daiichi Sankyo Company Ltd	-14.5
Mitsubishi UFJ Financial Group Inc	1.4	Banco Bilbao Vizcaya Argentaria SA	38.5	SoftBank Group Corp	-14.2



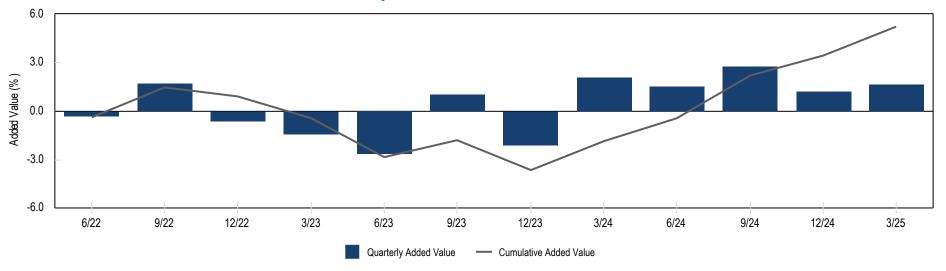
#### PanAgora Defuseq Performance Attribution vs. Russell 1000 Index

		Attribu	tion Effects		Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.7	0.1	0.6	0.1	11.7	9.6	7.4	3.3
Materials	0.1	-0.1	0.4	-0.2	-1.4	1.7	9.2	2.2
Industrials	0.4	0.4	0.0	0.0	2.6	-1.8	9.5	9.0
Consumer Discretionary	1.9	2.2	0.3	-0.5	6.0	-13.3	8.6	11.5
Consumer Staples	0.6	0.0	0.7	0.0	4.2	4.9	12.6	5.4
Health Care	0.3	0.2	0.1	0.0	7.5	5.7	10.8	10.1
Financials	0.6	1.1	-0.2	-0.3	10.0	2.3	10.4	14.0
Information Technology	3.2	4.6	1.8	-3.2	2.1	-12.8	9.1	30.7
Communication Services	2.1	2.0	0.0	0.1	15.4	-6.1	9.6	9.2
Utilities	1.6	0.1	1.0	0.5	10.8	5.2	12.1	2.2
Real Estate	-0.1	0.3	-0.2	-0.3	16.6	3.3	0.5	2.4
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total	11.4	10.8	4.4	-3.8	6.9	-4.5	100.0	100.0





#### **Quarterly and Cumulative Excess Performance**





eV US Small Cap Core Equity Net Return Comparison 25.0 20.0 15.0 10.0 Return 5.0 0.0 -5.0 -10.0 -15.0 3 Mo Fiscal YTD 1 Yr 2 Yrs 3 Yrs 5 Yrs 7 Yrs 10 Yrs 9.8 (23) -8.3 (53) -0.1 (50) -2.4 (44) 4.1 (24) 17.2 (32) 6.0 (74) PGIM Quant Solutions ▲ Russell 2000 Index -9.5 (76) -0.8 (56) -4.0 (56) 7.2 (56) 0.5 (75) 13.3 (78) 5.4 (86) 6.3 (81) 13.2 5th Percentile -3.8 7.8 4.9 7.8 20.4 10.7 11.0 1st Quartile -6.7 2.6 -0.1 9.4 4.0 17.6 8.0 8.4 2.5 Median -8.2 -0.2 -3.1 7.5 15.5 6.9 7.3 -3.5 5.2 6.5 3rd Quartile -9.5 -6.9 0.5 13.5 5.9 95th Percentile -12.1 -7.3 -11.1 1.3 -2.3 11.6 4.3 5.0 146 188 Population 188 188 186 178 171 164



	Portfolio	Benchmark
Number of Stocks	312	1,953
Wtd. Avg. Mkt. Cap \$M	3,137.0	3,463.6
Median Mkt. Cap \$M	2,135.4	812.3
Price/Earnings ratio	13.6	16.6
Current Yield (%)	1.3	1.5
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.2	2.4
Return on Equity (%)	2.6	1.8

Top Holdings		Best Perform	ners	Worst Perform	ers
	(%)		Return (%)		Return (%)
ACI Worldwide Inc	1.0	ThredUp Inc	73.4	Solo Brands Inc	-85.3
Brinker International Inc.	0.9	Xeris Biopharma Holdings Inc	61.9	Sutro Biopharma Inc	-64.6
Telephone and Data Systems Inc	0.9	Option Care Health Inc	50.6	Annexon Inc	-62.4
Guardant Health Inc	0.9	Compass Inc	49.2	MacroGenics Inc	-60.9
Compass Inc	0.8	Akero Therapeutics Inc	45.5	Columbus McKinnon Corp	-54.4
Rambus Inc	0.8	Guardant Health Inc	39.4	Vaxcyte Inc	-53.9
Commvault Systems Inc	0.8	Axsome Therapeutics Inc	37.8	Advantage Solutions Inc	-48.3
Life Time Group Holdings Inc	0.8	Life Time Group Holdings Inc	36.5	Methode Electronics Inc	-45.2
ExlService Holdings Inc	0.8	Halozyme Therapeutics Inc	33.5	Semtech Corp	-44.4
Portland General Electric Co	0.8	Preciaen Inc	33.0	Priority Technology Holdings Inc	-42.0

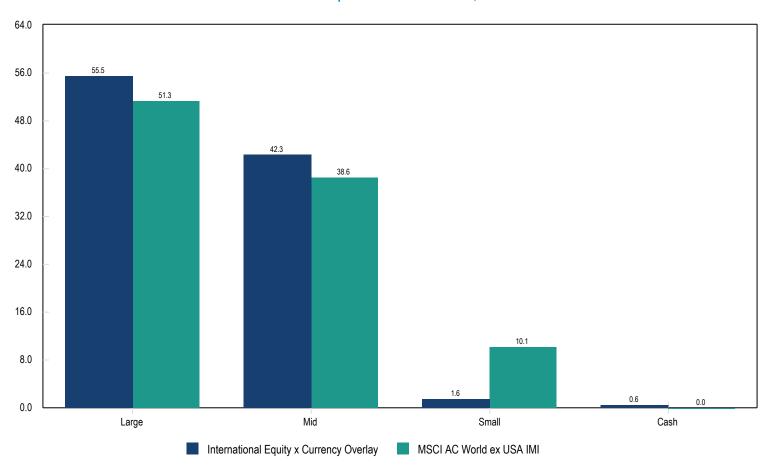


#### **PGIM Quant Solutions Performance Attribution vs. Russell 2000 Index**

		Attribution Effects			Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0	0.0	0.0	0.0	-12.5	-12.9	4.6	5.1
Materials	0.0	0.0	0.0	0.0	-5.3	-6.1	3.9	4.3
Industrials	-1.0	-1.0	0.0	0.0	-16.5	-10.9	18.3	17.8
Consumer Discretionary	0.0	0.0	0.0	0.0	-14.4	-14.7	10.0	9.7
Consumer Staples	-0.1	-0.1	0.0	0.0	-4.2	-0.2	2.3	2.8
Health Care	1.0	1.1	0.0	0.0	-1.9	-8.4	16.2	16.3
Financials	-0.5	-0.5	0.0	0.0	-6.8	-4.2	19.4	18.7
Information Technology	0.9	1.0	-0.1	0.1	-11.3	-18.2	14.6	13.8
Communication Services	0.3	0.3	0.0	0.0	-0.9	-12.4	2.4	2.7
Utilities	0.1	0.0	0.1	0.0	6.8	5.3	3.1	2.7
Real Estate	0.1	0.2	-0.1	0.0	-0.1	-3.2	5.2	6.1
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.9	1.1	-0.1	0.0	-8.4	-9.4	100.0	100.0



#### Market Capitalization as of March 31, 2025



	Characteristics	
	Portfolio	Benchmark
Number of Stocks	2,047	6,124
Wtd. Avg. Mkt. Cap \$M	123,411.0	92,086.0
Median Mkt. Cap \$M	10,574.4	2,100.1
Price/Earnings ratio	14.4	15.5
Current Yield (%)	3.1	3.0
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.5	2.4
Return on Equity (%)	4.8	3.7

Top Holdings		Best Performers		Worst Performers		
	(%)		Return (%)		Return (%)	
Taiwan Semiconductor Man.	4.8	Rheinmetall AG	123.9	Delta Electronics (Thailand) Public Co Ltd	-56.4	
Tencent Holdings LTD	2.2	Hyundai Rotem Co	111.6	PUMA SE	-47.3	
Alibaba Group Holding Ltd	2.1	Victory Giant Technology (HuiZhou) Co Ltd	93.7	TFI International Inc	-42.3	
HDFC Bank Limited	1.6	Hanwha Aerospace Co Ltd	92.0	Soitec SA	-41.3	
Samsung Electronics Co Ltd	1.3	Saab AB (publ)	85.3	Kalyan Jewellers India Limited	-38.9	
ASML Holding NV	1.0	Thales SA	84.8	Oracle Financial Services Software Ltd	-38.5	
United Overseas Bank Ltd	0.9	Harmony Gold Mining Co Ltd	81.5	Wiwynn Corporation	-38.4	
Axis Bank Ltd	0.9	Leonardo SPA	80.4	PT Amman Mineral Internasional Tbk	-38.4	
Jeronimo Martins SGPS SA	0.8	Hanwha Ocean Co Ltd	79.6	Saudi Research and Media Group	-36.9	
PT Bank Rakyat Indonesia (Persero) Tbk	0.7	Pop Mart International Group Ltd	74.3	Jentech Precision Industrial Co	-36.8	



#### International Equity x Currency Overlay Performance Attribution vs. MSCI AC World ex USA IMI

		Attribu	tion Effects		Perfo	ormance	Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.1	0.1	0.0	0.0	9.0	7.3	4.2	4.8
Materials	0.1	0.2	0.0	0.0	9.5	6.7	5.2	7.0
Industrials	-0.2	-0.2	0.0	0.0	3.0	4.3	18.0	15.2
Consumer Discretionary	0.0	0.0	0.0	0.0	3.4	3.3	11.4	11.3
Consumer Staples	0.1	0.1	0.0	0.0	6.6	5.8	8.2	6.8
Health Care	0.1	0.1	0.0	0.0	3.6	2.3	7.6	8.4
Financials	0.2	0.4	-0.2	-0.1	12.1	10.1	18.4	22.0
Information Technology	0.0	0.0	0.0	0.0	-6.1	-6.3	13.4	13.2
Communication Services	-0.2	-0.2	0.0	0.0	7.2	11.1	5.5	5.5
Utilities	0.1	0.1	0.0	0.0	11.2	8.3	3.4	3.0
Real Estate	0.0	0.0	0.0	0.0	1.8	2.0	1.5	2.8
Cash	-0.1	0.0	-0.1	0.0	0.0	0.0	3.1	0.0
Total	0.1	0.6	-0.3	-0.1	4.8	4.7	100.0	100.0



#### International Equity x Currency Overlay vs. MSCI AC World ex USA IMI

	We	Weights		rmance		Attribution Effects			
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects	
Australia	3.1	4.6	-1.8	-2.0	0.0	0.1	0.0	0.1	
Austria	0.3	0.2	15.9	16.4	0.0	0.0	0.0	0.0	
Belgium	0.6	0.5	16.7	9.9	0.0	0.0	0.0	0.0	
Brazil	1.1	1.1	11.3	14.4	0.0	0.0	0.0	0.0	
Canada	5.6	7.9	0.4	1.2	-0.1	0.1	0.0	0.0	
Chile	0.3	0.1	24.4	19.3	0.0	0.0	0.0	0.0	
China	5.0	6.6	14.6	15.4	-0.1	-0.2	0.0	-0.2	
Colombia	0.0	0.0	31.9	31.9	0.0	0.0	0.0	0.0	
Czech Republic	0.0	0.0	27.8	27.7	0.0	0.0	0.0	0.0	
Denmark	1.4	1.7	-9.7	-10.2	0.0	0.0	0.0	0.1	
Egypt	0.0	0.0	8.4	8.1	0.0	0.0	0.0	0.0	
Finland	0.3	0.6	13.1	13.2	0.0	0.0	0.0	0.0	
France	6.3	5.7	8.4	10.3	-0.1	0.0	0.0	-0.1	
Germany	5.0	5.2	17.8	15.9	0.1	0.0	0.0	0.1	
Greece	0.1	0.1	21.2	21.2	0.0	0.0	0.0	0.0	
Hong Kong	2.4	1.7	4.2	5.8	0.0	0.0	0.0	0.0	
Hungary	0.0	0.1	18.9	18.9	0.0	0.0	0.0	0.0	
India	4.4	6.5	-4.6	-4.8	0.0	0.2	0.0	0.2	
Indonesia	0.3	0.5	-11.7	-11.9	0.0	0.0	0.0	0.0	
Ireland	1.1	0.7	6.0	11.3	0.0	0.0	0.0	0.0	
Israel	0.4	0.8	-2.9	-2.9	0.0	0.0	0.0	0.0	
Italy	2.1	1.7	18.5	18.3	0.0	0.1	0.0	0.1	
Japan	16.4	15.6	1.1	1.2	0.0	0.0	0.0	0.0	
Kazakhstan	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	
Korea	1.7	2.7	5.1	4.6	0.0	0.0	0.0	0.0	
Kuwait	0.1	0.2	11.1	11.1	0.0	0.0	0.0	0.0	
Malaysia	0.3	0.5	-7.7	-7.8	0.0	0.0	0.0	0.0	
Mexico	0.6	0.5	9.4	8.3	0.0	0.0	0.0	0.0	
Netherlands	4.2	3.1	0.9	2.0	0.0	0.0	0.0	-0.1	
New Zealand	0.1	0.2	-8.3	-8.2	0.0	0.0	0.0	0.0	
Norway	0.2	0.5	17.0	17.0	0.0	0.0	0.0	0.0	
Peru	0.0	0.1	6.0	6.5	0.0	0.0	0.0	0.0	
Philippines	0.1	0.2	-0.8	-0.9	0.0	0.0	0.0	0.0	



# International Equity x Currency Overlay Equity Performance Attribution

	Wei	ights	Perfor	mance		Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Poland	0.1	0.2	31.9	31.9	0.0	0.0	0.0	0.0
Portugal	0.4	0.1	10.8	10.7	0.0	0.0	0.0	0.0
Qatar	0.1	0.2	-0.1	-0.1	0.0	0.0	0.0	0.0
Saudi Arabia	0.7	1.2	1.2	1.1	0.0	0.0	0.0	0.0
Singapore	2.1	1.2	6.3	6.2	0.0	0.0	0.0	0.0
South Africa	0.5	0.9	7.8	7.9	0.0	0.0	0.0	0.0
Spain	1.5	1.6	32.4	22.2	0.2	0.0	0.0	0.1
Sweden	2.9	2.1	9.0	10.2	0.0	0.0	0.0	0.0
Switzerland	4.6	5.7	11.1	10.5	0.0	-0.1	0.0	0.0
Taiwan	5.3	5.9	-13.8	-12.1	-0.1	0.1	0.0	0.0
Thailand	0.3	0.5	-12.0	-15.4	0.0	0.0	0.0	0.0
Turkey	0.1	0.3	-9.2	-9.3	0.0	0.0	0.0	0.0
United Arab Emirates	0.2	0.4	4.1	4.3	0.0	0.0	0.0	0.0
United Kingdom	13.0	8.8	5.9	8.7	-0.2	0.2	-0.1	-0.2
United States	0.1	0.1	22.6	22.9	0.0	0.0	0.0	0.0
Other	1.3	0.6	14.6	13.7	0.0	0.1	0.0	0.1
Cash	3.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
Total	100.0	100.0	4.8	4.7	-0.3	0.6	-0.2	0.1



#### International Equity x Currency Overlay vs. MSCI AC World ex USA IMI

	We	Weights Performance			Attribution Effects				
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	Total Effects	
Americas	7.8	9.9	3.8	3.7	0.0	0.0	0.0	0.0	
Asia Pacific	41.4	46.7	0.3	0.4	0.0	0.2	0.0	0.2	
EMEA	46.4	42.8	9.0	9.5	-0.2	0.2	0.0	-0.1	
Other	1.3	0.6	14.6	13.7	0.0	0.1	0.0	0.1	
Cash	3.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	
Total	100.0	100.0	4.8	4.7	-0.2	0.3	0.0	0.1	



eV ACWI ex-US Growth Equity Net Return Comparison 20.0 16.0 12.0 8.0 Return 4.0 0.0 -4.0 -8.0 -12.0 3 Mo Fiscal YTD 1 Yr 2 Yrs 3 Yrs 5 Yrs 7 Yrs 10 Yrs 1.2 (52) 1.1 (49) 0.4 (48) 2.3 (83) -1.1 (79) 6.5 (89) 3.0 (82) 4.4 (88) Baillie Gifford 5.4 (9) ▲ MSCI ACWI ex US 5.4 (18) 6.6 (13) 10.2 (16) 5.0 (19) 11.5 (25) 5.0 (40) 5.5 (68) ◆ MSCI ACWI ex US Growth 2.0 (35) 0.6 (54) 1.5 (44) 6.4 (46) 2.1 (45) 8.4 (65) 4.5 (54) 5.4 (69) 5th Percentile 6.4 9.0 9.7 13.1 7.6 14.8 8.8 9.6 1st Quartile 3.4 3.3 3.3 8.8 4.0 11.4 6.4 7.6 0.0 Median 1.3 8.0 6.3 1.8 9.4 4.5 6.1 3rd Quartile -0.4 -2.8 -3.9 3.6 -0.3 8.0 3.4 5.0 95th Percentile -4.8 -7.9 -9.1 -0.4 -4.6 4.8 1.0 4.0 75 Population 103 103 103 103 101 99 87



	Portfolio	Benchmark
Number of Stocks	86	1,982
Wtd. Avg. Mkt. Cap \$M	113,067.0	106,472.5
Median Mkt. Cap \$M	24,219.4	10,603.0
Price/Earnings ratio	17.0	15.7
Current Yield (%)	1.9	3.0
Beta (5 Years, Monthly)	1.2	1.0
Price/Book ratio	3.3	2.5
Return on Equity (%)	6.2	4.0

Top Holdings		Best Performers	S	Worst Performers		
	(%)		Return (%)		Return (%)	
Taiwan Semiconductor Man.	5.6	Alibaba Group Holding Ltd	55.1	Soitec SA	-41.3	
United Overseas Bank Ltd	3.4	LY Corporation	28.6	Greggs PLC	-35.7	
Tencent Holdings LTD	2.3	B3 SA - Brasil Bolsa Balcao	28.3	Trainline Plc	-35.2	
ASML Holding NV	2.3	Banco De Chile	26.1	Chroma Ate Inc	-31.2	
Investor AB publ	2.0	Anheuser-Busch InBev SA/NV	23.1	Recruit Holdings Co Ltd	-27.7	
Experian Plc	1.9	Spotify Technology SA	22.9	Remy Cointreau SA	-22.9	
LONZA GROUP AG	1.9	Roche Holding AG	20.3	Burberry Group PLC	-18.8	
Cie Financiere Richemont	1.8	TotalEnergies SE	19.9	Taiwan Semiconductor Man.	-16.0	
DSV A/S	1.7	Skandinaviska Enskilda Banken Ab	19.5	Ashtead Group PLC	-13.4	
MercadoLibre Inc	1.7	Nemetschek SE	19.0	Olympus Corp	-12.8	



#### Baillie Gifford Performance Attribution vs. MSCI AC World ex USA Index

		Attribu	tion Effects		Perfo	ormance	Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0	0.6	-0.1	-0.5	19.9	8.5	0.9	5.0
Materials	0.1	0.3	0.0	-0.1	11.0	6.7	3.3	6.3
Industrials	-2.0	-1.3	0.0	-0.7	-3.6	5.5	22.1	14.0
Consumer Discretionary	-0.4	-0.3	0.0	-0.1	1.9	4.3	13.7	11.2
Consumer Staples	0.0	0.0	0.0	0.0	6.2	6.6	10.2	7.0
Health Care	-0.1	-0.3	0.1	0.1	-0.6	2.8	5.8	8.7
Financials	-0.8	-0.7	-0.4	0.2	7.6	10.4	16.3	23.7
Information Technology	-1.1	-0.3	-0.7	-0.1	-8.2	-6.2	19.9	13.5
Communication Services	0.1	0.0	0.1	0.0	12.4	11.6	6.7	5.9
Utilities	-0.1	0.0	-0.1	0.0	0.0	9.7	0.0	3.0
Real Estate	0.1	0.0	0.1	0.0	0.0	1.5	0.0	1.8
Cash	-0.1	0.0	-0.1	0.0	0.0	0.0	1.1	0.0
Total	-4.4	-1.9	-1.2	-1.2	1.1	5.4	100.0	100.0



#### Baillie Gifford vs. MSCI AC World ex USA Index

	\A/a	Weights Performance				Attribution Effects				
	vve	ignis	Pertor	mance	Calactic			T : ( : 1		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects		
Australia	1.0	4.4	-0.8	-2.3	0.1	0.3	0.0	0.3		
Austria	0.0	0.1	0.0	13.1	0.0	0.0	0.0	0.0		
Belgium	1.1	0.5	23.1	10.7	0.1	0.0	0.1	0.2		
Brazil	1.7	1.2	6.7	14.2	-0.1	0.0	0.0	-0.1		
Canada	2.9	8.1	-7.5	1.5	-0.7	0.2	0.5	-0.1		
Chile	0.9	0.1	26.1	18.7	0.0	0.1	0.1	0.2		
China	5.7	7.3	12.6	15.8	-0.2	-0.2	0.1	-0.3		
Colombia	0.0	0.0	0.0	36.4	0.0	0.0	0.0	0.0		
Czech Republic	0.0	0.0	0.0	28.7	0.0	0.0	0.0	0.0		
Denmark	1.9	1.8	-8.7	-11.6	0.1	0.0	0.0	0.0		
Egypt	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0		
Finland	0.0	0.6	0.0	14.4	0.0	-0.1	0.0	-0.1		
France	4.7	6.4	-0.3	10.5	-0.7	-0.1	0.2	-0.6		
Germany	1.9	5.7	12.4	15.8	-0.2	-0.4	0.1	-0.5		
Greece	0.0	0.1	0.0	23.4	0.0	0.0	0.0	0.0		
Hong Kong	3.9	1.7	2.2	6.3	-0.1	0.0	-0.1	-0.1		
Hungary	0.0	0.1	0.0	18.0	0.0	0.0	0.0	0.0		
India	3.0	5.8	-4.2	-2.8	-0.1	0.2	0.0	0.2		
Indonesia	0.0	0.4	0.0	-11.1	0.0	0.1	0.0	0.1		
Ireland	3.1	0.7	3.6	12.3	-0.1	0.2	-0.2	-0.1		
Israel	0.0	0.6	0.0	-0.9	0.0	0.0	0.0	0.0		
Italy	0.0	1.6	0.0	19.7	0.0	-0.2	0.0	-0.2		
Japan	13.7	14.5	-2.8	0.5	-0.5	0.0	0.0	-0.4		
Korea	0.8	2.7	8.6	4.9	0.1	0.0	-0.1	0.0		
Kuwait	0.0	0.2	0.0	11.4	0.0	0.0	0.0	0.0		
Malaysia	0.0	0.5	0.0	-6.0	0.0	0.1	0.0	0.1		
Mexico	1.3	0.5	10.5	8.9	0.0	0.0	0.0	0.0		
Netherlands	8.4	3.5	0.3	1.8	-0.1	-0.2	-0.1	-0.3		
New Zealand	0.0	0.2	0.0	-8.5	0.0	0.0	0.0	0.0		
Norway	0.0	0.4	0.0	21.0	0.0	-0.1	0.0	-0.1		
Peru	0.0	0.1	0.0	6.1	0.0	0.0	0.0	0.0		
Philippines	0.0	0.2	0.0	-0.3	0.0	0.0	0.0	0.0		
Poland	0.0	0.2	0.0	33.0	0.0	-0.1	0.0	-0.1		



	Wei	ights	Perfor	mance		Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Portugal	1.4	0.1	10.8	6.8	0.0	0.0	0.1	0.1
Qatar	0.0	0.3	0.0	-0.8	0.0	0.0	0.0	0.0
Saudi Arabia	0.0	1.2	0.0	1.8	0.0	0.0	0.0	0.0
Singapore	3.2	1.2	6.4	7.6	0.0	0.0	0.0	0.0
South Africa	0.0	0.8	0.0	11.6	0.0	0.0	0.0	0.0
Spain	0.0	1.6	0.0	23.0	0.0	-0.3	0.0	-0.3
Sweden	7.0	1.9	8.3	11.2	-0.1	0.3	-0.1	0.1
Switzerland	4.8	6.2	7.6	11.1	-0.2	-0.1	0.0	-0.2
Taiwan	8.2	5.8	-16.5	-12.5	-0.2	-0.4	-0.1	-0.7
Thailand	0.0	0.4	0.0	-13.4	0.0	0.1	0.0	0.1
Turkey	0.0	0.2	0.0	-8.9	0.0	0.0	0.0	0.0
United Arab Emirates	0.0	0.4	0.0	4.9	0.0	0.0	0.0	0.0
United Kingdom	15.5	9.0	-2.9	10.0	-1.2	0.3	-0.8	-1.7
United States	0.0	0.1	0.0	39.0	0.0	0.0	0.0	0.0
Other	2.7	0.6	17.8	16.6	0.0	0.2	0.0	0.3
Cash	1.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
Total	100.0	100.0	1.1	5.4	-4.1	0.2	-0.5	-4.4



#### Baillie Gifford vs. MSCI AC World ex USA Index

	Wei	Weights		mance		Attributi		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	Total Effects
Americas	6.9	10.1	4.1	4.0	0.0	0.0	0.0	0.1
Asia Pacific	39.5	45.0	-2.0	0.9	-1.3	0.2	0.2	-0.9
EMEA	49.8	44.3	2.2	10.2	-3.5	0.3	-0.4	-3.7
Other	2.7	0.6	17.8	16.6	0.0	0.2	0.0	0.3
Cash	1.1	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1
Total	100.0	100.0	1.1	5.4	-4.8	0.7	-0.3	-4.4



	Portfolio	Benchmark
Number of Stocks	78	1,143
Wtd. Avg. Mkt. Cap \$M	164,640.6	81,678.5
Median Mkt. Cap \$M	19,581.1	10,837.3
Price/Earnings ratio	11.2	12.0
Current Yield (%)	4.4	4.2
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.1	1.8
Return on Equity (%)	4.8	2.8

Top Holdings		Best Performers		Worst Performers	
	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	8.1	Alibaba Group Holding Ltd	55.1	Lg Chem Ltd	-26.8
Alibaba Group Holding Ltd	5.1	Tingyi (Cayman Islands) Holding Corp	28.8	Hon Hai Precision Industry	-21.7
HDFC Bank Limited	3.6	Itau Unibanco Holding SA	28.0	Taiwan Semiconductor Man.	-16.0
Tencent Holdings LTD	3.5	Barrick Gold Corp	26.1	Guangdong Investment Ltd	-14.1
Axis Bank Ltd	3.0	Ambev SA	25.2	Perusahaan Perseroan	-13.6
Samsung Electronics Co Ltd	2.9	Itausa S A	24.2	Beijing-Shanghai High-Speed Railway Co Ltd	-9.0
PT Bank Rakyat Indonesia (Persero) Tbk	2.7	WH Group Ltd	22.2	Sinotruk (Hong Kong) Ltd	-7.6
Shinhan Financial Group Co Ltd	2.5	Tencent Holdings LTD	19.0	Lite-On Technology Corp	-7.6
Petroleo Brasileiro S.A.	2.4	Hypera SA	17.2	China Tower Corporation Ltd	-6.8
Samsung Electronics Co Ltd	2.1	Vale SA	17 1	Bidvest Group Ltd	-6.6



#### Mondrian Performance Attribution vs. MSCI AC World ex USA Value

		Attribution Effects			Perfo	ormance	Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0	0.1	0.0	0.0	10.4	9.7	6.4	8.6
Materials	0.7	1.2	0.2	-0.7	22.1	4.8	3.2	7.0
Industrials	0.2	0.1	-0.1	0.2	9.5	7.9	20.1	8.7
Consumer Discretionary	-0.1	-0.1	0.0	0.0	6.5	7.1	9.0	8.6
Consumer Staples	0.0	0.0	0.0	0.0	8.9	8.6	9.3	6.6
Health Care	0.1	0.0	0.1	0.0	11.3	11.5	8.2	5.4
Financials	1.3	5.8	-0.7	-3.8	28.1	11.9	12.3	35.8
Information Technology	0.6	0.6	0.0	0.0	3.8	-5.3	6.2	6.3
Communication Services	-1.1	-1.3	0.0	0.3	-16.2	10.3	4.1	5.1
Utilities	0.3	0.1	0.1	0.1	13.9	11.7	8.3	4.9
Real Estate	0.1	0.0	0.1	0.0	0.0	3.9	0.0	2.9
Cash	-1.1	0.0	-1.1	0.0	0.0	0.0	13.0	0.0
Total	1.0	6.5	-1.5	-4.0	9.8	8.8	100.0	100.0



#### Mondrian vs. MSCI AC World ex USA Value

	Wai	Weights Performance				Attribution Effects			
	AAGI	giita	FEIIOI	mance	Selection	Country	Interaction	Total	
	Portfolio	Benchmark	Portfolio	Benchmark	Effects	Effects	Effects	Effects	
Australia	1.7	4.2	-1.2	-0.7	0.0	0.2	0.0	0.2	
Austria	1.0	0.2	15.6	16.0	0.0	0.1	0.0	0.1	
Belgium	0.0	0.5	0.0	17.3	0.0	0.0	0.0	0.0	
Brazil	0.1	1.2	18.1	15.3	0.0	-0.1	0.0	-0.1	
Canada	3.2	8.2	3.6	0.8	0.2	0.4	-0.1	0.5	
Chile	0.0	0.1	9.3	21.0	0.0	0.0	0.0	0.0	
China	0.3	6.9	13.8	15.6	-0.1	-0.5	0.1	-0.5	
Colombia	0.0	0.0	0.0	38.4	0.0	0.0	0.0	0.0	
Czech Republic	0.0	0.0	0.0	33.7	0.0	0.0	0.0	0.0	
Denmark	0.0	0.4	0.0	16.3	0.0	0.0	0.0	0.0	
Egypt	0.0	0.0	0.0	7.9	0.0	0.0	0.0	0.0	
Finland	0.0	1.1	10.4	15.1	-0.1	-0.1	0.0	-0.1	
France	9.9	6.3	10.7	16.4	-0.4	0.3	-0.2	-0.3	
Germany	8.7	6.3	21.9	17.7	0.3	0.2	0.1	0.6	
Greece	0.0	0.1	0.0	28.9	0.0	0.0	0.0	0.0	
Hong Kong	2.2	2.2	5.2	6.5	0.0	0.0	0.0	0.0	
Hungary	0.0	0.1	0.0	18.2	0.0	0.0	0.0	0.0	
India	0.1	5.8	2.5	-2.2	0.3	0.6	-0.3	0.6	
Indonesia	0.0	0.4	-7.3	-8.8	0.0	0.1	0.0	0.1	
Ireland	0.0	0.3	0.0	14.7	0.0	0.0	0.0	0.0	
Israel	0.0	0.6	0.0	-2.3	0.0	0.1	0.0	0.1	
Italy	5.7	2.4	18.6	24.7	-0.1	0.5	-0.2	0.2	
Japan	21.6	15.0	3.9	4.7	-0.1	-0.3	0.0	-0.4	
Kazakhstan	0.0	0.0	-2.0	0.0	0.0	0.0	0.0	0.0	
Korea	0.1	2.8	3.0	4.6	0.0	0.1	0.0	0.1	
Kuwait	0.0	0.2	0.0	10.8	0.0	0.0	0.0	0.0	
Malaysia	0.0	0.5	2.7	-5.3	0.0	0.1	0.0	0.1	
Mexico	0.0	0.5	5.6	5.4	0.0	0.0	0.0	0.0	
Netherlands	1.7	1.7	-0.1	14.2	-0.2	0.0	0.0	-0.2	
New Zealand	0.0	0.1	0.0	-5.7	0.0	0.0	0.0	0.0	
Norway	0.0	0.5	0.0	23.6	0.0	-0.1	0.0	-0.1	
Peru	0.0	0.1	1.5	1.5	0.0	0.0	0.0	0.0	
Philippines	0.0	0.2	8.3	2.1	0.0	0.0	0.0	0.0	



	We	ights	Perfor	mance		Attributio	on Effects	
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Poland	0.0	0.3	0.0	35.7	0.0	-0.1	0.0	-0.1
Portugal	0.0	0.1	10.8	5.0	0.0	0.0	0.0	0.0
Qatar	0.0	0.2	0.0	-0.9	0.0	0.0	0.0	0.0
Saudi Arabia	0.1	1.2	6.5	5.4	0.0	0.0	0.0	0.0
Singapore	2.8	1.1	6.4	7.0	0.0	0.0	0.0	0.0
South Africa	0.0	0.7	0.0	6.3	0.0	0.0	0.0	0.0
Spain	3.2	2.3	44.8	31.3	0.3	0.2	0.1	0.6
Sweden	0.0	1.6	0.0	15.6	0.0	-0.1	0.0	-0.1
Switzerland	2.8	6.4	21.3	14.7	0.4	-0.2	-0.2	0.0
Taiwan	0.1	5.0	-13.9	-7.5	-0.3	0.8	0.3	0.8
Thailand	0.0	0.4	0.0	-3.4	0.0	0.1	0.0	0.1
Turkey	0.0	0.2	0.0	-7.9	0.0	0.0	0.0	0.0
United Arab Emirates	0.0	0.5	0.1	4.6	0.0	0.0	0.0	0.0
United Kingdom	20.3	10.5	10.9	11.4	0.0	0.3	0.0	0.2
United States	0.0	0.1	0.0	71.2	0.0	-0.1	0.0	-0.1
Other	1.3	0.3	7.4	7.9	0.0	0.0	0.0	0.0
Cash	13.0	0.0	0.0	0.0	0.0	-1.1	0.0	-1.1
Total	100.0	100.0	9.8	8.8	0.1	1.4	-0.5	1.0



#### Mondrian vs. MSCI AC World ex USA Value

	Wei	ights	Perfo	rmance	Attribution Effects				
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	Total Effects	
Americas	3.3	10.3	3.9	3.7	0.0	0.4	0.0	0.4	
Asia Pacific	29.0	44.6	3.9	3.4	0.3	0.8	-0.1	1.0	
EMEA	53.4	44.8	15.8	15.4	0.2	0.6	0.0	0.8	
Other	1.3	0.3	7.4	7.9	0.0	0.0	0.0	0.0	
Cash	13.0	0.0	0.0	0.0	0.0	-1.1	0.0	-1.1	
Total	100.0	100.0	9.8	8.8	0.5	0.6	-0.1	1.0	



#### BlackRock MSCI ACWI EX-US IMI Performance Attribution vs. MSCI AC World ex USA IMI (Net)

		Attribution Effects			Perfo	ormance	Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0	0.0	0.0	0.0	7.2	7.3	4.8	4.8
Materials	0.0	0.0	0.0	0.0	6.8	6.7	7.0	7.0
Industrials	0.0	0.0	0.0	0.0	4.1	4.3	15.1	15.2
Consumer Discretionary	0.0	0.0	0.0	0.0	3.2	3.3	11.3	11.3
Consumer Staples	0.0	0.0	0.0	0.0	5.6	5.8	6.8	6.8
Health Care	0.0	0.0	0.0	0.0	2.0	2.3	8.3	8.4
Financials	0.0	0.0	0.0	0.0	10.0	10.1	21.9	22.0
Information Technology	0.0	0.0	0.0	0.0	-6.4	-6.3	13.3	13.2
Communication Services	0.0	0.0	0.0	0.0	11.1	11.1	5.5	5.5
Utilities	0.0	0.0	0.0	0.0	8.2	8.3	3.1	3.0
Real Estate	0.0	0.0	0.0	0.0	1.8	2.0	2.8	2.8
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Total	-0.1	-0.1	0.0	0.0	4.6	4.7	100.0	100.0



	Portfolio	Benchmark
Number of Stocks	1,998	6,124
Wtd. Avg. Mkt. Cap \$M	106,335.1	92,086.0
Median Mkt. Cap \$M	10,603.0	2,100.1
Price/Earnings ratio	15.7	15.5
Current Yield (%)	3.0	3.0
Beta (3 Years, Monthly)	1.0	1.0
Price/Book ratio	2.5	2.4
Return on Equity (%)	4.1	3.7

Top Holdings		Best Performers		Worst Performers	
	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	2.5	Rheinmetall AG	123.9	Delta Electronics (Thailand) Public Co Ltd	-56.4
Tencent Holdings LTD	1.5	Hyundai Rotem Co	111.6	PUMA SE	-47.3
Alibaba Group Holding Ltd	1.0	Victory Giant Technology (HuiZhou) Co Ltd	93.7	TFI International Inc	-42.3
SAP SE	1.0	Hanwha Aerospace Co Ltd	92.0	Kalyan Jewellers India Limited	-38.9
ASML Holding NV	1.0	Saab AB (publ)	85.3	Oracle Financial Services Software Ltd	-38.5
Nestle SA, Cham Und Vevey	0.9	Thales SA	84.8	Wiwynn Corporation	-38.4
Astrazeneca PLC	0.8	Harmony Gold Mining Co Ltd	81.5	PT Amman Mineral Internasional Tbk	-38.4
Shell Plc	0.8	Leonardo SPA	80.4	Saudi Research and Media Group	-36.9
Roche Holding AG	0.8	Hanwha Ocean Co Ltd	79.6	Jentech Precision Industrial Co	-36.8
Novo Nordisk A/S	0.8	Pop Mart International Group Ltd	74.3	Air Canada	-36.4



#### BlackRock MSCI ACWI EX-US IMI vs. MSCI AC World ex USA IMI (Net)

	Wei	Weights		Performance		Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Australia	4.6	4.6	-1.9	-2.0	0.0	0.0	0.0	0.0
Austria	0.2	0.2	16.4	16.4	0.0	0.0	0.0	0.0
Belgium	0.5	0.5	9.9	9.9	0.0	0.0	0.0	0.0
Brazil	1.1	1.1	14.4	14.4	0.0	0.0	0.0	0.0
Canada	8.0	7.9	1.2	1.2	0.0	0.0	0.0	0.0
Chile	0.1	0.1	19.2	19.3	0.0	0.0	0.0	0.0
China	6.6	6.6	15.4	15.4	0.0	0.0	0.0	0.0
Colombia	0.0	0.0	31.9	31.9	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	27.8	27.7	0.0	0.0	0.0	0.0
Denmark .	1.7	1.7	-10.2	-10.2	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	8.4	8.1	0.0	0.0	0.0	0.0
Finland	0.6	0.6	13.1	13.2	0.0	0.0	0.0	0.0
France	5.7	5.7	10.3	10.3	0.0	0.0	0.0	0.0
Germany	4.9	5.2	15.9	15.9	0.0	0.0	0.0	0.0
Greece	0.1	0.1	21.2	21.2	0.0	0.0	0.0	0.0
Hong Kong	1.7	1.7	5.8	5.8	0.0	0.0	0.0	0.0
Hungary	0.1	0.1	18.9	18.9	0.0	0.0	0.0	0.0
India	6.8	6.5	-4.7	-4.8	0.0	0.0	0.0	0.0
Indonesia	0.5	0.5	-11.9	-11.9	0.0	0.0	0.0	0.0
Ireland	0.7	0.7	11.3	11.3	0.0	0.0	0.0	0.0
Israel	0.8	0.8	-2.9	-2.9	0.0	0.0	0.0	0.0
Italy	1.6	1.7	18.3	18.3	0.0	0.0	0.0	0.0
Japan	15.6	15.6	1.2	1.2	0.0	0.0	0.0	0.0
Korea	2.7	2.7	4.6	4.6	0.0	0.0	0.0	0.0
Kuwait	0.2	0.2	11.1	11.1	0.0	0.0	0.0	0.0
Malaysia	0.5	0.5	-7.9	-7.8	0.0	0.0	0.0	0.0
Mexico	0.5	0.5	8.2	8.3	0.0	0.0	0.0	0.0
Netherlands	3.1	3.1	2.0	2.0	0.0	0.0	0.0	0.0
New Zealand	0.2	0.2	-8.3	-8.2	0.0	0.0	0.0	0.0
Norway	0.5	0.5	17.0	17.0	0.0	0.0	0.0	0.0
Peru	0.1	0.1	6.5	6.5	0.0	0.0	0.0	0.0
Philippines	0.2	0.2	-1.0	-0.9	0.0	0.0	0.0	0.0
Poland	0.3	0.2	31.9	31.9	0.0	0.0	0.0	0.0



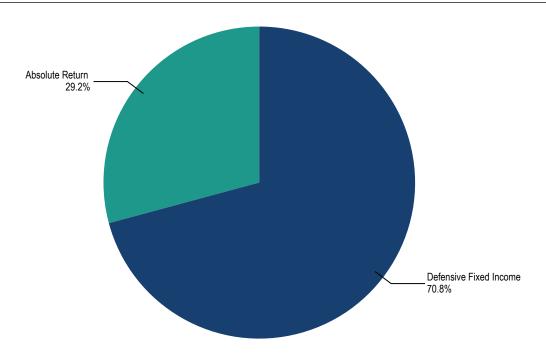
	Wei	ights	Perfor	rmance		Attributio	on Effects	
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Portugal	0.1	0.1	10.7	10.7	0.0	0.0	0.0	0.0
Qatar	0.2	0.2	-0.1	-0.1	0.0	0.0	0.0	0.0
Saudi Arabia	1.2	1.2	1.1	1.1	0.0	0.0	0.0	0.0
Singapore	1.2	1.2	6.2	6.2	0.0	0.0	0.0	0.0
South Africa	0.9	0.9	7.8	7.9	0.0	0.0	0.0	0.0
Spain	1.6	1.6	22.2	22.2	0.0	0.0	0.0	0.0
Sweden	2.1	2.1	10.2	10.2	0.0	0.0	0.0	0.0
Switzerland	5.2	5.7	10.4	10.5	0.0	0.0	0.0	0.0
Taiwan	6.0	5.9	-12.1	-12.1	0.0	0.0	0.0	0.0
Thailand	0.6	0.5	-12.0	-15.4	0.0	0.0	0.0	0.0
Turkey	0.3	0.3	-9.2	-9.3	0.0	0.0	0.0	0.0
United Arab Emirates	0.4	0.4	4.2	4.3	0.0	0.0	0.0	0.0
United Kingdom	8.8	8.8	8.7	8.7	0.0	0.0	0.0	0.0
United States	0.1	0.1	22.6	22.9	0.0	0.0	0.0	0.0
Other	0.6	0.6	13.9	13.7	0.0	0.0	0.0	0.0
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	4.6	4.7	0.0	-0.1	0.0	-0.1



#### BlackRock MSCI ACWI EX-US IMI vs. MSCI AC World ex USA IMI (Net)

	Wei	ights	Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	Total Effects
Americas	9.9	9.9	3.7	3.7	0.0	0.0	0.0	0.0
Asia Pacific	47.3	46.7	0.4	0.4	0.0	0.0	0.0	0.0
EMEA	42.0	42.8	9.5	9.5	0.0	0.0	0.0	-0.1
Other	0.6	0.6	13.9	13.7	0.0	0.0	0.0	0.0
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	4.6	4.7	0.0	-0.1	0.0	-0.1





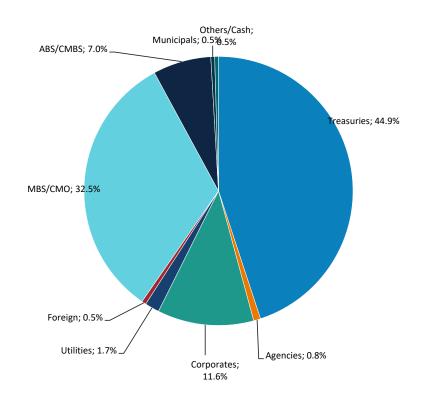
			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Defensive Fixed Income	\$875,685,005	70.8%	-0.1%
Absolute Return	\$360,980,147	29.2%	0.0%
Actual vs. Policy Weight Difference			0.0%
Total	\$1,236,665,152	100.0%	-0.1%

### San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

## Statistics Summary 3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Diversifying Portfolio	4.3	5.0	-0.1	-0.6	2.1
Blended Diversifying Index	5.7	5.0	0.2	-	0.0
Defensive Fixed Income	4.4	6.8	0.0	0.5	0.6
Blended Core Fixed Income Benchmark	4.0	7.3	-0.1	-	0.0
Absolute Return	3.6	7.5	-0.1	-0.6	7.5
Absolute Return Custom Index	9.0	0.2	20.1	-	0.0





Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries	44.9%	44.5%	0.5%
Agencies	0.8%	4.3%	-3.5%
Corporates	11.6%	24.0%	-12.4%
Utilities	1.7%	0.0%	1.7%
Foreign	0.5%	0.0%	0.5%
MBS/CMO	32.5%	24.7%	7.7%
ABS/CMBS	7.0%	2.0%	5.0%
Municipals	0.5%	0.0%	0.5%
Others/Cash	0.5%	0.5%	0.0%
TOTAL	100.0%	100.0%	0.0%

Portfolio Characteristics	
	Portfolio
Total Number of Securities	
Total Market Value	\$ 868,425,286
Current Coupon	4.41
Yield to Maturity	5.11
Average Life	10.60
Duration	7.17
Quality	AA

_	
	Bloomberg Aggregate
	3.48
	4.59
	8.35
	5.98
	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	62.1
5.0 - 7.0	31.5
7.0 - 9.0	5.2
9.0 - 11.0	0.5
11.0 - 13.0	0.4
13.0+	0.2
Unclassified	0.2

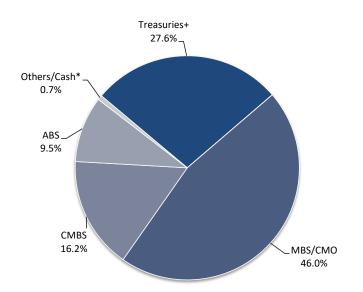
Average Life	
Range	% Held
0.0 - 1.0	3.6
1.0 - 3.0	12.4
3.0 - 5.0	14.5
5.0 - 10.0	37.6
10.0 - 20.0	16.1
20.0+	14.9
Unclassified	1.1

Duration	
Range	% Held
0.0 - 1.0	11.6
1.0 - 3.0	13.2
3.0 - 5.0	20.2
5.0 - 7.0	17.4
7.0 - 10.0	10.2
10.0+	27.4
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	49.2
Aaa (10)	21.3
Aa (9)	11.7
A (8)	8.6
Baa (7)	9.9
Below Baa (6-1)	0.5
Other	-1.3

Coupon	
Range	% Held
0.0 - 5.0	78.5
5.0 - 7.0	19.9
7.0 - 9.0	2.5
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	-1.1





Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries <sup>+</sup>	27.6%	44.5%	-16.9%
Agencies	0.0%	4.3%	-4.3%
Corporates	0.0%	24.0%	-24.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS/CMO	46.0%	24.7%	21.3%
CMBS	16.2%	0.0%	16.2%
ABS	9.5%	2.0%	7.6%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	0.7%	0.5%	0.2%
TOTAL	100.0%	100.0%	0.0%

<sup>+</sup> May include TIPS allocation.

<sup>\*</sup> Includes CLOs.

Portfolio Characteristics	
	Portfolio
Total Number of Securities	254
Total Market Value	\$ 275,047,575
Current Coupon	5.70
Yield to Maturity	5.94
Average Life	8.87
Duration	6.31
Quality	AA+

Bloomberg Aggregate
3.48
4.59
8.35
5.98
AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	26.6
5.0 - 7.0	55.5
7.0 - 9.0	15.9
9.0 - 11.0	0.7
11.0 - 13.0	0.8
13.0+	0.5
Unclassified	0.0

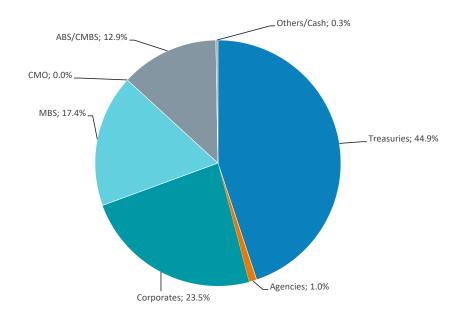
Average Life	
Range	% Held
0.0 - 1.0	10.2
1.0 - 3.0	9.4
3.0 - 5.0	15.9
5.0 - 10.0	37.1
10.0 - 20.0	20.4
20.0+	7.0
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	25.2
1.0 - 3.0	13.2
3.0 - 5.0	22.7
5.0 - 7.0	9.9
7.0 - 10.0	8.3
10.0+	20.8
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	38.3
Aaa (10)	43.4
Aa (9)	5.5
A (8)	7.7
Baa (7)	7.6
Below Baa (6-1)	1.5
Other	-4.1

Coupon	
Range	% Held
0.0 - 5.0	74.0
5.0 - 7.0	23.1
7.0 - 9.0	6.6
9.0 - 11.0	0.4
11.0 - 13.0	0.0
13.0+	0.0
Unclassified/Cash	-4.1





Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries	44.9%	44.5%	0.4%
Agencies	1.0%	4.3%	-3.3%
Corporates	23.5%	24.0%	-0.5%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	17.4%	24.7%	-7.3%
CMO	0.0%	0.0%	0.0%
ABS/CMBS	12.9%	2.0%	11.0%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.3%	0.5%	-0.2%
TOTAL	100.0%	100.0%	0.0%



Portfolio Characteristics	
	Portfolio
Total Number of Securities	574
Total Market Value	\$ 193,797,449
Current Coupon	4.21
Yield to Maturity	4.90
Average Life	9.6
Duration	6.13
Quality	AA-

Bloomberg Aggre	egate
	3.48
	4.59
	8.35
	5.98
	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	63.9
5.0 - 7.0	34.1
7.0 - 9.0	0.3
9.0 - 11.0	1.2
11.0 - 13.0	0.5
13.0+	0.0
Unclassified	0.0

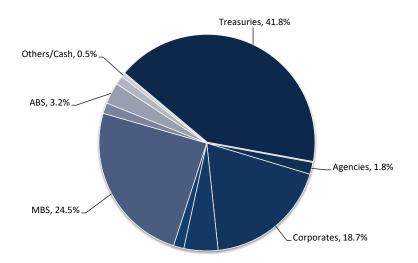
Average Life	
Range	% Held
0.0 - 1.0	-2.6
1.0 - 3.0	10.7
3.0 - 5.0	14.8
5.0 - 10.0	55.5
10.0 - 20.0	3.9
20.0+	12.7
Unclassified	4.98

Duration	
Range	% Held
0.0 - 1.0	12.2
1.0 - 3.0	7.3
3.0 - 5.0	23.5
5.0 - 7.0	29.9
7.0 - 10.0	12.0
10.0+	15.1
Unclassified	0.08

Quality	
Range	% Held
Govt (10)	45.9
Aaa (10)	25.8
Aa (9)	2.7
A (8)	8.1
Baa (7)	17.2
Below Baa (6-1)	0.2
Other	0.00

Coupon	
Range	% Held
0.0 - 5.0	74.2
5.0 - 7.0	24.9
7.0 - 9.0	0.9
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	





Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries	41.8%	44.5%	-2.7%
Agencies	1.8%	4.3%	-2.6%
Corporates	18.7%	24.0%	-5.4%
Utilities	5.1%	0.0%	5.1%
Foreign	1.6%	0.0%	1.6%
MBS	24.5%	24.7%	-0.2%
СМО	1.6%	0.0%	1.6%
ABS	3.2%	2.0%	1.2%
Municipals	1.4%	0.0%	1.4%
Others/Cash	0.5%	0.5%	0.0%
TOTAL	100.0%	100.0%	0.0%



Portfolio Characteristics	
	Portfolio
Total Number of Securities	575
Total Market Value	\$ 295,500,212
Current Coupon	3.84
Yield to Maturity	4.64
Average Life	8.77
Duration	6.05
Quality	Aa2

Bloomberg Aggi	regate
	3.48
	4.59
	8.35
	5.98
	AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	80.6
5.0 - 7.0	18.6
7.0 - 9.0	0.3
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified*	0.5

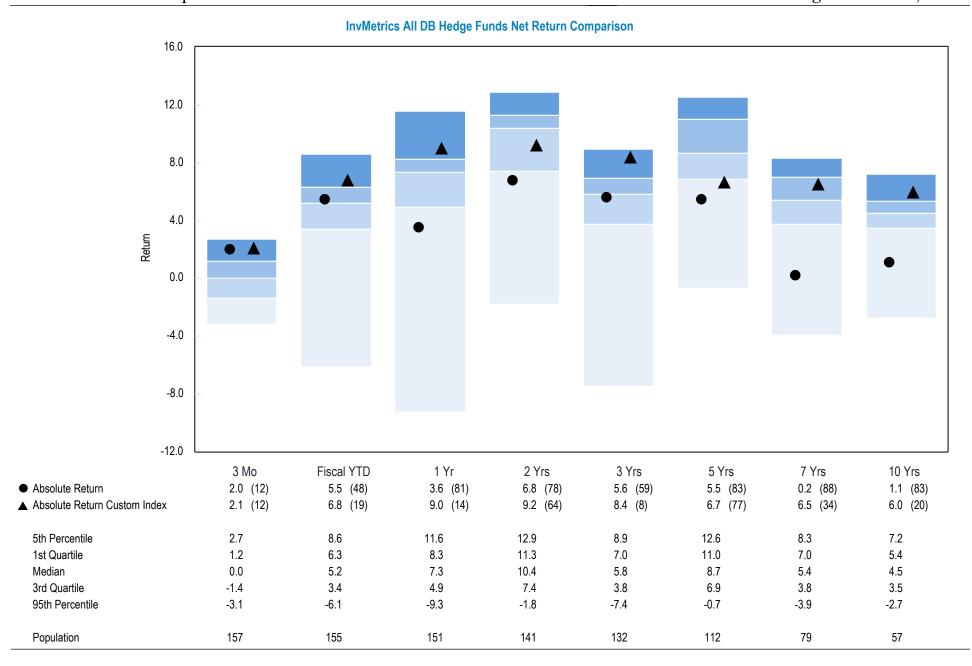
Average Life	
Range	% Held
0.0 - 1.0	2.6
1.0 - 3.0	20.5
3.0 - 5.0	18.0
5.0 - 10.0	39.5
10.0 - 20.0	10.0
20.0+	9.4
Unclassified	0.0

Duration	
Range	% Held
< 1.0	2.7
1.0 - 3.0	21.6
3.0 - 5.0	22.7
5.0 - 7.0	22.2
7.0 - 10.0	14.0
10.0+	16.7
Unclassified	0.0

<sup>\*</sup>Unclassified includes a 0.65% cash position

Quality	
Range	% Held
Govt* (10)	43.6
Aaa (10)	5.4
Aa (9)	27.6
A (8)	12.7
Baa (7)	10.8
Below Baa (6-1)	0.0
Other	0.0

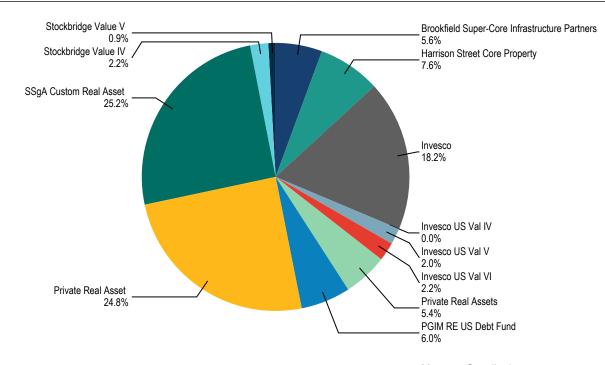
Coupon	
Range	% Held
0.0 - 5.0	78.2
5.0 - 7.0	20.6
7.0 - 9.0	0.7
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	0.5











			Manager Contribution to
	Actual \$	Actual %	Excess Return %
Harrison Street Core Property	\$91,227,779	7.6%	0.0%
Invesco	\$219,500,234	18.2%	-0.4%
Invesco US Val IV	\$94,745	0.0%	0.0%
Invesco US Val V	\$23,581,211	2.0%	0.0%
Invesco US Val VI	\$26,996,014	2.2%	0.0%
PGIM RE US Debt Fund	\$72,391,487	6.0%	0.1%
Stockbridge Value IV	\$26,599,512	2.2%	0.0%
Stockbridge Value V	\$10,579,810	0.9%	0.0%
Private Real Asset	\$299,672,312	24.8%	2.2%
Brookfield Super-Core Infrastructure Partners	\$67,907,206	5.6%	0.4%
KKR Diversified Core Infrastructure Fund	\$64,653,258	5.4%	0.3%
SSgA Custom Real Asset	\$305,085,203	25.2%	0.3%
Actual vs. Policy Weight Difference			-0.1%
Total	\$1,208,288,771	100.0%	2.7%



# San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

	3 Years							
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error			
Inflation Hedge	0.7	3.6	-0.9	0.1	5.1			
Blended Inflation Hedge Index	0.1	6.1	-0.6	-	0.0			
Real Estate	-2.9	4.5	-1.5	0.7	1.8			
NCREIF ODCE	-4.3	5.6	-1.4	-	0.0			
Invesco	-6.2	5.9	-1.7	-1.1	1.8			
NCREIF ODCE	-4.3	5.6	-1.4	-	0.0			
Invesco US Val IV	-43.1	32.4	-1.6	-1.4	31.0			
NCREIF ODCE	-4.3	5.6	-1.4	-	0.0			
Invesco US Val V	-11.6	14.1	-1.1	-0.6	11.5			
NCREIF ODCE	-4.3	5.6	-1.4	-	0.0			
PGIM RE US Debt Fund	6.4	0.7	2.6	1.9	5.5			
NCREIF ODCE	-4.3	5.6	-1.4	-	0.0			
Private Real Assets	8.3	5.7	0.7	0.0	17.3			
Blended Private Real Assets Index	7.3	16.2	0.3	-	0.0			
Public Real Assets	1.0	11.8	-0.2	-0.2	0.3			
Blended Public Real Assets Index	1.0	11.8	-0.2	-	0.0			
SSgA Custom Real Asset	1.0	11.8	-0.2	-0.2	0.3			

11.8

-0.2

1.0

**Statistics Summary** 



SSgA Custom Real Asset Index

0.0

Blended Public Real Assets Index

SSgA Custom Real Asset Index

SSgA Custom Real Asset

-0.3

		5 Years			
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Inflation Hedge	6.9	4.7	0.9	-0.2	4.8
Blended Inflation Hedge Index	7.6	6.9	0.7	-	0.0
Real Estate	2.1	5.7	-0.1	-0.4	2.6
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Invesco	0.5	7.6	-0.2	-1.0	2.2
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Invesco US Val IV	-26.7	26.6	-1.1	-1.2	25.0
NCREIF ODCE	2.9	7.5	0.1	-	0.0
PGIM RE US Debt Fund	5.9	0.9	3.1	0.4	7.4
NCREIF ODCE	2.9	7.5	0.1	-	0.0
Private Real Assets	11.9	10.5	0.9	0.1	20.7
Blended Private Real Assets Index	7.2	19.0	0.3	-	0.0
Public Real Assets	12.0	11.7	0.8	-0.3	0.6

11.7

11.7

11.7

8.0

8.0

8.0

12.2

12.0

12.2

**Statistics Summary** 



0.0

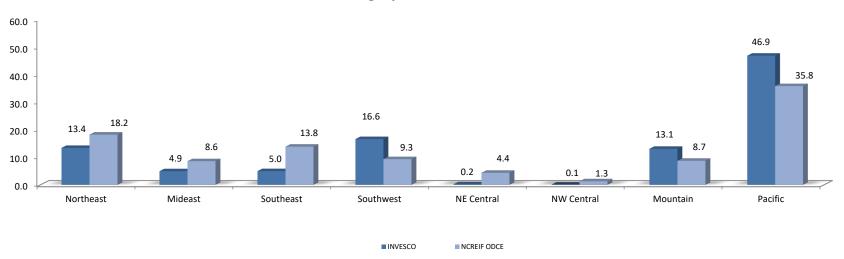
0.6

0.0

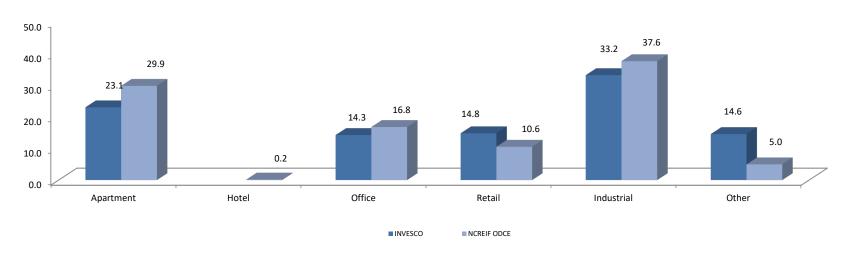




# **Geographic Diversification**



# **Property Diversification**





		Statistics Summa 3 Years	ary		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
County Treasury Pool	2.9	1.9	-0.6	-0.6	2.0
90 Day U.S. Treasury Bill	4.2	0.5	-	-	0.0
County Treasury Pool 2.9 90 Day U.S. Treasury Bill 4.2 Cash & Cash Overlay 4.7		0.5	2.6	2.6	0.2
90 Day U.S. Treasury Bill	4.2	0.5	-	-	0.0
General Account	4.7	0.4	3.8	3.8	0.1
90 Day U.S. Treasury Bill	4.2	0.5	-	-	0.0



## **Acadian Asset Management – MAARS Fund**

Acadian Multi-Asset Absolute Return (MAARS) strategy was incepted in November 2017. MAARS targets a volatility of 6%-8% and a return of cash plus 5%. This is a multi-factorstrategy that aims to exploit behavioral inefficiencies within and across global markets and is designed to be diversifying, dynamic and defensive. It is market neutral, implemented using long and short positions across five primary asset classes (equity, fixed income, currency, commodities, and volatility) and over 100 underlying assets with a focus on liquid instruments. Return forecasts incorporate asset-specific and macroeconomic insights and are utilized to harvest active returns from within and across asset classes through market selection and directional positioning. The strategy integrates risk and return across asset classes. Avoidance of downside events is highlighted in the approach with a greater weighting in their models allocated to down market beneficiaries, such as quality factors, and asymmetric positioning which reduces positions when risk rises. Differentiated attributes of this are its approach and weighting to commodities and its volatility sleeve which can incorporate long volatility.



#### Angelo, Gordon & Co. – Credit Solutions

The Angelo Gordon (AG) Credit Solutions Fund (CSF) expects to hold concentrated positions of 5-8% of NAV (averaging 30 positions over the life of the Fund with recycling). The Fund is targeting a net 15% IRR with a 5-7% current yield. The Fund should be 70% concentrated in the U.S. with the balance in Europe. Finally, while the opportunities can be sourced from both the public markets and the private markets, AG is finding compelling sources of return at this time through structuring new privately placed secured term loans out of public investments made by the firm. CSF will address corporate credit-based opportunities created in three main areas: 1) trading-based price dislocations that reduce creation multiples (price through the debt that must be repaid before value accrues to other stakeholders) while generating high current income; 2) opportunities in issuers tied to industries directly impacted by COVID-19 where the market's perception of the impact differs from the actual impact; and 3) corporate debt issuers that will be materially impacted by the pandemic and will need to restructure, but whose creation value is materially lower than the issuer's intrinsic value.

#### Angelo, Gordon & Co. - CSF (Annex) Dislocation II

The Angelo Gordon Annex Dislocation Fund II (ADFII)'s investment aim is to target senior securities of world-class businesses with irreplaceable assets and strong cash flow profiles which, because of market stress, can be purchased at a material discount to what they believe is a company's long-term intrinsic value. ADFII will invest opportunistically in securities or claims of companies in North America and Europe for which prices have, in Angelo Gordon's view, dislocated from long term fundamentals due to situational market volatility and stress.

#### Angelo, Gordon & Co. – Credit Solutions II

Like its predecessor funds, the Angelo Gordon (AG) Credit Solutions Fund II (CSF II) is an all-weather, solutions-based strategy that targets net returns of 14+% with 5-7% current yield. The Fund will invest in single-name opportunities where price movements and credit documents afford creative financing solutions. This could include companies with upcoming debt maturities, working capital issues, or inefficient capital structures that are inflating financing costs. In these cases, AG will seek to work with management and other creditors to structure a bespoke transaction that avoids bankruptcy and solves the issue for the company in exchange for debt securities with conservative attachment points and healthy yield. While the opportunities are likely to be sourced 75% from the public markets and 25% from the private markets, the "solutions" will likely be private products. During periods of dislocation, the Fund can pivot towards trading-oriented strategies where there is not a need for additional financing, such as sourcing debt in the secondary markets at discounts to intrinsic value. CSF II expects to hold concentrated positions of 5-8% of NAV (averaging 30 positions over the life of the Fund with recycling). The fund should be 70% concentrated in the U.S. with the balance in Europe.



#### **Baillie Gifford - ACWI ex US Focus Equities**

ACWI ex US Focus is a fundamental growth strategy. Research is organized primarily by regional teams, with each member of the ACWI ex US Focus Portfolio Construction Group representing a regional team. Four global sector groups also contribute research. Baillie Gifford conducts approximately 2000 company meetings annually both in Edinburgh and onsite. Companies are evaluated on their growth opportunity relative to the average company, their ability to execute on that opportunity, and the degree to which probability of future success is already valued by the market. Baillie Gifford's basic philosophy is that share prices ultimately follow earnings. They believe that the stock market has a recurring tendency to underappreciate the value of long-term compound growth. The process seeks to add value through use of proprietary fundamental research to identify companies exhibiting some combination of sustained above average growth, and attractive financial characteristics. The portfolio generally holds 60-90 stocks, with country and sector weights +/-10% relative to the index and stock weights +/-5% relative to the index.

#### Beach Point Capital Management, L.P. - Beach Point Select Fund

Beach Point Select Fund is a commingled fund vehicle within the firm's Opportunistic Credit strategy. This fund focuses on off-the-run, complex, and less-liquid securities. It is a best ideas portfolio of distressed debt, special situations, private/direct loans, catalyst-driven high yield bonds and bank loans, and credit-informed equities with a North American and European focus. The Select Fund differs from other funds and accounts in the Opportunistic Credit strategy by pursuing a more concentrated portfolio and emphasizing a higher percentage of less-liquid/private investments. Beach Point invests up and down the entire capital structure and it constructs portfolios with a bottom-up, research-driven approach that also takes into account top-down macro considerations. Its investment process includes idea generation, detailed credit analysis, relative value decision making and investment selection, portfolio construction and on-going monitoring. The ultimate goal of its investment process is to produce a well-diversified investment portfolio with limited downside risk and substantial upside potential.

#### BlackRock - MSCI ACWI ex US IMI Index

The ACWI ex US IMI Index Fund seeks to replicate the return of the MSCI ACWI ex US IMI Index. This index represents the developed equity markets outside of North America, including small cap equity. BlackRock monitors their funds daily to ensure that additions and deletions to the indexes, mergers and acquisitions, restructurings and other capitalization changes are made to the fund in such a way as to minimize tracking error and transactions costs.

#### BlackRock - Russell 1000 Index

The Russell 1000 Index Fund tracks large U.S. companies and achieve broad diversification with low costs by fully replicating the Russell 1000 Index. BlackRock monitors their funds daily to ensure that additions and deletions to the indexes, mergers and acquisitions, restructurings and other capitalization changes are made to the fund in such a way as to minimize tracking error and transactions costs.

#### BlackRock (formerly Tennenbaum Capital Partners) - Direct Lending Funds VIII and IX

TCP Direct Lending Fund VIII is a private investment fund managed by Tennenbaum Capital Partners ("TCP"). The Fund is designed to continue TCP's successful strategy of investing in privately-originated, performing senior secured debt primarily in North America-based companies with target enterprise values between \$100 million and \$1.5 billion. The Fund will include positions in 1st lien, 2nd lien and unitranche debt, with a preference for floating-rate debt, which TCP believes provides better flexibility to adapt to market conditions. TCP's direct lending strategy has generated attractive investment opportunities across market cycles, as evidenced by the Firm's prior direct lending track record. Fund VIII targets an unlevered annual yield of approximately 9-12%, with its return primarily driven by current income. SamCERA committed \$35 million to DLF VIII in June 2016 in its unlevered fund sleeve and \$35 million to the DLF IX in June 2019.



## **Brigade – Opportunistic Credit**

Opportunistic Credit is a fundamental, bottom-up strategy focused on high yield corporate bonds and bank loans with tactical allocations to structured securities, convertibles, and other sectors of the bond markets as they become attractive on a relative value basis. While performing credits represent the majority, Brigade will invest up to 35% of the portfolio in distressed securities and restructuring situations if these types of opportunities are attractive on a risk-adjusted basis and the timing is right with respect to the credit cycle. The portfolio is comprised of mostly North American issuers, but they are not restricted geographically and expect to have a moderate allocation to Europe over time. Although the portfolio is generally long-only, Brigade has the ability to implement a limited amount of tactical macro hedges.

#### **CFM - Systematic Global Macro**

Capital Fund Management (CFM) Systematic Global Macro (SCM) is a directional strategy that takes long and short positions in liquid future and forwards across 130+ markets and across equities, bonds, currencies, and commodities. It is a new strategy that draws on model signals from existing strategies at the firm – Discus (diversified CTA), CFM ISTrends (trend following) and CFM ISTrend Equity Capped (defensive trend following) - and SamCERA is a seed investor with an attractive fee. SGM's objective is to provide absolute returns that are uncorrelated with traditional asset classes over a long time horizon with an annualized volatility target between 8% and 12%. SGM uses a diverse set of trading strategies that are based on factors (momentum, value, carry, macro and sentiment) across asset classes. These technical and fundamental factors operate at different time scales and can have varying degrees of influence on performance depending on market and economic conditions. An additional global macro defensive overlay is combined with these outputs in constructing the final portfolio. CFM uses a form of portfolio construction known as agnostic risk parity to ensure that the SGM portfolio is diversified on an out-of-sample basis. The goal of SGM is to generate consistent returns while limiting drawdowns.

#### DE Shaw – DE Shaw US Broad Market Core Alpha Extension Fund

The D. E. Shaw group believes that there exist some market inefficiencies that may be identified through quantitative analysis, advanced technology, and the insight of practitioners. Identifying these inefficiencies involves a process of hypothesis formulation, testing, and validation. Importantly, to avoid data-mining, the hypothesis formulation precedes the analysis of the historical data. D.E. Shaw's Structured Equity strategies rely largely on quantitative and computational investment techniques developed by the D. E. Shaw over the last two decades in the course of research conducted for purposes of managing the firm's hedge funds. D.E. Shaw's investment process involves a suite of quantitative models, each designed to capitalize on a distinct and uncorrelated set of market inefficiencies. Some of these models are technical in nature and involve price and volume inputs. Other models rely on fundamental data, such as figures gleaned from corporate balance sheets or income statements. Still others, again quantitative, anticipate or react to a particular corporate event or set of events. These models typically operate with forecast horizons of a few weeks to many months. The ability to trade on shorter-term signals distinguishes D.E. Shaw from many of its long only and 130/30 peers. Portfolio construction involves the use of a proprietary optimizer which runs dynamically throughout the trading day. The portfolio is broadly diversified with several hundred long and short positions. Over- and under-weighting of sectors and industries relative to the benchmark will be quite modest, with the intention that most of the alpha be generated by security selection. The US Broad Market Core Alpha Extension Fund is a 130/30 strategy which maintains a beta that is approximately neutral to the Russell 1000 Index.



#### **DoubleLine - Securitized Income**

The DoubleLine Securitized Income strategy is an actively managed, liquid, long only, intermediate-term fixed income product. The primary objective of the strategy is to seek and maximize current income and total return by utilizing a combination of Agency MBS and structured credit. The DoubleLine Structured Products team aims to offer clients investment grade exposure to both interest rate duration and credit spread to provide a more attractive total return profile compared to the benchmark. Securitized Income seeks to maximize income and total return by investing across the structured products universe, focusing on agency mortgage-backed securities (MBS) and investment grade securitized credit. DoubleLine takes a barbelled approach to investing in the securitized market, and they will separate rates from credit and will adjust the allocations to both at the based on the economic cycle and opportunities. Duration positioning is achieved through Agency MBS, Agency CMBS, and treasuries while credit exposure is attained through all areas of structured credit.

#### **Eaton Vance – Emerging Markets Debt Opportunities Fund**

Eaton Vance's Emerging Market Debt Opportunities (EMDO) strategy utilizes a combination approach to build a portfolio of fixed income securities that is highly diversified across geographies, issuers, credit quality, and currencies to achieve a higher expected return relative to the benchmark with similar volatility.

#### Fidelity (FIAM) - Broad Market Duration Separate Account

Pyramis' Broad Market Duration (BMD) investment strategy seeks to achieve absolute and risk-adjusted returns in excess of the BC U.S. Aggregate Index, focusing its investment in US Treasuries, agencies, investment grade corporate bonds, mortgage-backed and asset-backed securities. The BMD commingled pool can also hold small, opportunistic positions in out-of-benchmark securities, such as inflation-linked bonds. The investable universe includes all US dollar denominated, investment grade debt securities. The BMD investment approach emphasizes issuer and sector valuation and individual security selection. Through the integration of fundamental and quantitative research and trading, the BMD strategy is implemented in a team environment. Risk management technology is utilized to explicitly quantify benchmark exposures on a daily basis, and Pyramis uses the same analytical framework to assess both index and portfolio risk. Tracking error should range between 40 and 60 basis points per annum over the benchmark, and stringent portfolio construction risk control rules are strictly adhered to.



#### **Graham – Quant Macro Fund**

Graham Quant Macro ("GQM") is a directional, long and short strategy that utilizes fundamental and price-based indicators to establish return forecasts across global interest rates, foreign exchange, stock indices and commodities. The strategy incorporates a variety of submodels that generate macro fundamental forecasts, assess yield and earnings differentials, compare current valuations relative to historic fair value, and analyze directional price trends across markets. Quantitative risk management and portfolio construction techniques are used to diversify risk across the portfolio and enhance risk-adjusted returns. Historically, the average holding period has been approximately eight to ten weeks, although the sub-models will make daily adjustments to positions. The strategy is designed to have low correlation to traditional markets and other alternative strategies and has the potential to provide significant portfolio diversification benefits.

#### **Harrison Street Core Property**

Based in Chicago, Harrison Street's exclusive focus since inception in 2005 has been investing in non-core property sectors of the real estate market. The Harrison Street Core Fund is an open-end fund that invests primarily in stabilized education, healthcare, and self-storage real estate assets in the United States using modest leverage with an emphasis on generating current income. The focus on these alternative property types is intended to concentrate on areas of the real estate market that are less GDP sensitive with demand drivers that are more demographic driven such as aging populations, education growth and healthcare delivery. Each of these areas tend to be less tied to the business cycle, have fragmented ownership and more operationally intensive. The fund acts as a diversifier within real estate portfolios with sector exposures that are not a typical focus of other core ODCE funds.

#### **INVESCO Realty Advisors – INVESCO Core Equity, LLC**

SamCERA is a founding member of INVESCO's open-end Core Equity real estate fund and rolled its separate account properties into the fund. INVESCO Core Equity, LLC (the "Fund") is a perpetual life, open-end vehicle which invests in a diversified portfolio of institutional quality office, retail, industrial and multifamily residential real estate assets. The Fund buys core properties that are located within the United States, typically requiring an investment of \$10 million or more. The portfolio cannot be more than 30% leveraged.

#### INVESCO Realty Advisors – INVESCO US Val IV, V, & VI

Invesco has provided SamCERA with Core Real Estate exposure since 2004 through the Invesco Core Equity Fund. The Invesco real estate team manages around \$62B in assets with investments and offices around the globe. Invesco Value Fund's looks to acquire fundamentally sound but broken "core" assets that can be repositioned into institutional-quality, income producing properties. Investments are limited to direct equity interests in office, multi-family, retail and industrial properties across the US. The Fund is expected to be geographically concentrated in U.S. gateway cities and top 25 Metropolitan Statistical Areas (MSA's). Invesco Value Fund's provide a complement to the more conservative Invesco Core Fund and offers the potential of enhanced returns to the SamCERA Real Estate portfolio.

#### Insight Investments - Cash Flow Matched Liquidity

Insight is the fixed income sleeve of Mellon Capital. The strategy seeks to invest in short duration fixed income securities that match the negative cash flows of the Plan (similar to an LDI plan). Insight receives estimates of three years of cash flows from the actuarial report. Once a year, if market conditions allow, SamCERA will re-invest "year 3" net cash flows. Insight uses their credit analysis team for analyzing all credits or potential investments to the fund.



#### **Mondrian Investment Partners – International Equity**

Mondrian is a value-oriented, defensive manager whose investment philosophy is based on the principle that investments must be evaluated for their fundamental long-term value. The firm's philosophy involves three stated investment objectives: 1) provide a rate of return meaningfully greater than the client's domestic rate of inflation, 2) structure client portfolios that preserve capital during protracted international market declines, and 3) provide portfolio performance that is less volatile than benchmark indices and other international managers.

Mondrian applies typical value screening criteria to a universe of 1,500 stocks, from which 500 are selected for more detailed work. Through fundamental research, and the deliberations of the Investment Committee, the universe is further reduced to a list of 150 stocks. The investment team conducts detailed fundamental analysis on the remaining stocks, a process which includes applying the firm's dividend discount model consistently across all markets and industries. Mondrian also uses a purchasing power parity model to give an accurate currency comparison of the value of the stocks under consideration. The firm will only consider buying stocks in countries with good investor protection practices and relatively simple repatriation procedures. A computer-based optimization program is employed in the portfolio construction process. Mondrian's portfolio holds 80-125 issues.

#### NISA - Core Bond

NISA applies a risk-controlled approach to all of its fixed income portfolios. This approach does not permit large bets or positions that generate significant tracking error versus the benchmark. Instead, NISA invests in a large number of small, diversified, active positions which seek tight tracking error to the chosen benchmark. Benchmark weight is a significant consideration when constructing and managing portfolios. The investment strategy is comprised of strategic (top-down) and tactical (bottom-up) decisions. Strategic decisions include sector selection and yield curve positioning while tactical decisions include industry and security selection and trading activity. Review of both strategic and tactical decisions is continual. The amount of portfolio risk budget devoted to one aspect versus the other will change as market conditions warrant. In general, strategic decisions change relatively infrequently, while tactical decisions, especially security selection, will change fairly often as market conditions provide opportunities. Over a typical market cycle, the bottom-up is expected to contribute to 70% of value-added while top-down is roughly 30%.

#### NISA - Long Treasury

A passive implementation of long treasuries managed to the Bloomberg Long Treasury Index. This strategy seeks to replicate the characteristics of it's benchmark.

#### PanAgora Asset Management - Defensive U.S. Equity Low Volatility

PanAgora's Defensive Equity strategy seeks to harness the 'low-volatility premium' through a systematic, factor-based investment approach focused on achieving market-like returns with less risk. This is accomplished by leveraging PanAgora's proprietary Risk Parity portfolio construction methodology, which seeks to efficiently capture the equity premium associated with low volatility, while taking minimal unintended risks. Since the firm's inception, PanAgora has been using quantitative techniques to integrate fundamental insights with large amounts of dynamic market data. They score individual securities on a factor basis and also on a diversification basis, in the context of a broadly diversified portfolio. The portfolio construction process optimizes the portfolio around the intended factor exposure (volatility) while maintaining equal risk contribution across sectors (ex., overweight utilities and consumer staples, underweight financials and technology). Shorter term volatility and longer term correlation analysis is combined in the approach. The result for the US Defensive Equity strategy is a portfolio expected to have lower volatility (beta around 0.65-0.75), and similar returns relative to the capitalization-weighted benchmark over a full market cycle. PanAgora expects the strategy to participate in approximately 75% of up markets and 55% in down markets.



## Parametric Overlay – Cash Overlay and Currency Hedge

Parametric's cash overlay program is an efficient way for SamCERA to maintain its target asset allocation in a systematic fashion through cash securitization at the fund and manager level transition/reallocation support and asset class rebalancing back to target within defined bands. The cash overlay program is invested synthetically using liquid futures with cash balances reviewed daily. A combination of large and small cap futures implementation is the proxy for private equity. SamCERA's investment guidelines initially allowed only for cash overlay. Rebalancing was added to the SamCERA program in January 2014. Cash overlay and rebalancing is expected to add 10-20 bps to the portfolio over time. The purpose of the currency is first and foremost to lower portfolio risk and secondarily to add incremental performance.

#### **PIMCO Diversified**

PIMCO's Diversified Income (DI) Fund is a multi-sector strategy that invests across a broad spectrum of global credit market sectors, including investment grade and high yield corporate debt, as well as emerging markets. The allocation among these will vary based on PIMCO's assessment of global trends and relative valuations. This active and dynamic approach allows for increased responsiveness in asset allocation to changing economic and market conditions while remaining anchored by PIMCO's investment process and longer-term orientation. The ability to invest globally helps to improve diversification and may allow investors to benefit from differences in business cycles across regions and credit quality trends across credit sectors. PIMCO's DI investment strategy seeks to provide high yield-like returns with lower volatility against a blended index (1/3 Bloomberg Barclays Global Agg Credit ex-EM; 1/3 BofA Merrill Lynch BB-B rated Developed Markets High Yield; 1/3 JPMorgan EMBI Global). The fund allows for a duration band of 3-8 years. The team focuses its investments into these groups: credit strategies (investment grade, high yield, emerging markets and non-core credits including MBS, municipals and other govt-related sectors); duration strategies (U.S. and non-U.S. duration) and currencies (tactical non-USD exposure).

#### PIMCO - MAARS

PIMCO MAARS is an alternative risk premia strategy that looks for risks associated with: (1) Supply and Demand Constraints, (2) Behavioral Biases, and (3) Asymmetric Risks (event risk). As reflected in the design of the MAARS strategies, PIMCO believes that alternative risk premia strategies are best implemented using a systematic approach that minimizes the discretionary inputs in day-to-day portfolio management. MAARS places a greater emphasis and weighting on global interest rates, currencies and commodities and a lesser emphasis on equities than many of its Alt Beta peers. Relative to Alt Beta peers, the strategy's rates and currency (FX) models are particularly robust, reflective of PIMCO's core competency and long history managing these asset classes using derivative instruments.

#### **PIMCO Private Income Fund**

PIMCO Private Income Fund (PIF) uses an opportunistic and flexible approach to global private credit. PIF provides a total return oriented global credit exposure utilizing both top-down sector relative value and bottom up security selection. The strategy invests across private residential, commercial, corporate and specialty finance markets. PIMCO's Private Income Fund (PIF) is targeting 8-12% net returns with income providing most of the fund's returns. The Private Income Investment Committee (IC) identifies market themes and direction for their relative value framework, and sector specialists provide recommendations to the PM team within that construct. PIF has the ability to invest throughout the capitalization structure. The fund can use a moderate amount of leverage to enhance portfolio returns (1.5 times with a hard cap of 2 times).



#### **PGIM RE Debt**

PGIM Real Estate US Debt Fund (PREDS) focuses on a loan origination strategy with a mix of 20% senior long duration loans on stable assets, 60% senior short/medium duration loans on stable and transitional assets, and 20% mezzanine mid/long duration debt. SamCERA was a founding investor in the PREDS strategy which invests in US commercial real estate debt in an open-ended vehicle with a return target of 7-8% (gross) coming from stable current income. The fund makes investments in first lien mortgages and mezzanine debt. First lien mortgages can be floating rate or fixed rate, but only floating rate loans will use leverage. Subordinate investments (mezzanine debt and preferred equity) will be limited by design. The fund can source and invest in secondary loans through a variety of Prudential real estate professionals, but the primary focus will be on direct origination through the real estate finance team.

#### **PGIM Quantitative Solutions – Small-Cap Core**

Quantitative Management Associates (QMA) utilizes a bottom-up quantitative framework in order provide a diversified exposure to core U.S. small-cap stocks, while attempting to produce consistent outperformance versus the benchmark with moderate tracking error levels. QMA uses an adaptive, systematic investment process to exploit opportunities created by mispriced securities to consistently add value over long time periods. Bottom-up stock selection drives exposure to key sources of alpha (valuation, growth, and quality). The QMA stock selection model adapts to changes in company growth rates and market environments by putting more emphasis on valuation for slowly growing companies, and more emphasis on future growth projections for companies with higher projected growth rates.

#### **Record Dynamic Currency**

Record is one of the world's largest and longest standing currency managers. The Record Dynamic Currency Hedging program uses a systematic process which exploits inefficiencies in the FX markets. The strategy focuses on currencies' tendency to trend, in an explicable, repeatable way.

#### State Street Global Advisors (SSgA) Custom Real Asset

SSgA Custom Real Asset portfolio uses a portfolio of liquid real assets to proxy private real assets. The portfolio is comprised of equal weightings of the Bloomberg Roll Select Commodity Index, S&P Global Mid-Large Cap Natural Resources Index, S&P Global Infrastructure Index, and Bloomberg Barclays TIPS Index. SSgA provides beta exposure through these underlying liquid components which can be customized to changing client needs (ex., TIPS was added in May 2020 with the other three parts of the portfolio reduced pro-rata). The portfolio is used to fund upcoming private real asset mandates.

#### Stockbridge Value IV

Stockbridge Value IV will implement a value-added strategy that will seek to own assets that are undervalued, underutilized, and/or not operating to their full potential. The manager will add value with their internal asset management team through active strategies including additional capital investment, leasing, recapitalization, renovation and/or development. The fund will target three to five year holding periods for investments, with disposition taking place after the completion of the value-add strategy. The fund will target 15 to 25 mid-sized investments, diversified by geography and property type. The strategy will target 21 markets in the United States in which the firm has boots on the ground coverage with dedicated acquisitions professionals and asset managers responsible for knowing each market extensively with a vast network of relationships.



# **Investment Strategy Summaries**

San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

## White Oak - White Oak Yield Spectrum Fund/Fund V

The White Oak Yield Spectrum Fund's objective is to earn substantial current income by originating, extending, and/or investing in a diversified portfolio of primarily senior secured corporate credit and debt instruments consisting of term loans, asset-based loans and equipment leases and loans issued by small to middle-market companies located primarily in the United States and Canada. It focuses on providing self-originated deals for predominantly non-sponsored, privately-held borrowers.



# San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

Total Plan Policy Index	As of															
•	1/1/25	7/1/23	3/1/23	10/1/22	7/1/22	2/1/21	1/1/21	7/1/20	4/1/20	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	4/1/18	10/1/17
60/40 MSCI World/Bloomberg Global Aggregate (RP)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
91 Day T-Bills	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Blended Opportunistic Index	11.0%	11.0%	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%
Bloomberg US Govt/Credit 1-3 Yr. TR	4.5%	4.5%	4.5%	4.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bloomberg Aggregate	9.5%	9.5%	12.5%	13.5%	16.5%	18.0%	21.0%	21.0%	18.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Bloomberg BA Intermediate HY	0.0%	0.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	8.0%	8.0%	7.0%	7.0%	7.0%	7.0%	7.0%	7.0%
Bloomberg Long Treasury	3.0%	3.0%	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%
Bloomberg TIPS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Blended Public Real Assets	3.0%	3.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	0.0%
Blended Private Real Assets	5.0%	5.0%	5.0%	4.0%	4.0%	4.0%	3.0%	3.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	8.0%
Libor +4% (HF)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
SOFR +4% (HF)	6.0%	6.0%	7.0%	7.0%	7.0%	7.0%	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI 100% Hedged (Net)	8.0%	9.0%	9.5%	9.5%	9.5%	9.5%	9.0%	9.0%	9.0%	9.0%	7.6%	5.7%	3.8%	1.9%	0.0%	0.0%
MSCI ACWI ex-US IMI (Net)	8.0%	9.0%	9.5%	9.5%	9.5%	9.5%	9.0%	9.0%	9.0%	9.0%	11.4%	13.3%	15.2%	17.1%	19.0%	19.0%
NCREIF ODCE	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	10.0%	10.0%	9.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Russell 3000	25.0%	23.0%	21.0%	21.0%	21.0%	22.0%	21.0%	21.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	21.0%	21.0%
Russell 3000 +3% (PE)	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%	7.0%
Russell 3000 +3% 1Q Lag (PE)	7.0%	7.0%	7.0%	7.0%	7.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	7.0%	0.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Simple Benchmark	A			
	7/1/23	3/1/23	10/1/22	7/1/22
MSCI ACWI IMI	59.0%	57.0%	57.0%	57.0%
Bloomberg US Aggregate	18.5%	19.5%	20.5%	23.5%
NFI ODCE	17.0%	18.0%	17.0%	17.0%
Bloomberg 1-3 Yr Govt/Credit Index	5.5%	5.5%	5.5%	2.5%
	100.0%	100.0%	100.0%	100.0%



0.0%

0.0% 100.0%

# San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

														P	er10	u L	nan	1g: 1	war	cn 3	1, Z	1026
Public Equity Benchmark	As of:																					
. ,	1/1/25	7/1/23	7/1/22	2/1/21	7/1/20	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	10/1/17	2/1/17	10/1/16	9/1/16	1/1/16	1/1/14	10/1/10	5/1/07	6/1/00	3/1/99	9/1/98	1/1/96
MSCI ACWI ex-US	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%	0.0%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI 100% Hedged (Net)	19.5%	22.0%	23.8%	23.2%	23.1%	22.5%	18.5%	13.9%	9.3%	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex-US IMI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	47.5%	45.2%	40.4%	41.7%	41.7%	40.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI (Net)	19.5%	22.0%	23.8%	23.2%	23.1%	22.5%	27.8%	32.4%	37.0%	41.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
MSCI EAFE	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%	0.0%	0.0%	0.0%	0.0%	32.3%	33.3%	33.3%
Russell 1000	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%	50.0%	48.0%	52.8%	55.2%	61.5%	35.5%	33.3%	33.3%
Russell 1000 Value	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%	0.0%	0.0%	0.0%	0.0%	8.0%	8.4%	0.0%
Russell 2000	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%	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
Russell 3000	61.0%	56.1%	52.5%	53.7%	53.9%	55.0%	53.7%	53.7%	53.7%	53.7%	52.5%	54.8%	59.6%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S&P 500	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%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	8.4%
Odi 300	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
US Equity Benchmark	As of:																					
OO Equity Denominark	9/1/16	1/1/16	6/1/00	3/1/99	9/1/98	7/1/96	1/1/95															
Russell 1000	0.0%	85.7%	80.0%	52.0%	50.0%	50.0%	69.0%															
Russell 1000 Value	0.0%	0.0%	0.0%	12.0%	12.5%	0.0%	0.0%															
Russell 2000	0.0%	14.3%	20.0%	36.0%	37.5%	37.5%	14.0%															
Russell 3000	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%															
S & P 500	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	17.0%															
C41 000	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%															
International Equity Benchmark	As of:																					
mematona Equity Denominary	10/1/19	7/1/19	4/1/19	1/1/19	10/1/18	10/1/17	1/1/14	6/1/00	1/1/96													
MSCI ACWI ex US	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%													
MSCI ACWI ex US IMI 100% Hedged (Net)	50.0%	40.0%	30.0%	20.0%	10.0%	0.0%	0.0%	100.0%	0.0%													
MSCI ACWI ex US IMI	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%													
MSCI ACWI ex US IMI (Net)	50.0%	60.0%	70.0%	80.0%	90.0%	100.0%	0.0%	0.0%	0.0%													
MSCI EAFE	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%													
MOCI EAFE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%													
Defensive Fixed Income Benchmark	As of:																					
Deletisive i ixed income Delicimark	7/1/23	7/1/22																				
Bloomberg U.S. Aggregate Index	76.0%	100.0%																				
Bloomberg U.S. Treasury Long Index	24.0%	0.0%																				
bloomberg 0.3. Heasury Long muck	100.0%	100.0%																				
Opportunistic Credit Benchmark	As of:																					
opportunistic oreast Benominars	7/1/23	7/1/22																				
Bloomberg US Corporate HY	73.0%	0.0%																				
Credit Suisse Leveraged Loan Index 1 Qtr Lag	27.0%	0.0%																				
Bloomberg BA Intermediate HY	0.0%	100.0%																				
Distribute Dr. Intermediate 111	100.0%	100.0%																				
Public Credit Benchmark	As of:																					
	7/1/23	1/1/14	12/1/09																			
Bloomberg US Corporate HY	100.0%	0.0%	100.0%																			
Bloomberg BA Intermediate HY	0.0%	100.0%	0.0%																			
Bloomberg Credit BAA	0.0%	0.0%	100.0%																			
	100.0%	100.0%	100.0%																			
Private Credit Benchmark	As of:																					
	7/1/23	1/1/14	12/1/09																			
Credit Suisse Leveraged Loan Index 1 Qtr Lag	100.0%	0.0%	0.0%																			
Bloomberg US Corporate HY	0.0%	0.0%	100.0%																			
Cliffwater Direct Lending Index	0.0%	100.0%	0.0%																			
Bloomberg Credit BAA	0.0%	0.0%	100.0%																			



Bloomberg Credit BAA

Private Equity Benchmark	As of:								
Trivate Equity Benchmark	4/1/18	10/1/10							
Russell 3000 +3% 1Q Lag	100.0%	0.0%							
Russell 3000 +3%	0.0%	100.0%							
	100.0%	100.0%							
Absolute Return Benchmark	As of:								
	1/1/21	10/1/10							
Libor +4%	0.00%	100.00%							
SOFR +4%	100.0%	0.0%							
	100.0%	0.0%							
Inflation Hedge Benchmark	As of:								
illiation ricage Denominark	3/1/23	2/1/21	7/1/20	4/1/20	10/1/19	4/1/18	2/1/17	10/1/16	4/1/16
Bloomberg TIPS	0.00%	0.00%	0.00%	0.00%	5.88%	11.1%	12.5%	14.3%	14.3%
Bloomberg Commodity	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	21.4%
CPI + 5% (RA)	0.00%	0.00%	0.00%	0.00%	0.00%	0.0%	0.0%	0.0%	14.3%
Blended Public Real Assets	22.22%	23.53%	23.53%	35.29%	35.29%	33.3%	0.0%	0.0%	0.0%
Blended Private Real Assets	27.78%	23.53%	17.65%	11.77%	11.77%	11.1%	43.8%	35.7%	0.0%
NCREIF ODCE	50.00%	52.94%	58.82%	52.94%	47.06%	44.4%	43.8%	50.0%	50.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Public Real Assets Benchmark	As of:	40/4/40	414144						
Discoulers Ball Calast Comments	5/1/20	10/1/16	1/1/14						
Bloomberg Roll Select Commodity	25.0%	34.0%	0.0%						
S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure	25.0% 25.0%	33.0% 33.0%	0.0%						
CPI + 5%	0.0%	0.0%	0.0%						
Bloomberg TIPS	25.0%	0.0%	0.0%						
Bloomberg TIP3	100.0%	100.0%	100.0%						
Private Real Assets Benchmark	As of:								
	As of: 1/1/21	4/1/18	10/1/16	1/1/14					
Bloomberg Roll Select Commodity	As of: 1/1/21 0.00%	<b>4/1/18</b> 0.00%	<b>10/1/16</b> 34.00%	0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources	As of: 1/1/21 0.00% 0.00%	<b>4/1/18</b> 0.00% 0.00%	<b>10/1/16</b> 34.00% 33.00%	0.0% 0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure	As of: 1/1/21 0.00% 0.00% 0.00%	<b>4/1/18</b> 0.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00%	0.0% 0.0% 0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	As of: 1/1/21 0.00% 0.00% 0.00% 0.00%	<b>4/1/18</b> 0.00% 0.00% 0.00% 100.00%	10/1/16 34.00% 33.00% 33.00% 0.00%	0.0% 0.0% 0.0% 0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 0.00%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 0.00%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% As of:	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark Cambridge Associates Private Natural Resources 1 Qtr Lag	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% As of: 9/1/14	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark	As of: 1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 4s of: 9/1/14 50.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00%  50.00% 100.0% As of:  9/1/14 50.0% 50.0% 100.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 0.00%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark Cambridge Associates Private Natural Resources 1 Qtr Lag	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% 50.0% As of:  9/1/14 50.0% 50.0% 100.0% As of:	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark	As of:  1/1/21 0.00% 0.00% 0.00% 100.00% 100.00% 100.00% 40.00% As of: 9/1/14 50.0% 100.0% As of: 1/1/09	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity  \$&P Global Large-MidCap Commodity and Resources  \$&P Global Infrastructure  50/50 \$&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL  75/25 \$&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL  CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag  Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2%	As of:  1/1/21 0.00% 0.00% 0.00% 100.00% 100.00% 40.00% 100.0% As of: 9/1/14 50.0% 100.0% As of: 1/1/09 0.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00%  As of:  9/1/14 50.0% 50.0% 100.0%  As of:  1/1/09 0.0% 100.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00% 0.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity  \$&P Global Large-MidCap Commodity and Resources  \$&P Global Infrastructure  50/50 \$&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL  75/25 \$&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL  CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag  Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2%	As of:  1/1/21 0.00% 0.00% 0.00% 100.00% 100.00% 40.00% 100.0% As of: 9/1/14 50.0% 100.0% As of: 1/1/09 0.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE NCREIF Property	As of:  1/1/21 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% As of:  9/11/4 50.0% 100.0% As of:  1/1/09 0.0% 100.0%	4/1/18 0.00% 0.00% 0.00% 100.00% 0.00% 100.00% 6/1/00 0.0% 100.0%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0% 7/1/96 100.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% As of:  9/1/14 50.0% 50.0% 100.0% As of:  1/1/09 0.0% 100.0% As of:  1/1/09 As of: 100.0% As of:	4/1/18 0.00% 0.00% 100.00% 0.00% 100.00% 100.00% 0.00% 100.0%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0% 7/1/96 100.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE NCREIF Property  Liquidity Benchmark	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% As of:  9/1/14 50.0% 50.0% 100.0% As of:  1/1/09 0.0% 100.0% As of:  1/1/09 100.0% As of: 101/122	4/1/18 0.00% 0.00% 0.00% 100.00% 100.00% 100.00% 100.0% 100.0% 100.0%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0% 7/1/96 100.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI + 5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE NCREIF Property  Liquidity Benchmark  Bloomberg US Govt/Credit 1-3 Yr. TR	As of:  1/1/21 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% As of: 9/1/14 50.0% 50.0% 100.0% As of: 1/1/09 0.0% As of: 1/1/09 100.0% As of: 10/1/22 81.8%	4/1/18 0.00% 0.00% 0.00% 100.00% 100.00% 100.00% 100.0% 100.0% 100.0% 100.0% 100.0%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0% 7/1/96 100.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					
Bloomberg Roll Select Commodity S&P Global Large-MidCap Commodity and Resources S&P Global Infrastructure 50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL 75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL CPI +5%  Private RA Secondary Benchmark  Cambridge Associates Private Natural Resources 1 Qtr Lag Cambridge Associates Private Infrastructure 1 Qtr Lag  Real Estate Benchmark  10 Year Treasury +2% NCREIF ODCE NCREIF Property  Liquidity Benchmark	As of:  1/1/21 0.00% 0.00% 0.00% 0.00% 100.00% 100.00% 100.0% As of:  9/1/14 50.0% 50.0% 100.0% As of:  1/1/09 0.0% 100.0% As of:  1/1/09 100.0% As of: 101/122	4/1/18 0.00% 0.00% 0.00% 100.00% 100.00% 100.00% 100.0% 100.0% 100.0%	10/1/16 34.00% 33.00% 33.00% 0.00% 0.00% 100.0% 7/1/96 100.0% 0.0% 0.0%	0.0% 0.0% 0.0% 0.0% 0.0% 100.0%					



Baillie Gifford Benchmark	As of:	
	1/1/14	5/1/12
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	100.0%	100.0%
Daillia Cifford Casandam, Danahmani	As of:	
Baillie Gifford Secondary Benchmark	AS OT: 1/1/14	EMMO
MSCI ACWI ex-US Growth	1/1/14	<b>5/1/12</b> 0.0%
MSCI EAFE Growth	0.0%	100.0%
MSCI EAFE GIOWIII	100.0%	
	100.0%	100.0%
Brigade Secondary Benchmark	As of:	
brigade Secondary Benchmark	AS 01. 8/1/10	
Plaambara High Viold	50.0%	
Bloomberg High Yield Credit Suisse Leveraged Loans	50.0%	
Credit Suisse Leveraged Loans	100.0%	
	100.0 /6	
PIMCO Diversified	As of:	
	9/1/17	
JPMorgan EMBI Global	33.333%	
BofAMLBB-BRatedDvlpdMktsHYHdgdUSD	33.333%	
Global Agg Credit Ex EM USD hedged	33.334%	
Close Figg Close Ex Em Cos Houges	100.0%	
SSgA Custom Real Assets	As of:	
·	5/1/20	11/1/16
Bloomberg Roll Select Commodity	25.00%	33.33%
S&P Global Large-MidCap Commodity and Resources	25.00%	33.33%
S&P Global Infrastructure	25.00%	33.34%
Bloomberg TIPS	25.00%	0.00%
	100.0%	100.0%



Baillie Gifford	
First \$25 million:	0.60% per annum
Next \$75 million:	0.50% per annum
Next \$300 million:	0.40% per annum
Thereafter:	0.30% per annum
BlackRock-Russell 1000 Index Fund	
On All Assets:	0.01% per annum
BlackRock-MSCI ACWI ex US IMI Index Fund	
On All Assets:	0.045% per annum
<u>DoubleLine</u>	
On All Assets:	0.30% per annum
<u>NISA</u>	
First \$500 million:	0.15% per annum
Next \$1 billion:	0.125% per annum
Next \$1 billion:	0.105% per annum
Next \$1.5 billion	0.085% per annum
Thereafter:	0.065% per annum

Eaton Vance	
On All Assets:	0.54% per annum
FIAM Bond	
First \$50 million:	0.25% per annum
Next \$50 million:	0.20% per annum
Next \$100 million:	0.125% per annum
Thereafter:	0.10% per annum
PanAgora Asset Management	
First \$50 million:	0.25% per annum
Next \$50 million:	0.15% per annum
Thereafter:	0.10% per annum
Parametric Overlay	
First \$50 million:	0.12% per annum
Next \$100 million:	0.10% per annum
Thereafter:	0.05% per annum
Plus monthly reporting fee of \$1500	·

PIMCO Diversified	
On All Assets:	0.75% per annum
PGIM Quantitative Solutions	
First \$100 million:	0.55% per annum
Next \$100 million:	0.53% per annum
Thereafter:	0.49% per annum
Mondrian Investment Partners	
First \$50 million:	1.00% per annum
Next \$150 million:	0.19% per annum
Thereafter:	0.33% per annum
Insight Investment	
First \$200 million:	0.09% per annum
Next \$300 million:	0.08% per annum
Thereafter:	0.06% per annum



# San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

# Manager Compliance (Net)

und Name	Benchmark	Rule 1	Rule 2	Rule 3
cadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	<b>✓</b>	✓	<b>✓</b>
PanAgora Defuseq	Russell 1000 Index	₽	B	<b>✓</b>
PGIM Quant Solutions	Russell 2000 Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
Baillie Gifford	MSCI ACWI ex US	B	R	B
Mondrian	MSCI AC World ex USA Value	B	B	B
OoubleLine	Blmbg. U.S. Aggregate Index	<b>✓</b>	B	<b>V</b>
IAM Bond	Blmbg. U.S. Aggregate Index	<b>✓</b>	<b>V</b>	<b>V</b>
IISA Core Bond	Blmbg. U.S. Aggregate Index	-	-	-
IISA Long Treasury	Blmbg. U.S. Treasury: Long	-	-	-
AG CSF ADF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
AG CSF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
AG CSF III	Credit Suisse Leveraged Loan Index 1 Qtr Lag	-	-	-
Ingelo Gordon Credit Solutions	Blmbg. U.S. Corp: High Yield Index	-	-	-
Beach Point Select	Blmbg. U.S. Corp: High Yield Index	<b>✓</b>	<b>V</b>	<b>V</b>
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	<b>✓</b>	<b>V</b>	<b>V</b>
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	B	-
One William Street	Blmbg. U.S. Corp: High Yield Index	-	-	-
aton Vance Emerging Markets Debt Opportunities Fund	JPM EMB (JEMB) Hard Currency/Local Currency 50-50	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	B	B	B
PIMCO MAARS Fund LP	Absolute Return Custom Index	<b>✓</b>	<b>V</b>	B

# San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

# Manager Compliance (Gross)

Fund Name	Benchmark	Rule 1	Rule 2	Rule 3
Acadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
PanAgora Defuseq	Russell 1000 Index	R	P	<b>✓</b>
PGIM Quant Solutions	Russell 2000 Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
Baillie Gifford	MSCI ACWI ex US	B	B	B
Mondrian	MSCI AC World ex USA Value	B	B	B
DoubleLine	Blmbg. U.S. Aggregate Index	<b>✓</b>	B	<b>✓</b>
FIAM Bond	Blmbg. U.S. Aggregate Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
NISA Core Bond	Blmbg. U.S. Aggregate Index	-	-	-
NISA Long Treasury	Blmbg. U.S. Treasury: Long	-	-	-
AG CSF ADF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
AG CSF II	Blmbg. U.S. Corp: High Yield Index	-	-	-
Angelo Gordon Credit Solutions	Blmbg. U.S. Corp: High Yield Index	-	-	-
Beach Point Select	Blmbg. U.S. Corp: High Yield Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	<b>✓</b>	<b>✓</b>	<b>✓</b>
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	B	-
One William Street	Blmbg. U.S. Corp: High Yield Index	-	-	-
Eaton Vance Emerging Markets Debt Opportunities Fund	JPM EMB (JEMB) Hard Currency/Local Currency 50-50	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	B	B	B
PIMCO MAARS Fund LP	Absolute Return Custom Index	<b>✓</b>	<b>V</b>	B

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs	Rank
Total Fund**	6,865,645,882	100.0	1.4 (11)	5.5 (7)	7.3 (5)	8.6 (49)	4.5 (39)	9.5 (78)	6.5	(65)
Policy Index			0.5 (44)	5.6 (7)	8.0 (3)	10.2 (15)	5.2 (15)	9.9 (59)	7.1	(39)
Simple Benchmark			-0.1 (84)	3.9 (72)	5.4 (61)	8.2 (62)	3.3 (87)	9.3 (87)	6.6	(59)
Total Fund ex Overlay	6,851,355,951	99.8	1.4 (11)	5.4 (7)	7.3 (5)	8.5 (54)	4.4 (42)	9.4 (82)	6.4	(71)
Policy Index			0.5 (44)	5.6 (7)	8.0 (3)	10.2 (15)	5.2 (15)	9.9 (59)	7.1	(39)
Simple Benchmark			-0.1 (84)	3.9 (72)	5.4 (61)	8.2 (62)	3.3 (87)	9.3 (87)	6.6	(59)
Growth Portfolio	3,997,584,758	58.2	0.4	5.9	8.5	11.9	-	-	-	
Blended Growth Index			-0.4	5.8	9.3	15.3	7.8	14.4	-	
US Equity	1,642,956,366	23.9	-2.9 (9)	6.5 (3)	9.4 (1)	16.9 (40)	8.8 (9)	17.6 (61)	11.1	(58)
Blended US Equity Index			-4.7 (57)	3.9 (31)	7.2 (18)	17.7 (18)	8.2 (28)	18.2 (35)	11.7	(30)
Russell 3000 Index			-4.7 (57)	3.9 (31)	7.2 (18)	17.7 (18)	8.2 (28)	18.2 (35)	11.8	(23)
BlackRock Russell 1000	959,480,727	14.0	-4.5 (60)	4.1 (39)	7.8 (31)	18.3 (38)	8.7 (50)	18.5 (41)	-	
DE Shaw	289,442,622	4.2	-1.9 (27)	11.6 (3)	17.4 (1)	22.8 (5)	11.3 (9)	20.1 (12)	13.4	(9)
PanAgora Defuseq	227,044,646	3.3	6.3 (1)	15.2 (2)	15.5 (2)	12.7 (86)	7.7 (67)	14.8 (91)	-	
Russell 1000 Index			-4.5 (60)	4.1 (39)	7.8 (31)	18.3 (39)	8.7 (51)	18.5 (41)	12.2	(36)
PGIM Quant Solutions	122,559,794	1.8	-8.2 (51)	0.2 (47)	-1.8 (40)	10.3 (20)	4.6 (18)	17.8 (20)	-	
Russell 2000 Index			-9.5 (76)	-0.8 (56)	-4.0 (56)	7.2 (56)	0.5 (75)	13.3 (78)	6.3	(81)
International Equity	1,118,671,641	16.3	3.7 (84)	5.0 (56)	6.4 (42)	9.1 (71)	5.4 (38)	11.0 (74)	5.7	(47)
Blended International Equity Index			3.4 (88)	4.9 (58)	6.8 (25)	11.3 (17)	6.6 (17)	12.5 (30)	6.1	(27)
Baillie Gifford	269,453,985	3.9	1.3 (54)	1.5 (51)	0.8 (50)	2.7 (87)	-0.7 (83)	6.9 (92)	4.9	(95)
MSCI ACWI ex US			5.4 (11)	5.4 (21)	6.6 (18)	10.2 (18)	5.0 (20)	11.5 (33)	5.5	(84)
MSCI ACWI ex US Growth			2.0 (36)	0.6 (57)	1.5 (47)	6.4 (57)	2.1 (58)	8.4 (81)	5.4	(87)
Mondrian	292,443,642	4.3	9.2 (41)	10.8 (32)	12.3 (20)	12.3 (51)	7.4 (56)	12.3 (91)	5.0	(80)
MSCI AC World ex USA Value			8.8 (48)	10.5 (34)	12.2 (23)	14.2 (28)	8.0 (49)	14.4 (57)	5.4	(73)
MSCI AC World ex USA Index			5.4 (77)	5.4 (76)	6.6 (69)	10.2 (59)	5.0 (84)	11.5 (94)	5.5	(72)
BlackRock MSCI ACWI EX-US IMI	545,818,261	7.9	4.9 (68)	4.7 (69)	5.8 (62)	9.5 (62)	4.3 (72)	-	-	
MSCI AC World ex USA IMI (Net)			4.6 (72)	4.5 (72)	5.5 (64)	9.3 (63)	4.0 (73)	11.0 (76)	5.0	(94)
Record Dynamic Currency Hedge	1,238,066	0.0	-90.3	117.6	625.9	-4,783.8	-	-	-	

San Mateo County Employees' Retirement Association Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs	Rank
Private Equity***	470,415,976	6.9	2.7 (14)	5.0 (28)	12.7 (7)	8.3 (19)	1.1 (71)	16.1 (19)	16.5	(5)
Blended Private Equity Index			3.5 (8)	14.5 (3)	26.8 (1)	27.9 (1)	11.1 (3)	16.9 (14)	15.3	(8)
Opportunistic Credit	765,540,775	11.2	1.6	7.3	7.9					
Opportunistic Credit Index			1.4	6.5	8.1	9.9	5.5	7.0	5.1	
Public Credit	540,156,651	7.9	1.7	7.9	8.9	9.7	5.1	7.3	5.7	
Blmbg. U.S. Corp: High Yield Index			1.0	6.5	7.7	9.4	5.0	7.3	5.0	
Beach Point Select	123,719,270	1.8	1.8 (2)	8.7 (3)	9.7 (3)	11.3 (5)	5.6 (25)	11.5 (4)	8.1	(1)
Brigade Capital	108,103,138	1.6	0.6 (83)	8.4 (4)	8.8 (9)	10.1 (21)	3.7 (97)	9.9 (9)	5.2	(50)
GoldenTree Select Partners	61,571,418	0.9	0.9 (51)	-	-	-	-	-	-	
One William Street	70,807,878	1.0	1.9 (2)	6.4 (27)	8.5 (14)	-	-	-	-	
Blmbg. U.S. Corp: High Yield Index			1.0 (53)	6.5 (22)	7.7 (35)	9.4 (43)	5.0 (60)	7.3 (57)	5.0	(59)
PIMCO Diversified	108,455,963	1.6	2.0 (1)	6.5 (23)	7.1 (68)	8.0 (87)	3.6 (98)	3.5 (100)	-	
Blmbg. U.S. Corp: High Yield Index			1.0 (53)	6.5 (22)	7.7 (35)	9.4 (43)	5.0 (60)	7.3 (57)	5.0	(59)
Eaton Vance Emerging Markets Debt Opportunities Fund	67,498,984	1.0	3.0 (36)	9.7 (5)	11.3 (3)	-	-	-	-	
JPM EMB (JEMB) Hard Currency/Local Currency 50-50			3.3 (20)	6.1 (60)	5.7 (59)	6.6 (80)	3.5 (68)	3.3 (85)	2.5	(71)
Private Credit	225,384,124	3.3	1.4	5.8	5.7	6.1	4.9	6.9		
Credit Suisse Leveraged Loan Index 1 Qtr Lag			2.3	6.4	9.1	11.0	6.8	5.7	5.1	
400 Capital Asset Based Term Fund IV	9,625,213	0.1	-	-	-	-	-	-	-	
AG CSF ADF II	1,504,231	0.0	-4.8	1.6	0.1	9.6	-	-	-	
AG CSF II	28,260,568	0.4	1.1	10.7	12.3	16.5	9.0	-	-	
AG CSF III	2,654,223	0.0	-	-	-	-	-	-	-	
Angelo Gordon Credit Solutions	5,547,122	0.1	0.0 (97)	9.0 (1)	9.4 (2)	10.8 (4)	5.5 (18)	13.2 (1)	-	
Credit Suisse Leveraged Loan Index 1 Qtr Lag			2.3 (1)	6.4 (17)	9.1 (3)	11.0 (4)	6.8 (4)	5.7 (86)	5.1	(21)
Blackrock DL Feeder IX-U	39,924,534	0.6	3.4	4.8	5.1	7.9	6.4	8.2	-	
Comvest Credit Partners VII	19,965,369	0.3	0.0	5.9	-	-	-	-	-	
PIMCO Private Income	49,832,031	0.7	0.0	4.2	5.6	6.6	4.6	9.1	-	
TCP Direct Lending VIII	5,236,564	0.1	1.5	3.8	3.4	5.8	4.6	6.0	-	
White Oak Yield	31,351,708	0.5	0.0	8.6	10.6	8.1	6.2	6.4	-	
White Oak YSF V	31,482,561	0.5	0.0 (99)	0.3 (100)	0.2 (100)	2.1 (100)	0.8 (100)	-	-	
Credit Suisse Leveraged Loan Index 1 Qtr Lag			2.3 (1)	6.4 (29)	9.1 (7)	11.0 (6)	6.8 (6)	5.7 (93)	5.1	(51)

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Diversifying Portfolio	1,236,665,152	18.0	2.8	5.1	4.4	4.6			-
Blended Diversifying Index			2.9	5.2	5.7	4.5	2.7	1.7	2.9
Defensive Fixed Income	875,685,005	12.8	3.2	4.9	4.6	3.5	0.8	0.4	1.9
Blended Core Fixed Income Benchmark			3.2	4.4	4.0	2.1	-0.2	-0.8	1.2
DoubleLine	275,047,575	4.0	3.0 (42)	5.6 (61)	6.0 (68)	4.5 (64)	1.3 (66)	0.4 (64)	-
Blmbg. U.S. Aggregate Index			2.8 (53)	4.8 (94)	4.9 (98)	3.3 (95)	0.5 (95)	-0.4 (89)	1.5 (77)
FIAM Bond	193,797,449	2.8	2.8 (41)	4.9 (70)	5.2 (64)	4.1 (36)	1.0 (50)	1.0 (22)	2.3 (19)
NISA Core Bond	295,500,212	4.3	3.1 (9)	5.1 (45)	5.1 (74)	3.6 (77)	0.9 (64)	-	-
Blmbg. U.S. Aggregate Index			2.8 (54)	4.8 (82)	4.9 (92)	3.3 (92)	0.5 (91)	-0.4 (97)	1.5 (99)
NISA Long Treasury	104,080,050	1.5	4.7	3.1	1.3	-	-	-	-
Blmbg. U.S. Treasury: Long			4.7	3.1	1.3	-2.5	-7.2	-7.9	-0.6
Absolute Return	360,980,147	5.3	2.0 (13)	5.5 (48)	3.6 (83)	6.8 (82)	5.6 (64)	5.5 (86)	1.1 (84)
Absolute Return Custom Index			2.1 (12)	6.8 (25)	9.0 (15)	9.2 (63)	8.4 (7)	6.7 (79)	6.0 (20)
CFM Systematic Global Macro	124,306,994	1.8	-1.9 (87)	13.7 (12)	13.8 (21)	8.6 (45)	9.3 (25)	-	-
Graham Quant Macro	114,269,029	1.7	1.9 (61)	-9.1 (99)	-11.8 (98)	2.6 (82)	2.7 (67)	5.7 (67)	-
PIMCO MAARS Fund LP	122,404,123	1.8	6.5 (22)	11.9 (15)	10.6 (31)	15.3 (17)	12.4 (9)	-	-
Absolute Return Custom Index			2.1 (59)	6.8 (42)	9.0 (39)	9.2 (43)	8.4 (27)	6.7 (65)	6.0 (35)
Inflation Hedge	1,208,288,771	17.6	3.1	4.2	6.5	2.3	1.1	7.2	
Blended Inflation Hedge Index			0.5	5.4	6.1	0.9	0.1	7.6	5.5
Real Estate	470,970,792	6.9	0.3 (88)	0.7 (90)	0.1 (80)	-3.9 (65)	-2.3 (52)	2.7 (84)	6.0 (29)
NCREIF ODCE			1.1 (70)	2.5 (62)	2.0 (73)	-4.9 (69)	<i>-4.3 (89)</i>	2.9 (83)	5.6 (36)
Harrison Street Core Property	91,227,779	1.3	0.8	1.4	2.1	-2.1	1.2	4.0	-
Invesco	219,500,234	3.2	-0.7	-1.5	-2.8	-7.3	-5.8	0.9	5.0
Invesco US Val IV	94,745	0.0	0.0	-5.0	-11.1	-31.6	-42.4	-25.9	-
Invesco US Val V	23,581,211	0.3	2.2	2.8	1.5	-14.1	-10.7	-0.4	-
Invesco US Val VI	26,996,014	0.4	0.0	3.3	0.8	-1.6	-	-	-
PGIM RE US Debt Fund	72,391,487	1.1	2.0	5.7	7.7	7.3	7.2	6.6	-
NCREIF ODCE			1.1	2.5	2.0	-4.9	-4.3	2.9	5.6
Stockbridge Value IV	26,599,512	0.4	0.0	-1.4	-4.9	-4.2	2.7	-	-
Stockbridge Value V	10,579,810	0.2	0.0	-2.0	-	-	-	-	-
NCREIF ODCE			1.1	2.5	2.0	-4.9	-4.3	2.9	5.6



	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
Private Real Assets***	432,232,776	6.3	3.8	6.0	12.8	9.6	8.4	11.9	8.7
Blended Private Real Assets Index			-4.2	8.9	10.9	8.4	7.3	7.2	6.9
Blended Secondary CA Private RA Index			0.6	4.7	7.4	6.7	9.1	9.5	7.4
Private Real Asset	299,672,312	4.4	5.0	6.1	11.8	9.1	8.1	11.7	-
Brookfield Super-Core Infrastructure Partners	67,907,206	1.0	1.7	5.5	8.5	8.8	8.4	-	-
KKR Diversified Core Infrastructure Fund (DCIF)	64,653,258	0.9	1.3	6.1	8.8	7.4	-	-	-
Public Real Assets	305,085,203	4.4	6.6	8.1	9.9	5.4	1.2	12.2	-
Blended Public Real Assets Index			6.5	7.8	9.6	5.2	1.0	12.2	5.6
SSgA Custom Real Assets	305,085,203	4.4	6.6	8.1	9.9	5.4	1.2	12.2	-
SSgA Custom Real Assets Index			6.5	7.8	9.6	5.2	1.0	12.2	-
Liquidity	423,107,202	6.2	1.2	3.9	5.2	5.2	4.3	2.8	-
Blended Liquidity Index			1.5	4.4	5.5	4.6	-	-	-
Cash Flow-Matched Liquidity	296,188,290	4.3	1.3	3.9	5.1	5.0	-		•
Bloomberg U.S. Gov/Credit 1-3 Year Index			1.6	4.6	5.6	4.5	3.1	1.6	1.7
Bloomberg U.S. Credit 1-3 Year Index			1.6	5.0	6.1	5.4	3.7	2.5	2.2
Insight Investment*	271,538,399	4.0	1.6	4.4	5.6	5.3	-	-	-
Bloomberg U.S. Credit 1-3 Year Index			1.6	5.0	6.1	5.4	3.7	2.5	2.2
County Treasury Pool**	24,649,891	0.4	0.2	1.7	3.1	3.8	2.9	2.3	2.1
90 Day U.S. Treasury Bill			1.0	3.6	5.0	5.1	4.2	2.6	1.9
Cash & Cash Overlay	188,324,896	2.7	1.2	3.9	5.4	5.7	4.8	3.1	2.1
90 Day U.S. Treasury Bill			1.0	3.6	5.0	5.1	4.2	2.6	1.9
General Account	174,033,307	2.5	1.2	4.0	5.5	5.7	4.8	3.1	2.8
90 Day U.S. Treasury Bill			1.0	3.6	5.0	5.1	4.2	2.6	1.9

## Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return [Risk free Rate + Portfolio Beta x (Market Return Risk free Rate)].

Benchmark R squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book to Market: The ratio of book value per share to market price per share. Growth managers typically have low book to market ratios while value managers typically have high book to market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of 1 me

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price to Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price to earnings ratios whereas value managers hold stocks with low price to earnings ratios.

R Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from 1 to 1 on each axis and are dependent on the Style Indices comprising the Map.



## Disclosure

This report contains confidential and proprietary information and is subject to the terms and conditions of the Consulting Agreement. It is being provided for use solely by the customer. The report may not be sold or otherwise provided, in whole or in part, to any other person or entity without written permission from Verus Advisory, Inc., (hereinafter Verus) or as required by law or any regulatory authority. The information presented does not constitute a recommendation by Verus and cannot be used for advertising or sales promotion purposes. This does not constitute an offer or a solicitation of an offer to buy or sell securities, commodities or any other financial instruments or products.

The information presented has been prepared using data from third party sources that Verus believes to be reliable. While Verus exercised reasonable professional care in preparing the report, it cannot guarantee the accuracy of the information provided by third party sources. Therefore, Verus makes no representations or warranties as to the accuracy of the information presented. Verus takes no responsibility or liability (including damages) for any error, omission, or inaccuracy in the data supplied by any third party. Nothing contained herein is, or should be relied on as a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the investor should be prepared to bear.

The information presented may be deemed to contain forward-looking information. Examples of forward looking information include, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure and other financial terms, (b) statements of plans or objectives of management,(c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward-looking information can be identified by the use of forward looking terminology such as believes, expects, may, will, should, anticipates, or the negative of any of the foregoing or other variations thereon comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward-looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. The findings, rankings, and opinions expressed herein are the intellectual property of Verus and are subject to change without notice. The information presented does not claim to be all-inclusive, nor does it contain all information that clients may desire for their purposes. The information presented should be read in conjunction with any other material provided by Verus, investment managers, and custodians.

Verus will make every reasonable effort to obtain and include accurate market values. However, if managers or custodians are unable to provide the reporting period's market values prior to the report issuance, Verus may use the last reported market value or make estimates based on the manager's stated or estimated returns and other information available at the time. These estimates may differ materially from the actual value. Hedge fund market values presented in this report are provided by the fund manager or custodian. Market values presented for private equity investments reflect the last reported NAV by the custodian or manager net of capital calls and distributions as of the end of the reporting period. These values are estimates and may differ materially from the investments actual value. Private equity managers report performance using an internal rate of return (IRR), which differs from the time-weighted rate of return (TWRR) calculation done by Verus. It is inappropriate to compare IRR and TWRR to each other. IRR figures reported in the illiquid alternative pages are provided by the respective managers, and Verus has not made any attempts to verify these returns. Until a partnership is liquidated (typically over 10-12 years), the IRR is only an interim estimated return. The actual IRR performance of any LP is not known until the final liquidation.

Net-of-Fees Returns mean gross-of-fees returns reduced by fees and expenses charged by third-party investment managers on the products of such managers held by client. Net-of-Fees Returns does not include a reduction of returns for Verus' investment management and consulting fees, or other expenses incurred by the asset owner, fund or plan.

Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is no static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.



## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 6.2

**TO:** Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer Michael R. Coultrip

SUBJECT: Preliminary Monthly Portfolio Performance Report for the Period Ended

April 30, 2025

#### Recommendation

Accept the preliminary performance report dated April 30, 2025.

## **Background**

This preliminary report is intended to provide a high-level view of the portfolio and its trends. It is not intended to provide short-term performance upon which the Board would act. The quarterly performance metrics are not yet available for our private equity, private credit, private real asset, and real estate portfolios. The performance for these portfolios will be reflected in the quarterly performance report generated by Verus.

The fund's preliminary return for April was 0.5%, bringing the preliminary trailing twelve-month net return ending April to 8.9%. SamCERA's estimated market value as of the end of April was \$6.86 billion, while the actuarial funded ratio as of June 30, 2024 was 87.6%.

#### Discussion

Extreme volatility was the name of the game in April, with decidedly mixed results across asset classes. U.S. equity plummeted early in the month (reaching near a bear market or 20% down from previous highs), only to snap back later in the month on tariff policy whipsaws. Significant uncertainty surrounding U.S. tariff policy negatively impacted investor sentiment towards U.S. markets.

After all of that volatility, the U.S. equity market (as measured by the S&P 500 Index) was down only 0.7%, while small-capitalization stocks were down 2.3%. Developed international equity (as measured by MSCI EAFE) was up 4.6%, while emerging markets were up 1.3%.

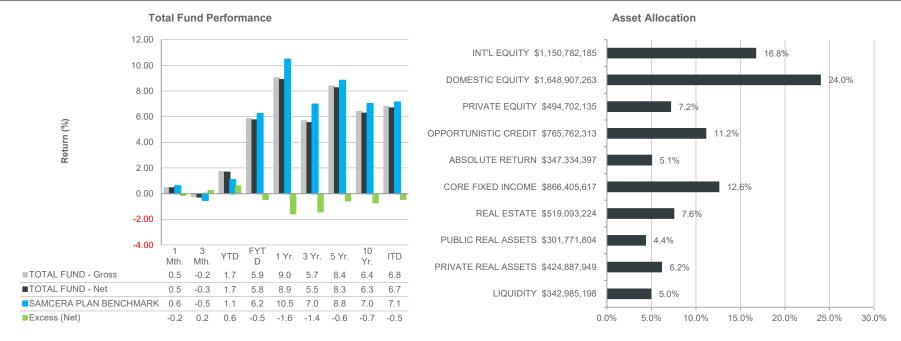
U.S. economic activity was mixed in April. Real gross domestic product (GDP) contracted -0.3% on an annualized rate for the first three months of 2025. U.S. manufacturing weakened and remained in contraction territory for the second straight month. The labor market was stronger than expected in April, adding 177,000 jobs. The headline unemployment rate remained steady at 4.2%. Inflation (as measured by the Consumer Price Index - All Urban Consumers) increased 2.3% for the 12-months ending April, which was lower than March levels.

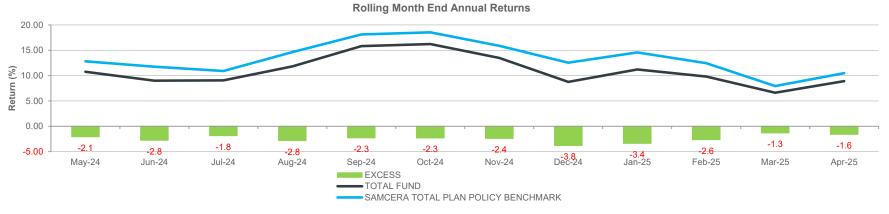
The general U.S. fixed income market was higher by 0.4% in April, as the yield curve steepened (short-rates fell and long-rates increased). The 10-year U.S. Treasury yield was 4 bps lower during the month and ended at 4.17%. Commodities were down 4.8% in April.

## **Attachments**

Northern Trust Monthly Preliminary Performance Report Verus Capital Market Update







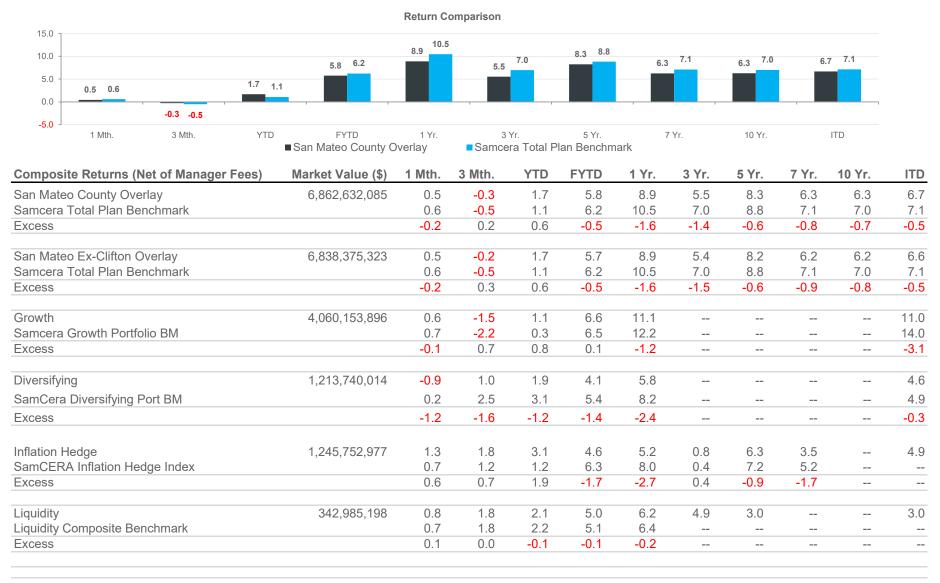


NTAC:3NS-20 1 of 13

# San Mateo County Composite Return Summary



April 30,2025





NTAC:3NS-20 2 of 13

SamCER	Ą

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Public Equity	2,799,689,448	0.9	-2.9	0.4	6.4	11.8	9.7	12.6	8.6	8.6	8.1
Samcera Total Equity BM		0.4	-4.4	-1.2	4.4	10.3	10.2	13.3	9.3	9.5	8.7
Excess		0.5	1.4	1.6	2.0	1.5	-0.4	-0.7	-0.7	-0.9	-0.6
Domestic Equity	1,648,907,263	-0.9	-7.0	-4.0	5.2	12.8	11.0	14.7	11.5	11.1	9.3
Samcera Dom. Equity Benchmark		-0.7	-8.3	-5.4	3.2	11.4	11.4	15.1	12.3	11.6	9.8
Excess		-0.2	1.3	1.4	2.0	1.4	-0.4	-0.4	-0.8	-0.6	-0.5
Large Cap Equity	1,465,661,744	-0.7	-6.3	-3.3	6.0	13.9	11.4	14.6	12.0	11.6	10.0
Russell 1000		-0.6	-8.0	-5.1	3.5	11.9	11.9	15.4	12.8	12.0	10.4
Excess		-0.1	1.7	1.8	2.5	1.9	-0.5	-0.8	-0.8	-0.4	-0.4
Blackrock Russell 1000	953,759,070	-0.6	-8.0	-5.1	3.5	12.0	11.9	15.6	12.9		13.2
Russell 1000		-0.6	-8.0	-5.1	3.5	11.9	11.9	15.4	12.8		13.1
Excess		-0.0	0.0	-0.0	0.0	0.0	0.0	0.1	0.1		0.1
DE Shaw Commingled Fund	291,642,387	0.8	-5.8	-2.1	10.9	21.4	14.1	16.7	13.0	12.7	12.7
Russell 1000		-0.6	-8.0	-5.1	3.5	11.9	11.9	15.4	12.8	12.0	11.9
Excess		1.4	2.2	3.0	7.4	9.5	2.2	1.3	0.2	0.6	0.8
Panagora Defuseq -SL	220,260,287	-3.0	0.7	3.0	11.6	15.0	7.7	11.7			11.6
Russell 1000		-0.6	-8.0	-5.1	3.5	11.9	11.9	15.4			15.2
Excess		-2.4	8.7	8.1	8.1	3.1	-4.2	-3.7			-3.6
Small Cap Equity	117,431,009	-4.2	-15.9	-12.2	-4.4	0.4	5.3	13.3	5.3	5.5	6.2
Russell 2000		-2.3	-13.8	-11.6	-3.0	0.9	3.3	9.9	4.9	6.3	7.2
Excess		-1.9	-2.1	-0.6	-1.3	-0.5	2.1	3.4	0.4	-0.8	-1.0
QMA US Small Cap	117,431,009	-4.2	-15.9	-12.2	-4.4	0.4	5.3	13.3	5.3		7.1
Russell 2000		-2.3	-13.8	-11.6	-3.0	0.9	3.3	9.9	4.9		6.9
Excess		-1.9	-2.1	-0.6	-1.3	-0.5	2.1	3.4	0.4		0.2
Domestic Equity Overlay	65,814,510	0.7	-6.2	-3.0	8.2	16.5	16.7	67.9			67.9
ICE BofAML US 3-Month Treasury Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6			2.6
Excess		0.3	-7.2	-4.4	4.2	11.6	12.3	65.3			65.3
International Equity	1,150,782,185	3.5	3.4	7.3	8.7	11.4	8.4	10.4	5.4	5.5	5.7
SamCERA Custom Hedge Intl	, , , ,	2.0	1.9	5.5	7.0	9.9	8.8	11.3	5.8	5.7	5.5
Excess		1.6	1.5	1.8	1.7	1.5	-0.5	-0.9	-0.3	-0.2	0.2



SamCERA

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Developed Markets Equity	1,147,826,344	3.6	3.5	7.4	8.7	11.4	8.0	9.7	5.3	5.4	4.9
Dev Mrkts Equity Curr Hedge	7,986,568										
Dev Mrkts Equity Ex Curr Hedge	1,155,812,912	4.3	5.4	9.6	9.7	12.5	7.7	9.5	5.1	5.3	4.9
MS AC WIdxUS IMI Nt		3.8	4.7	8.5	8.5	11.4	7.6	10.1	4.6	4.9	5.1
Excess		0.6	0.7	1.1	1.2	1.1	0.1	-0.6	0.5	0.4	-0.2
Baillie Gifford	280,167,686	4.0	0.4	5.2	5.1	8.4	4.0	5.3	3.5	4.5	6.1
MSCI ACWI ex USA Growth		4.1	1.9	6.2	4.7	8.6	6.1	7.5	4.9	5.4	
Excess		-0.1	-1.5	-1.0	0.3	-0.2	-2.1	-2.2	-1.4	-0.9	
Blackrock MSCI ACWI ex US IMI	566,678,881	3.8	4.9	9.0	8.6	11.6	7.8				8.0
MS AC WIdxUS IMI Nt		3.8	4.7	8.5	8.5	11.4	7.6				7.9
Excess		0.1	0.2	0.5	0.2	0.2	0.2				0.1
Mondrian Investment Partners	308,966,346	5.6	11.2	15.3	16.7	18.5	10.7	11.9	4.8	4.8	5.6
MSCI ACWI xUSA Value		3.3	8.2	12.3	14.1	16.6	11.1	13.7	5.4	5.1	5.8
Excess		2.4	3.0	3.0	2.6	1.9	-0.5	-1.8	-0.6	-0.4	-0.2
Int'l Equity Overlay	2,955,841	-5.5	-11.9	-5.8	8987.2	9181.7					
ICE BofAML US 3-Month Treasury Bill		0.3	1.0	1.4	4.0	4.9					5.1
Excess		-5.9	-12.9	-7.2	8983.3	9176.8					
Private Equity	494,702,135	0.3	3.9	4.4	6.9	9.1	2.1	14.6	17.5	15.9	-4.0
Samcera PE Benchmark		3.4	7.4	6.9	18.3	29.2	14.4	17.6	15.9	15.7	16.8
Excess		-3.1	-3.5	-2.5	-11.5	-20.1	-12.3	-3.1	1.6	0.2	-20.8
Opportunistic Credit	765,762,313	-0.3	0.8	1.6	6.8	8.9	5.1	6.3	4.8	5.3	7.3
Samcera Opp Credit Bench		0.2	0.3	1.5	6.7	8.8	6.9	5.7	5.2	4.9	6.3
Excess		-0.4	0.5	0.1	0.1	0.1	-1.7	0.7	-0.4	0.5	1.0
Public Credit	538,720,042	-0.3	0.4	1.6	7.5	9.5					9.0
BBG US Corp High Yield	000,120,042	-0.0	-0.4	1.0	6.5	8.7					9.3
Excess		-0.3	0.7	0.6	1.0	0.8					-0.2
Beach Point Select Fund	123,360,484	-0.2	-0.1	1.8	8.4	9.6	6.4	11.1	7.8	7.7	8.1
BBG US Corp High Yield	,,	-0.0	-0.4	1.0	6.5	8.7	6.2	6.3	4.8	4.9	5.1
Excess		-0.2	0.3	0.8	1.9	0.9	0.1	4.7	2.9	2.9	3.0



<u></u>	
Com CED	Λ
SamCER	$\Delta$

April 00,2020											
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Brigade Cap Mngmt	107,310,515	-0.7	-1.3	-0.2	7.6	10.4	3.8	9.3	4.8	4.9	5.9
BBG US Corp High Yield		-0.0	-0.4	1.0	6.5	8.7	6.2	6.3	4.8	4.9	6.1
Excess		-0.7	-1.0	-1.1	1.1	1.7	-2.5	3.0	-0.0	-0.0	-0.2
Eaton Vance EM	67,498,981	-0.7	3.0	4.1	9.4	11.3					9.9
BBG US Corp High Yield		-0.0	-0.4	1.0	6.5	8.7					7.3
Excess		-0.7	3.4	3.1	2.9	2.6					2.5
Golden Tree Select PA	61,263,561	-0.4	-0.6	0.5							
BBG US Corp High Yield		-0.0	-0.4	1.0							2.8
Excess		-0.3	-0.2	-0.5							
One William Street	70,772,472	0.0	1.0	1.8	6.4	7.6					
BBG US Corp High Yield		-0.0	-0.4	1.0	6.5	8.7					8.9
Excess		0.0	1.4	0.8	-0.1	-1.0					
PIMCO Div. Income Fund	108,514,028	0.1	1.0	2.1	6.7	9.1	5.2	3.1	3.2		3.0
BBG US Corp High Yield		-0.0	-0.4	1.0	6.5	8.7	6.2	6.3	4.8		4.5
Excess		0.1	1.4	1.1	0.2	0.4	-1.0	-3.3	-1.7		-1.6
Private Credit	227,042,271	-0.2	1.9	1.8	4.9	7.4					6.7
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					10.7
Excess		-0.9	-0.2	-1.2	-2.2	-1.6					-4.0
AG CREDIT SOL FU LP	5,469,532	0.1	6.0	6.1	9.8	12.3	6.7	11.5			13.8
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.6	3.9	3.1	2.6	3.3					
AG CSF ADF II	1,583,029	0.0	2.3	2.3	6.6	9.9					
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.7	0.1	-0.7	-0.6	0.9					
AG CSF II	27,424,994	0.1	5.5	5.6	11.3	14.7	9.1				8.3
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.6	3.3	2.5	4.1	5.7					
Blackrock Direct Lending Feede	37,475,831	-0.3	-0.5	-0.8	1.4	2.5	5.6	6.3			4.1
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-1.0	-2.6	-3.8	-5.8	-6.5					



# San Mateo County Composite Return Summary

April 30,2025



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Comvest Credit Partners VII	21,469,886	-1.0	2.0	2.0	-6.7	-6.7					-6.6
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-1.7	-0.2	-1.0	-13.8	-15.6					
Pimco Private Income	49,832,031	0.0	1.6	1.6	5.7	8.7	5.1	7.6			7.0
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.7	-0.5	-1.4	-1.5	-0.3					
TCP Direct Lending VIII	5,236,564	-2.0	1.4	-0.1	4.6	4.0	4.9	6.4	5.4		
Credit Suisse Lev Loan 1 QTR L	, ,	0.7	2.2	3.0	7.1	9.0					
Excess		-2.8	-0.8	-3.1	-2.6	-5.0					
TPG AG CSF III	1,500,000	0.0	0.0	0.0							
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0							5.5
Excess		-0.7	-2.2	-3.0							
SAMCERA-400 CAPITAL ASSET B IV	14,216,134	0.0									
Credit Suisse Lev Loan 1 QTR L	, -, -	0.7	2.2	3.0							3.0
Excess		-0.7									
White Oak Yield Spec	31,351,708	0.0	4.6	4.6	10.8	13.5	6.9	6.3	6.4		
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.7	2.4	1.5	3.6	4.5					
White Oak YSF V	31,482,562	0.0	0.2	0.2	0.2	3.4	1.4				1.2
Credit Suisse Lev Loan 1 QTR L		0.7	2.2	3.0	7.1	9.0					
Excess		-0.7	-1.9	-2.8	-6.9	-5.6					
Absolute Return	347,334,397	-3.7	-3.1	-1.8	1.5	-0.3	2.6	4.5	-0.5	0.8	1.9
Samcera SOFR + 4%		0.7	2.1	2.8	7.4	9.0	8.6	6.8	6.6	6.0	5.5
Excess		-4.4	-5.2	-4.5	-5.8	-9.4	-6.0	-2.3	-7.1	-5.2	-3.6
CFM SYS Global Macro Fund	125,921,616	1.4	-1.8	-0.6	15.2	14.0	7.4				9.4
Samcera SOFR +4%		0.7	2.1	2.8	7.4	9.0	8.6				7.0
Excess		0.7	-3.8	-3.4	7.8	5.0	-1.2				2.4
Graham Global Investment	102,974,551	-9.9	-10.7	-8.2	-18.0	-20.7	-3.0	3.2			2.2
Samcera SOFR +4%	,- ,	0.7	2.1	2.8	7.4	9.0	8.6	6.8			6.7
Excess		-10.6	-12.7	-10.9	-25.4	-29.7	-11.5	-3.6			-4.5



NTAC:3NS-20 6 of 13

# San Mateo County Composite Return Summary





7-prii 00;2020											
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
PIMCO MAARS Fund L.P.	118,438,230	-3.2	2.9	3.2	8.3	6.9	9.0	9.8			9.7
Samcera SOFR +4%		0.7	2.1	2.8	7.4	9.0	8.6	6.8			6.7
Excess		-3.9	0.9	0.4	1.0	-2.1	0.5	3.1			3.0
Core Fixed Income	866,405,617	0.2	2.7	3.4	5.1	8.2	1.8	-0.1	1.6	1.8	4.2
BBG US Aggregate		0.4	2.6	3.2	5.2	8.0	2.0	-0.7	1.7	1.5	4.0
Excess		-0.1	0.1	0.2	-0.1	0.2	-0.2	0.5	-0.1	0.2	0.3
Core Fixed Income ex Overlay	870,611,242	0.2	2.7	3.4	5.1	8.3	1.9	-0.1	1.7	1.8	4.3
BBG US Aggregate		0.4	2.6	3.2	5.2	8.0	2.0	-0.7	1.7	1.5	4.0
Excess		-0.1	0.1	0.2	-0.1	0.3	-0.1	0.6	-0.1	0.3	0.3
DoubleLine	276,266,930	0.4	2.6	3.4	5.9	8.8	2.2	0.0			0.3
BBG US Aggregate		0.4	2.6	3.2	5.2	8.0	2.0	-0.7			-0.4
Excess		0.1	0.0	0.2	0.7	0.8	0.3	0.7			0.8
FIAM B Core Bond	194,729,753	0.4	2.7	3.3	5.4	8.4	2.2	0.3	2.4		2.4
BBG US Aggregate		0.4	2.6	3.2	5.2	8.0	2.0	-0.7	1.7		1.6
Excess		0.1	0.0	0.1	0.1	0.4	0.2	1.0	0.7		8.0
NISA Core Bond	296,704,756	0.4	2.7	3.5	5.4	8.1	2.2	-0.3			-0.3
BBG US Aggregate		0.4	2.6	3.2	5.2	8.0	2.0	-0.7			-0.7
Excess		0.0	0.0	0.3	0.1	0.1	0.3	0.4			0.4
NISA Long Treasury	102,909,803	-1.1	3.0	3.5	2.2	6.8					-1.9
Bloomberg US Long Tsy		-1.1	3.1	3.5	2.0	6.7					-2.1
Excess		-0.0	-0.1	-0.0	0.1	0.1					0.1
Core Fixed Income Overlay	4,205,625	6.9	10.8	11.6	11.1	11.7					
ICE BofAML US 3-Month Treasury Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6			2.6
Excess		6.6	9.8	10.2	7.2	6.9					
Real Estate	519,093,224	0.5	0.8	1.2	0.1	0.1	-3.1	1.9	3.4		4.6
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9	3.8		4.7
Excess		0.5	-0.3	0.2	-2.4	-1.9	1.1	-1.0	-0.5		-0.1
Beach Point Cap	17,688,966	4.3	4.3	5.4							8.7
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1							2.5
Excess		4.3	3.2	4.3							6.2



NTAC:3NS-20 7 of 13

Sam	CERA

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Harrison Street Core Property	92,111,948	0.9	0.9	2.9	1.6	3.1	0.4	3.1			3.0
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9			2.9
Excess		0.9	-0.2	1.8	-0.9	1.1	4.6	0.2			0.2
Invesco Core Real Estate	249,500,500	-0.0	-0.7	-0.7	-1.8	-3.1	-6.3	0.5	2.3	4.6	6.0
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9	3.8	5.6	6.5
Excess		-0.0	-1.7	-1.8	-4.3	-5.2	-2.0	-2.4	-1.5	-1.0	-0.6
Invesco US Val IV	95,131	0.4	0.4	-4.4	-10.7	-10.7	-43.1	-26.5	-16.7		-10.2
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9	3.8		5.2
Excess		0.4	-0.7	-5.5	-13.2	-12.8	-38.9	-29.3	-20.5		-15.3
Invesco US VAL V	23,581,211	1.9	1.9	2.7	0.5	0.5	-11.5	-1.2			0.1
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9			
Excess		1.9	0.8	1.6	-2.0	-1.6	-7.3	-4.1			
Invesco Value-Add Fund	26,996,014	0.0	7.1	7.1	1.0	3.9					-5.3
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0					-6.4
Excess		0.0	6.0	6.0	-1.5	1.8					1.1
PGIM Real Estate US Debt Fund	71,940,133	0.7	1.8	2.1	5.2	7.0	6.5	5.9	6.0		5.6
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9	3.8		4.2
Excess		0.7	0.8	1.0	2.7	4.9	10.8	3.1	2.2		1.4
Stockbridge VAL FD V	10,579,810	0.0	-1.0	-1.0	-9.5						-9.5
Samcera NCREIF ODCE (gross)		0.0	1.1	1.1	2.5	2.0	-4.3	2.9	3.8		4.2
Excess		0.0	-2.1	-2.1	-12.0						-13.7
Stockbridge Value IV	26,599,512	0.0	0.9	0.9	-5.8	-5.8	3.7				2.6
Samcera NCREIF ODCE (gross)	2,222,2	0.0	1.1	1.1	2.5	2.0	-4.3				3.0
Excess		0.0	-0.2	-0.2	-8.3	-7.8	8.0				-0.4
Public Real Assets	301,771,804	-1.1	2.2	5.4	6.8	7.9	1.2	10.0	1.8		
SamCera Liquid Real Asset Inde	00.,,00.	-1.0	2.3	5.5	6.7	7.9	1.2	10.3	4.2		6.0
Excess		-0.1	-0.1	-0.1	0.1	-0.0	-0.0	-0.3	-2.3		
SSGA CST REAL ASSET NL	301,771,804	-1.1	2.2	5.4	6.8	7.9	1.2	10.0	4.1		
SamCera Liquid Real Asset Inde		-1.0	2.3	5.5	6.7	7.9	1.2	10.3	4.2		5.3
Fxcess		-0.1	-0.1	-0.1	0.1	-0.0	-0.0	-0.3	-0.0		

SamC	ERA

Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Private Real Assets	424,887,949	4.2	2.8	3.7	9.1	10.3	8.5	12.4	7.4		9.8
SamCERA Private Real Asset Idx		3.1	0.4	-1.3	12.4	18.7	8.2	8.5	7.0		10.5
Excess		1.1	2.4	5.0	-3.3	-8.4	0.3	3.9	0.4		-0.7
Liquidity	342,985,198	0.8	1.8	2.1	5.0	6.2	4.9	3.0			3.0
Liquidity Composite Benchmark		0.7	1.8	2.2	5.1	6.4					
Excess		0.1	0.0	-0.1	-0.1	-0.2					
Cash Flow - Match Liquidity	282,287,734	0.8	1.7	2.1	4.8	5.9					4.4
BBG US Agg Govt Credit 1-3		8.0	1.9	2.4	5.4	6.8					3.8
Excess		0.1	-0.3	-0.3	-0.6	-0.8					0.7
County Treasury Pool	9,104,099	2.8	2.8	3.0	4.9	4.9	3.8	2.7	2.5	2.0	2.7
91 Day T-Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6	2.5		
Excess		2.4	1.8	1.6	0.9	-0.0	-0.6	0.1	0.0		
Insight Investment	273,183,635	0.6	1.7	2.2	4.9	6.1					4.3
BBG US Credit 1-3 Yrs		0.6	1.8	2.3	5.6	7.0					4.4
Excess		-0.0	-0.1	-0.1	-0.7	-0.8					-0.2
Cash & Cash Overlay	125,262,189	0.3	1.1	1.5	4.1	5.0					
91 Day T-Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6	2.5		
Excess		0.0	0.1	0.1	0.1	0.1					
Cash Overlay	24,256,762	0.3	1.0	1.4	4.0	4.9	4.2	2.4			2.4
ICE BofAML US 3-Month Treasury Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6			2.6
Excess		-0.0	0.0	0.0	-0.0	0.0	-0.2	-0.2			-0.2
General Account	101,005,423	0.4	1.1	1.5	4.1	5.0	4.6	2.8	2.6	2.0	2.1
Transition Account	3										
Futures Offsets	64,564,725	0.1	0.1	0.1	0.2	0.2	-0.0	0.0			0.0
ICE BofAML US 3-Month Treasury Bill		0.3	1.0	1.4	4.0	4.9	4.3	2.6			2.6
Excess		-0.3	-0.9	-1.3	-3.8	-4.7	-4.4	-2.6			-2.6

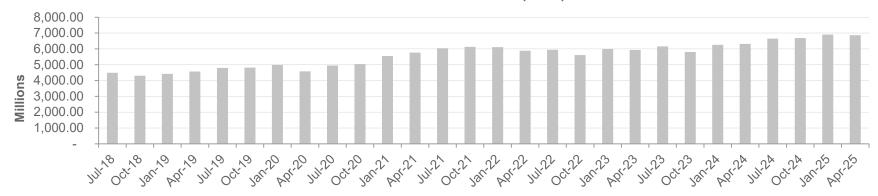




Record	of /	Asset	Growth	١
--------	------	-------	--------	---

	<b>Three Months</b>	One Year
TOTAL FUND		
Beginning Market Value	6,902,116,161	6,313,492,634
Contributions	70,058,083	323,052,858
Withdrawals	-92,693,622	-346,384,160
Income Received	36,891,333	134,450,269
Gain/Loss	-53,756,643	438,477,492
Ending Market Value	6,862,632,085	6,862,632,085

# **Net Asset Values Over Time (\$000)**

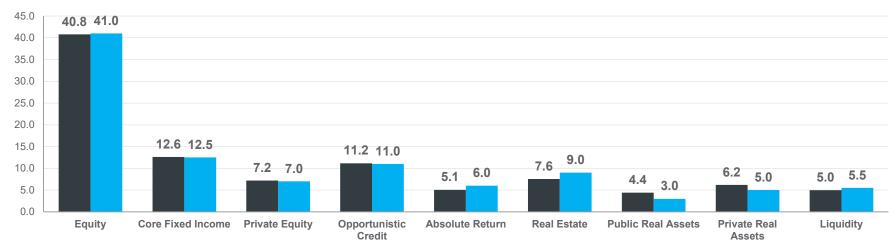




NTAC:3NS-20 10 of 13



# **Actual vs Target Weights**



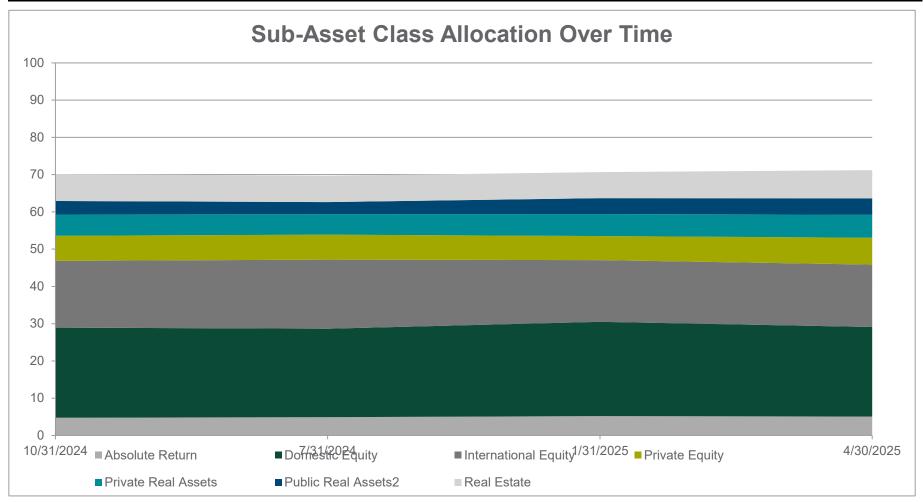
■ Actual	Target
----------	--------

	Min	Actual	<b>Target</b>	Deviation	Max
Equity	38.0	40.8	41.0	-0.2	44.0
Core Fixed Income	10.5	12.6	12.5	0.1	14.5
Private Equity	5.0	7.2	7.0	0.2	9.0
Opportunistic Credit	9.0	11.2	11.0	0.2	13.0
Absolute Return	4.0	5.1	6.0	-0.9	8.0
Real Estate	7.0	7.6	9.0	-1.4	11.0
Public Real Assets	1.0	4.4	3.0	1.4	5.0
Private Real Assets	3.0	6.2	5.0	1.2	7.0
Liquidity		5.0	5.5	-0.5	



NTAC:3NS-20 11 of 13







NTAC:3NS-20 12 of 13

# Disclaimer(s)

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of Morgan Stanley Capital International Inc.("MSCI") and Standard & Poor's, a division of The McGraw-Hill Companies, Inc.("S&P") and is licensed for use by The Northern Trust Corporation and its wholly owned subsidiaries. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

The Dow Jones Wilshire Indexes are calculated, distributed and marketed by Dow Jones & Company, Inc. pursuant to an agreement between Dow Jones and Wilshire and have been licensed for use. All content of the Dow Jones Wilshire Indexes © 2005 Dow Jones & Company, Inc. & Wilshire Associates Incorporated.

Standard and Poor's including its subsidiary corporations ("S&P") is a division of the McGraw-Hill Companies, Inc. Reproduction of S&P Index Alerts in any form is prohibited except with the prior written permission of S&P. Because of the possibility of human or mechanical error by S&P sources, S&P or others, S&P does not guarantee the accuracy, adequacy, completeness or availability of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. S&P gives not express or implied warranties, including, but not limited to, any warranties or merchantability or fitness for a particular purpose or use. In no event shall S&P be liable for any indirect, special or consequential damages in connection with subscriber's or others' use of S&P Index Alerts.

All MSCI equity characteristic results except for Dividend Yield, Price to Book Value, Price to Cash Earnings and Price Earnings Ratio were calculated by The Northern Trust Company.

FTSE ® is a trade mark of London Stock Exchange Plc and The Financial Times Limited and is used by FTSE under license. All rights in the FTSE Indices vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE Indices or underlying data.

The Merrill Lynch Indices are used with permission. Copyright 2007, Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. The Merrill Lynch Indices may not be copied, used, or distributed without Merrill Lynch's prior written approval.

The Citi Index data is provided to you on an "AS IS" basis and you agree that use of the index data is at your sole risk. Citi Index makes no representations or warranties, express or implied, to you or any other person or entity, including without limitation any warranty of merchantability, originality, suitability or fitness for a particular purpose of the index data or any other matter and no warranty is given that the index data will conform to any description thereof or be free of omissions, errors, interruptions or defects. 4. In no event shall Citi Index be liable to you or any other person or entity for any direct, incidental, indirect, special or consequential damages (including, without limitation,

lost profits or revenues, loss of data, loss of use or claims of third parties). arising out of or in any manner in connection with your use of (or inability to use) the index data, whether or not you have been advised of, or otherwise might have anticipated the possibility of, such damages. Without limitation on the foregoing, you acknowledge that the index data may be incomplete or condensed, is for information purposes only and is not intended as, and shall not be construed to be, an offer or solicitation with respect to the purchase or sale of any security. All opinions and estimates provided constitute judgments as of their respective dates and are subject to change without notice. Such data, information, opinions and estimates are furnished as part of a general service, without regard to your particular circumstances, and Citi Index shall not be liable for any damages in connection therewith. Citi Index is not undertaking to manage money or act as a fiduciary with respect to your accounts or any of your managed or fiduciary accounts and you acknowledge and agree that the index data does not and shall not serve as the primary basis for any investment decisions made with respect to such accounts.

iShares® and BlackRock® are registered trademarks of BlackRock, Inc. and its affiliates ("BlackRock") and are used under license. BlackRock has licensed certain trademarks and trade names of BlackRock to The Northern Trust Company. The Northern Trust Company's products and services are not sponsored, endorsed, sold, or promoted by BlackRock, and BlackRock makes no representations or warranties related to such products or services either to The Northern Trust Company or any other person or entity, including but not limited to the advisability of investing in the products of The Northern Trust Company. BlackRock has no obligation or liability in connection with the operation, marketing, trading or sale of the products or services from The Northern Trust Company.

Please note that this report has been prepared using best available data. This report may also contain information provided by third parties, derived by third parties or derived from third party data and/or data that may have been categorized or otherwise reported based upon client direction - Northern Trust assumes no responsibility for the accuracy, timeliness or completeness of any such information. If you have questions regarding third party data or direction as it relates to this report, please contact your Northern Trust relationship team.

INVESTMENT ADVICE NOTICE: The data and analysis contained in this report is for informational purposes only. In providing the information contained herein. The Northern Trust Company is not undertaking to provide "investment advice" or to give advice in a fiduciary capacity for purposes of the Employee Retirement Income Security Act of 1974, as amended. Nothing in this report is intended as, or should be understood as, a recommendation to hire, retain, or terminate an investment manager or engage in any purchase or sale transaction with such a manager or any fund that it manages. The Northern Trust Company and/or its affiliates may have business relationships with one or more investment managers or funds for included in this report, and may receive compensation for providing custody, administration, banking, brokerage, foreign exchange or other services to such investment managers or funds. The Northern Trust Company and its affiliates shall have no responsibility for the consequences of investment decisions made in reliance on information contained in this report.



# Market commentary

#### **U.S. ECONOMICS**

- Headline CPI decreased -0.1% in March, lower than expectations of +0.1%, bringing year-over-year inflation to 2.4%—closer to the Fed's 2% target. Core CPI rose +0.1% over the month, 2.8% year-over-year. The index for energy fell -2.4% in March, led by a -6.3% fall in seasonally adjusted gas prices, which offset higher natural gas and electricity prices.
- April nonfarm payrolls were stronger-than-expected, coming in at 177,000 jobs added, which was 39,000 higher than the expected 138,000. Employment gains were concentrated in health care, transportation and warehousing, social assistance, and financial activities sectors. Unemployment remained unchanged at 4.2% in April, reaffirming the labor market's solid footing.
- The ISM Manufacturing Index came in at 48.7, registering in contractionary territory for the second month in a row, down from 49 in March. Demand and output continued to show weakness in April, with declines in both New Export Orders and Production Indexes.

# **U.S. EQUITIES**

- April was a highly volatile month for the S&P 500. On April 2nd, President Trump announced a list of updated tariff rates on nearly all U.S. trading partners, which led to a -4.8% slide the following day and then a further slide to -12%. However, stocks then rallied during the following weeks as President Trump announced a 90-day pause on most tariffs, excluding China. Exemptions on certain products such as phones, chips, and computers provided relief to companies reliant on Chinese tech.
- Markets have remained focused on trade, the probability of recession, and potential inflation upside due to tariffs. Strong corporate earnings for Q1 provided support to investors as 76% of S&P 500 companies reported a positive EPS surprise as of May 2<sup>nd</sup>.

#### **U.S. FIXED INCOME**

- Bond yields moved lower in April. The 2-year and 10-year U.S Treasury yields fell -29bps and -6bps, respectively, which could be partially attributed to the lower March CPI print and signs of economic weakness in April amid global tensions. Shorter-dated U.S. Treasuries (1-3 Years) were up +0.8% in April and continued to outperform long duration assets as the yield curve steepened over the month.
- High yield bonds were flat in April (Bloomberg U.S. Corp High Yield +0.0%). High yield bond spreads continued to widen +37bps to 384bps, while total yield increased by +17bps to 7.90%. This comes as many investors pivot towards less riskier assets amid global trade concerns.

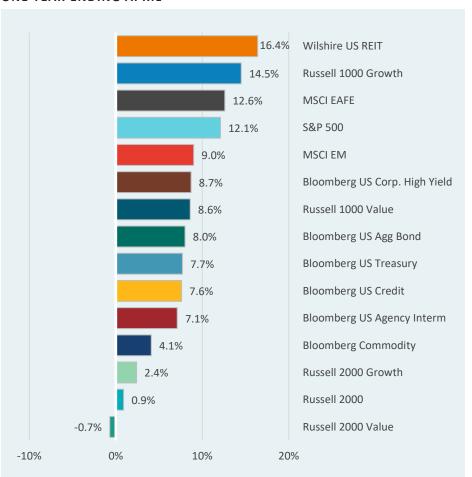
#### **INTERNATIONAL MARKETS**

- The European Central Bank (ECB) voted unanimously to cut interest rates by an additional 25bps to 2.25% on April 17th, which marked the seventh cut since June 2024. ECB President Lagarde warned that continued escalations in global trade tensions are likely to dampen future euro area growth. Markets interpreted this as a signal that further easing could be on the horizon.
- UK headline CPI came in slightly lower-than-expected in March at 2.6% year-over-year, down from 2.8% in February, but still above the Bank of England's target of 2%. Core CPI came in at 3.4% year-over-year, down from 3.5%.
- On April 11<sup>th</sup> Canada's Interim Prime Minister Mark Carney announced a 25% retaliatory tariff against the U.S. on automobiles and auto parts with the intention to incentivize production and investment in Canada. At the end of April, Canadian elections concluded with Mike Carney winning the election against his opponent, conservative leader Pierre Poilievre.

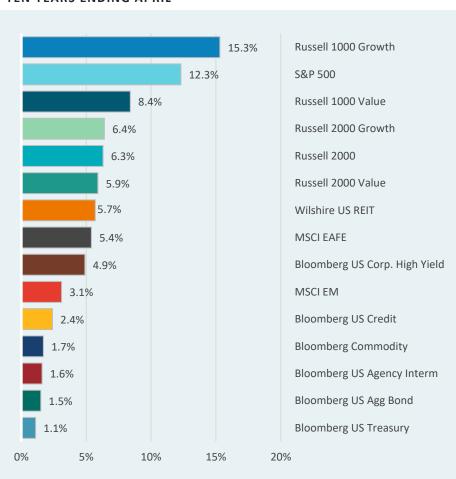


# Major asset class returns

#### ONE YEAR ENDING APRIL



#### TEN YEARS ENDING APRIL



\*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 4/30/25

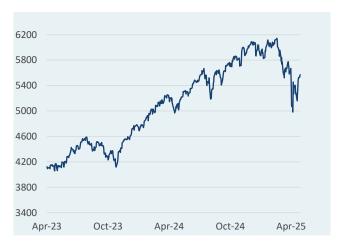
Source: Morningstar, as of 4/30/25



# U.S. large cap equities

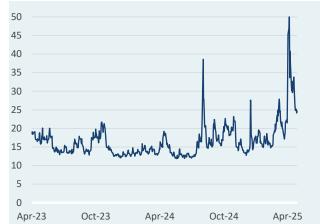
- The S&P 500 Index ended the month down -0.7%, bringing year-to-date returns to -4.9%. April was marked by trade related volatility as President Trump's tariff announcement triggered a historically quick selloff early in the month. A positive earnings season, 90-day tariff pause, and expectations for trade negotiations helped U.S. equities recover most losses by month end.
- April was broadly negative with 7 of 11 sectors in the red.
   Energy (-13.6%), Health Care (-3.7%), and Materials
   (-2.2%) lagged the index, while Information Technology
   (+1.6%) and Consumer Staples (+1.2%) posted gains.
- Earnings have beaten expectations so far, as 76% of reporting companies in the S&P 500 had an EPS above estimates as of May 2<sup>nd</sup>. This is below the 5-year average of 77% but above the 10-year average of 75%. The yearover-year blended earnings growth rate now sits at 12.8%, the second straight quarter of double-digit earnings growth.
- U.S. equities experienced significant volatility as trade uncertainty persisted. The VIX closed at 24.7, after it reached a peak of 52.3 on the 8th following the 90-day pause, then sharply declined to 30.1. The spike might reflect heightened investor anxiety as markets reacted to potential economic impacts of the tariffs.

#### S&P 500 PRICE INDEX



Source: S&P, as of 4/30/25

#### IMPLIED VOLATILITY (VIX INDEX)



Source: Choe, based on closing price, as of 4/30/25

#### **S&P 500 VALUATION SNAPSHOT**



Source: S&P, as of 4/30/25

# Domestic equity size & style

- In April, large-cap growth (Russell 1000 Growth +1.8%) outperformed large-cap value (Russell 1000 Value -3.0%), reversing the trend seen so far this year. This was driven by strong earnings reports from technology companies, notably Microsoft and Meta. Furthermore, tariff exemptions on phones, computers, and chips provided relief to large-cap growth outlooks.
- Large-cap growth valuations remain elevated, with the Russell 1000 Growth Index trading at 25.6x, compared to the 20-year average of 19.5x. Large cap value and small cap value remain near their 20-year average.
- Large-cap stocks outperformed small-cap stocks in April, with the Russell 1000 down -0.6% and the Russell 2000 down -2.3%. Concerns over persistent inflation and delays in rate cuts have led investors to favor large cap stocks that may have stronger balance sheets and more stable earnings.
- Small-cap value was the worst performing sector in April (Russell 2000 Value -4.0%), underperforming small-cap growth (Russell 2000 Growth -0.6%) and bringing the 1-year return down to -0.7%.

# VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



PERFORMANCE

SMALL VS. LARGE 1-YR ROLLING RELATIVE



Source: FTSE Russell, as of 4/30/25

#### 1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	8.6%	11.9%	14.5%
Mid Cap	5.2%	7.3%	13.7%
Small Cap	-0.7%	0.9%	2.4%

Source: FTSE Russell, as of 4/30/25



Source: FTSE Russell, as of 4/30/25

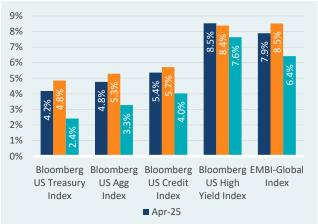
# Fixed income

- Long-dated U.S. Treasuries were volatile in April with the 10-year U.S. Treasury yield climbing to a mid-month high of 4.48%. However, a lower-than-expected CPI print likely helped to lower the 10-year yield back to 4.17%. The 2year U.S. Treasury yield ended the month -29bps lower at 3.60%.
- High yield bonds posted a flat +0.0% return in April, despite widening credit spreads. High bond spreads continued to widen by +37bps to 384bps, while yields increased by +17bps to 7.90%. Regardless of widening spreads and concerns over economic slowdown, spreads remain well below the 10-year average of 412bps.
- The U.S. Treasury Implied Volatility ("MOVE") Index spiked to 140 in the first week of April during the sudden market selloff. Some market participants attributed this to fluctuations in foreign demand for U.S. dollars due to shifts in U.S. trade policy. Others believe these moves have been more driven by hedge fund trading and an unwinding of 'basis trades'. The index continued to fluctuate for the remainder of the month and closed out April at 112. Investors remain cautious of the volatility in U.S. Treasury markets as the long-term effect of trade policy on the economy and inflation data remains unclear.

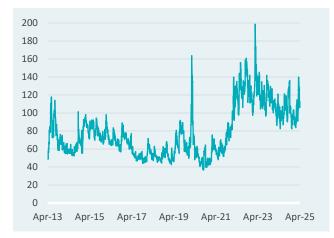
#### U.S. TREASURY YIELD CURVE

#### 6% 5% 4% 3% 2% 1% 0% 6 Month 30 Years 1 Month 2 Years 5 Years 10 Years - Apr-25 Oct-24 Apr-24

# NOMINAL YIELDS



# U.S. TREASURY IMPLIED VOL ("MOVE" INDEX)



Source: Morningstar, as of 4/30/25

Source: U.S. Treasury, as of 4/30/25

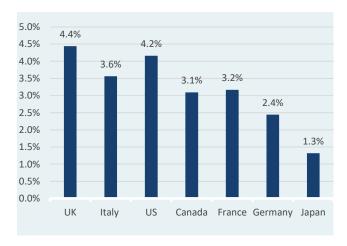
Source: BofA, as of 4/30/25



# Global markets

- Non-U.S. equities (MSCI ACWI ex U.S. +3.6%) outperformed the S&P 500 by 4.3% in part due to U.S. dollar weakness as U.S equities sold off -4.8% in the beginning of April following President Trump's announcement of reciprocal tariffs.
- On April 29<sup>th</sup>, Canadian elections concluded with the announcement that interim Prime Minister Mark Carney's Liberal Party had won the federal election. Earlier in the month, Canada implemented a 25% retaliatory tariff on U.S. made automobiles and auto parts to incentivize production and investment in Canada. The MSCI Canada Index ended the month up +4.4%.
- UK March CPI came in slightly lower-than-expected at 2.6% year-over-year, down from 2.8% in February. Core CPI came in at 3.4% year-over-year, down from 3.5%. The largest downward contribution to the print was the decrease in prices in the recreation and culture, and transportation divisions.
- Chinese equities fell in April with the MSCI China Index down -4.3% as global trade tensions weighed on investor expectations. On April 11<sup>th</sup>, China announced that it would mirror the U.S's reciprocal tariff of 125%, up from 84%. During the height of tariff threats, UBS downgraded its GDP growth forecast for China from 4% to 3.4%.

#### **GLOBAL SOVEREIGN 10-YEAR YIELDS**



Source: Bloomberg, as of 4/30/25

#### **U.S. DOLLAR MAJOR CURRENCY INDEX**



Source: Federal Reserve, as of 4/30/25

#### MSCI VALUATION METRICS (3-MONTH AVG)



Source: MSCI, as of 4/30/25 – price metrics are trailing



# U.S. economic review

Data Print	Period	Prior	Estimate	Actual
Change in Nonfarm Payrolls	Apr	185,000	138,000	177,000
Unemployment Rate	Apr	4.2%	4.2%	4.2%
CPI MoM	Mar	0.2%	0.1%	-0.1%
CPI YoY	Mar	2.8%	2.5%	2.4%
CPI Ex Food and Energy MoM	Mar	0.2%	0.3%	0.1%
ISM Manufacturing	Apr	49	48	49
ISM Services Index	Apr	51	50	52
Conf. Board Consumer Confidence	Apr	94	88	86
S&P Global US Manufacturing PMI	Apr	51	51	50
S&P Global US Composite PMI	Apr	51	51	51
S&P Global US Services PMI	Apr	51	51	51
U. of Mich. Sentiment	Apr	57	51	52
ISM Manufacturing ISM Services Index Conf. Board Consumer Confidence S&P Global US Manufacturing PMI S&P Global US Composite PMI S&P Global US Services PMI	Apr Apr Apr Apr Apr Apr	49 51 94 51 51 51	48 50 88 51 51 51	49 52 86 50 51 51

#### LABOR MARKET METRICS



Source: FRED, as of 4/30/25

#### **Labor Market**

— Nonfarm payrolls came in at 177,000 jobs, 39,000 higher than the expected 138,000. The transportation and warehousing sector increased by 29,000 jobs, which was double the average monthly gain of 12,000 jobs per month of the past year. February and March additions were revised down by a collective 58,000 jobs.

#### Consumers

- University of Michigan Consumer Sentiment came in at 52, down from 57 in March, which marked the fourth straight monthly drop in sentiment. Consumers remain concerned over the future health of the economy, in part due to uncertainty in trade policy and lower personal income growth expectations. As a result, long-run inflation expectations rose from 4.1% in March to 4.4% in April.
- Conference Board Consumer Confidence came in at 86, down from 94 in March, falling to levels unseen since the onset of the COVID-19 Pandemic. The decline was largely driven by deterioration in all three components of the consumer expectations index: business conditions, employment prospects, and future income.

# **Looking Ahead**

— The Federal Reserve appears to be demonstrating a wait and see approach regarding rate policy, given the complex dynamics of weaker growth and potentially higher inflation due to tariffs. The Federal Reserve will have to continue to balance the conflicting soft consumer data and the hard economic data when deciding the interest rate path for 2025.



# Appendix



# \_

# BEST 600

# Periodic table of returns

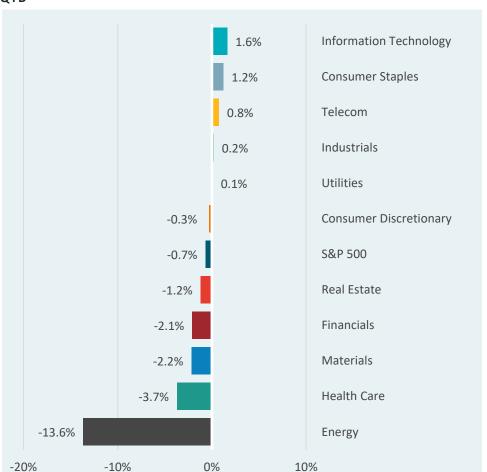
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	5-Yea	r 10-Yea
International Equity	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	33.4	11.8	17.2	15.3
Emerging Markets Equity	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	9.4	26.5	24.5	4.3	15.4	12.0
Commodities	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	1.5	18.7	15.2	3.6	13.7	8.4
US Bonds	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-4.7	18.2	14.4	3.2	13.0	6.4
Real Estate	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-7.5	16.9	11.5	2.2	11.7	6.3
60/40 Global Portfolio	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	9.9	2.0	11.4	5.9
Cash	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.0	10.3	14.8	-14.5	14.6	9.5	1.4	9.9	5.7
Hedge Funds of Funds	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-14.5	11.5	8.1	-0.2	8.5	5.4
Large Cap Value	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-17.3	9.8	7.5	-1.0	7.6	5.3
Large Cap Equity	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-19.1	6.3	5.4	-5.1	6.6	3.6
Large Cap Growth	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-20.1	5.5	5.3	-8.4	6.3	3.1
Small Cap Value	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-20.4	5.0	3.8	-11.4	3.0	1.8
Small Cap Equity	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	1.3	-11.6	2.5	1.7
Small Cap Growth	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-29.1	-7.9	0.4	-11.7	-0.7	1.5
	La	rge Ca	p Equi	ty				Smal	II Cap (	Growth	1				ommo	dities							
	La	rge Ca	p Valu	ie				Inter	nation	nal Equ	ity			R	eal Est	tate							
	La	rge Ca	p Grov	wth				Eme	rging N	larket	s Equit	у		Н	ledge I	unds	of Fund	s					
	Sr	nall Ca	p Equi	ty				US B	onds					6	0% MS	CIACW	/1/40%	Bloom	berg G	lobal B	ond		
	Sr	nall Ca	p Valu	ie				Cash	ı														

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/25.

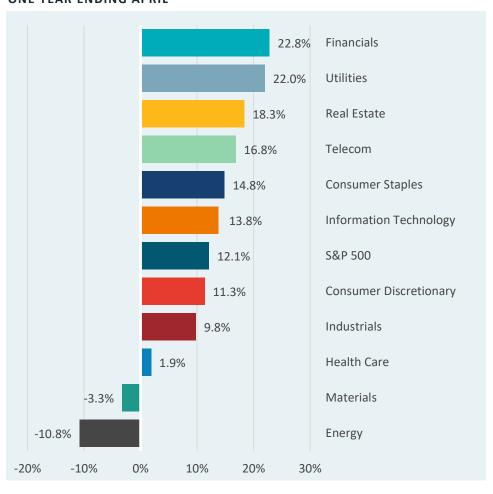


# S&P 500 sector returns

# QTD



#### ONE YEAR ENDING APRIL



Source: Morningstar, as of 4/30/25

Source: Morningstar, as of 4/30/25



# Detailed index returns

Month         QTD         YTD         1 Year         3 Year         5 Year         10 Year           Core Index           S&P 500         (0.7)         (0.7)         (4.9)         12.1         12.2         15.6         12.3         Bloomberg US TIPS	Month						
S&P 500 (0.7) (0.7) (4.9) 12.1 12.2 15.6 12.3 Bloomberg US TIPS	WOULT	QTD	YTD	1 Year	3 Year	5 Year	10 Year
	0.1	0.1	4.3	8.1	0.8	1.8	2.5
S&P 500 Equal Weighted (2.3) (2.3) (2.9) 6.9 6.7 14.0 9.7 Bloomberg US Treasury Bills	s 0.4	0.4	1.4	5.0	4.4	2.6	1.9
DJ Industrial Average (3.1) (3.1) (3.9) 9.5 9.4 13.0 11.0 Bloomberg US Agg Bond	0.4	0.4	3.2	8.0	2.0	(0.7)	1.5
Russell Top 200 (0.5) (0.5) (5.2) 13.4 13.4 16.2 13.2 Bloomberg US Universal	0.4	0.4	3.0	8.1	2.4	(0.0)	1.9
Russell 1000 (0.6) (0.6) (5.1) 11.9 11.9 15.4 12.0 <b>Duration</b>							
Russell 2000 (2.3) (2.3) (11.6) 0.9 3.3 9.9 6.3 Bloomberg US Treasury 1-3	Yr 0.8	0.8	2.5	6.7	3.3	1.3	1.6
Russell 3000 (0.7) (0.7) (5.4) 11.4 11.4 15.1 11.7 Bloomberg US Treasury Lon	ng (1.1)	(1.1)	3.5	6.7	(4.6)	(8.5)	(0.4)
Russell Mid Cap (1.0) (1.0) (4.4) 7.3 7.1 13.0 8.8 Bloomberg US Treasury	0.6	0.6	3.6	7.7	1.2	(1.7)	1.1
Style Index Issuer							
Russell 1000 Growth 1.8 1.8 (8.4) 14.5 15.6 17.2 15.3 Bloomberg US MBS	0.3	0.3	3.4	9.0	1.9	(0.8)	1.1
Russell 1000 Value (3.0) (3.0) (1.0) 8.6 7.6 13.0 8.4 Bloomberg US Corp. High Yi	ield (0.0)	(0.0)	1.0	8.7	6.2	6.3	4.9
Russell 2000 Growth (0.6) (0.6) (11.7) 2.4 5.1 7.6 6.4 Bloomberg US Agency Inter	m 0.8	0.8	2.8	7.1	3.2	0.8	1.6
Russell 2000 Value (4.0) (4.0) (11.4) (0.7) 1.4 11.7 5.9 Bloomberg US Credit	0.1	0.1	2.4	7.6	3.0	0.5	2.4
INTERNATIONAL EQUITY OTHER							
Broad Index Index							
MSCI ACWI 0.9 0.9 (0.4) 11.8 10.3 13.1 8.6 Bloomberg Commodity	(4.8)	(4.8)	3.6	4.1	(3.7)	13.7	1.7
MSCI ACWI ex US 3.6 3.6 9.0 11.9 8.0 10.1 4.8 Wilshire US REIT	(2.7)	(2.7)	(1.7)	16.4	(0.2)	8.8	5.7
MSCI EAFE 4.6 4.6 11.8 12.6 10.1 11.4 5.4 S&P UBS Leveraged Loan	(0.1)	(0.1)	0.5	6.2	7.0	8.0	4.9
MSCI EM 1.3 1.3 4.3 9.0 3.8 6.3 3.1 S&P Global Infrastructure	3.7	3.7	8.5	23.9	8.6	12.6	6.4
MSCI EAFE Small Cap 5.8 5.8 9.7 12.4 5.3 9.0 5.5 Alerian MLP	(8.8)	(8.8)	2.3	14.5	21.1	26.9	3.5
Style Index Regional Index	(0.2)	(0.2)	2.0	8.8	5.3	3.0	3.0
Style Index         Regional Index           MSCI EAFE Growth         5.2         5.2         7.4         6.6         7.0         8.1         5.6         JPM EMBI Global Div	· ,						
	3.2	3.2	7.7	9.7	6.0	2.2	1.3
MSCI EAFE Growth 5.2 5.2 7.4 6.6 7.0 8.1 5.6 JPM EMBI Global Div	3.2	3.2	7.7	9.7	6.0	2.2	1.3
MSCI EAFE Growth 5.2 5.2 7.4 6.6 7.0 8.1 5.6 JPM EMBI Global Div MSCI EAFE Value 4.1 4.1 16.1 18.6 13.1 14.5 5.0 JPM GBI-EM Global Div	3.2	(0.5)	7.7	9.7	4.6	8.3	4.8
MSCI EAFE Growth         5.2         5.2         7.4         6.6         7.0         8.1         5.6         JPM EMBI Global Div           MSCI EAFE Value         4.1         4.1         16.1         18.6         13.1         14.5         5.0         JPM GBI-EM Global Div           Regional Index         Hedge Funds							
MSCI EAFE Growth 5.2 5.2 7.4 6.6 7.0 8.1 5.6 JPM EMBI Global Div  MSCI EAFE Value 4.1 4.1 16.1 18.6 13.1 14.5 5.0 JPM GBI-EM Global Div  Regional Index  MSCI UK 2.7 2.7 12.6 15.3 10.3 13.3 4.5 HFRI Composite	(0.5)	(0.5)	(8.0)	4.1	4.6	8.3	4.8
MSCI EAFE Growth         5.2         5.2         7.4         6.6         7.0         8.1         5.6         JPM EMBI Global Div           MSCI EAFE Value         4.1         4.1         16.1         18.6         13.1         14.5         5.0         JPM GBI-EM Global Div           Regional Index         Hedge Funds           MSCI UK         2.7         2.7         12.6         15.3         10.3         13.3         4.5         HFRI Composite           MSCI Japan         5.2         5.2         5.6         8.3         10.4         8.8         5.4         HFRI FOF Composite	(0.5)	(0.5)	(8.0)	4.1	4.6	8.3	4.8

Source: Morningstar, HFRI, as of 4/30/25



(3.2)

(5.6)

10.3

4.8

10.2

(1.7)

# Detailed private market returns

# Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	5.0	1.5	14.5	12.3
MSCI World Index (PME)	32.3	9.6	13.4	9.8
Global Private Equity Direct Funds <sup>1</sup>	8.0	2.2	14.9	14.0
MSCI World Index (PME)	32.3	10.0	13.4	10.4
U.S. Private Equity Direct Funds <sup>1</sup>	7.8	2.7	16.3	15.1
Russell 3000 Index (PME)	35.0	11.2	15.6	13.0
Europe Private Equity Direct Funds <sup>1</sup>	12.3	3.9	15.0	13.9
MSCI Europe Index (PME)	25.0	7.7	9.6	6.2
Asia Private Equity Direct Funds 1,4	2.9	(1.4)	8.4	10.5
MSCI AC Asia Pacific Index (PME)	31.7	(0.3)	6.7	6.6

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt <sup>2,4</sup>	7.9	8.4	11.9	10.5
Moringstar LSTA U.S. Leveraged Loan 100 Index (PME)	9.5	6.6	5.9	5.2
Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	(1.8)	2.9	6.6	9.4
FTSE NAREIT Equity REIT Index (PME)	34.5	6.6	6.7	8.8
Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources <sup>3,4</sup>	4.7	13.4	8.3	3.0
S&P Global Natural Resources Index (PME)	7.1	8.4	10.5	6.0
Global Infrastructure <sup>4</sup>	11.1	10.3	10.7	10.4
S&P Global Infrastructure Index (PME)	29.6	9.3	7.2	6.5

Drivete Credit Deeled IDDs

Source: Pooled IRRs and Public Market Equivalents (PMEs) are both from FTSE (previously Refinitiv) C/A, as of. September 30th, 2024. All returns in U.S. dollars.

- 1. Includes Buyout, Growth Equity and Venture Capital.
- 2. Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.
- 3. Includes Private Equity Energy, Timber and Upstream Energy & Royalties.
- 4. Due to limited history of the PMEs, only the funds with the same vintage years as PMEs are included.



# Notices & disclosures

Past performance is no guarantee of future results. This document is provided for informational purposes only. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Additional information about Verus Advisory, Inc. is available on the SEC's website at www.adviserinfo.sec.gov.

 $Verus - also known as Verus Advisory^{TM}$ .



# SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 6.3

**TO:** Board of Retirement

FROM: Doris Ng, Investment Analyst

**SUBJECT:** Report on Real Estate Annual Manager Reviews

#### Recommendation

Accept and review the report on the annual reviews of SamCERA's real estate managers, PGIM Real Estate, Harrison Street, Beach Point Capital Real Estate, Invesco and Stockbridge.

#### **Background**

SamCERA staff and consultant held annual review meetings with our real estate managers, PGIM Real Estate, Harrison Street and Beach Point Capital Real Estate on April 8<sup>th</sup>. We also conducted meetings with Invesco and Stockbridge on May 1<sup>st</sup>.

Each meeting lasted approximately 1-1.5 hours, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook.

## Discussion

On April 8<sup>th</sup>, we first reviewed PGIM's Real Estate U.S. Debt fund, which is an open-ended commingled fund that invests primarily in senior loans secured by U.S. commercial real estate. The firm discussed some changes on the fund's investment team related to the upcoming retirement of its former, senior portfolio manager.

Next, we reviewed Harrison Street's Core Property Fund, which is an open-ended commingled fund that invests in high quality real estate assets primarily across student housing, senior housing, medical office, life sciences and self-storage sectors.

Lastly, we reviewed Beach Point Capital Real Estate Debt Fund, which is a closed-end commingled fund that invests primarily in senior secured and subordinate loans, structured preferred equity, secondary debt purchases and special situations.

On May 1<sup>st</sup>, we first reviewed INVESCO's Core Real Estate fund, which is an open-ended commingled fund that invests primarily in institutional quality office, retail, industrial, multi-family residential and specialty sector real estate assets. Next, we reviewed INVESCO's U.S. Value-Add Fund V and VI, which are closed-end funds that acquire and reposition fundamentally sound, but "broken" core real estate into institutional-quality assets across similar sectors as the Core fund.

Lastly, we reviewed Stockbridge's Value Fund IV and V, which are closed-end commingled funds that acquire real estate assets primarily in the retail, industrial and multi-family residential sectors. The value-add strategy invests in real estate assets that are undervalued, under-utilized and/or not operating to their full potential, and provides value-add through capital investment, leasing, recapitalization, renovation and/or repositioning.

Attached you will find meeting notes summarizing the findings and details from the annual reviews.

#### **Attachments**

PGIM Real Estate US Debt Annual Review Meeting Notes (confidential)
Harrison Street Core Property Fund Annual Review Meeting Notes
Beach Point Capital Real Estate Debt Review Meeting Notes (confidential)
Invesco Core Real Estate Review Meeting Notes
Invesco Value-Add Real Estate Review Meeting Notes (confidential)
Stockbridge Value-Add Real Estate Review Meeting notes (confidential)



# Research Meeting Notes

Investment Organization	Harrison Street
Business Type	Private
Firm Inception Date	2005
Firm \$AUM	\$55 billion
<b>Investment Org Attendees</b>	Kate Davis, Mia Dennis
Verus Attendees	Matt Foppiano
SamCERA Attendees	Michael Coultrip, Doris Ng
Interview Date(s)	4/8/2025
Meeting Type	In office
Meeting Purpose	Update
Strategy Name	Harrison Street Core Property Fund
Strategy Inception Date	2011
Asset Class (Style)	Real Estate
If other, please name	
Sub-Style	Equity
Strategy \$AUM	\$12.5 billion (gross asset value)
AIC Approved (Yes or No)	Yes

# Notes and Analysis

#### Firm:

Harrison Street was founded in 2005 by Christopher Merrill in partnership with Chris Galvan and Mike Galvin. Based in Chicago, Harrison Street's exclusive focus since inception has been investing in education, healthcare, life sciences, and self-storage sectors of the real estate market. The Firm has invested in over 1,698 transactions that comprise more than \$70.6 billion in investment activity. The Core Fund is their openend flagship product with over \$12.5 billion in assets. They also manage a domestic opportunistic closed-end series and European opportunistic fund, all with the same alternative property type focus. In 2018, Harrison Street launched an open-end social infrastructure fund to develop or buy infrastructure-related assets in partnership with universities, health systems, and government users. In 2021, Harrison Street launched a Canadian-focused open-end real estate fund targeting the same alternative property types.

In 2018, Colliers International Group purchased a 75% stake in Harrison Street, with the remaining 25% held by employees of Harrison Street.



# Team/People:

Harrison Street Real Estate currently has 288 employees who support the Firm's various real estate and infrastructure strategies, including the Core Property Fund. These include 29 in portfolio management, 65 in transactions, 53 in asset management, 25 in client service, 16 in legal and compliance, 48 in portfolio accounting and reporting, and 7 in research.

The Investment Committee comprises seven permanent members (three Managing Partners and one Managing Director) and two rotating members (Managing Directors Kate Davis and Ben Mohns). The Investment Committee provides input into investment strategy, reviews portfolio construction, approves all acquisitions and dispositions, and monitors performance. Further, significant capital expenditures, leasing, and financing decisions require review by members of the Committee.

Joey Lansing serves as Co-Senior Portfolio Manager, and as of 2024, Kate Davis was elevated to share the responsibility from her previous title, Senior Portfolio Manager. Mr. Lansing has been a portfolio manager since he helped launch the product in 2011. In addition to Joey Lansing and Kate Davis, Mike Gordon, as global CIO is a key contributor to the Fund. Mark Burkemper is head of transactions and a key contributor to the Core Fund, responsible for sourcing transactions and forming joint venture relationships. Ben Mohns is head of Asset Management North America and is responsible for directing the creation and execution of the Firm's investment-level strategies and driving value-add initiatives.

In the last 18 months, the firm has had no changes to ownership or material changes to leadership. In 2024, Paul Bashir, Senior Managing Director and CIO of Europe, was elevated to the firm's Executive Committee, given the growing importance of European business.

# Process/Philosophy

Incepted in 2011, the Harrison Street Core Fund is an open-end fund that invests primarily in stabilized education, healthcare, life sciences, and self-storage real estate assets in the United States using modest leverage with an emphasis on generating current income.

In 2024, the Fund approved data center investments as a new investable sector with a maximum exposure restriction of 20%. In the near term, the Manager anticipates 0-3% of GAV exposure to data centers.

The Fund executes its strategy through investments in student housing, other university market real estate, for-rent senior housing, healthcare-delivery real estate, and other healthcare-related properties, self-storage facilities, and now triple-net data centers. The Fund's LPA limits leverage to no more than 40% loan-to-value (LTV) at the portfolio level. However, the Fund targets leverage across the portfolio of 22% to 27% LTV, emphasizing fixed-rate, interest-only, long-term debt. As of year-end, the fund-level leverage sits at 25% LTV.

The focus on these alternative property types is intended to concentrate on areas of the real estate market that are less GDP sensitive and have more demographic demand drivers, such as aging populations, education growth, and healthcare delivery. Each area tends to be less tied to the business cycle, have fragmented ownership, and be more operationally intensive.

Investment opportunities are sourced through relationships with universities, major national health systems, institutional and private owners, service providers, brokers, lenders, and other market contacts. Additionally, Harrison Street utilizes its operating partners to generate proprietary, off-market deal flow, and much of the time, the firm has a right of first refusal with its operating partners. The Firm has created a proprietary set of selection criteria for each asset class to be used as an initial screening tool for all potential acquisitions.



The team conducting due diligence of a potential acquisition consists of professionals from Harrison Street's various disciplines, including acquisitions, asset management, portfolio management, internal counsel, risk management, compliance, and accounting. The team is responsible for (i) touring the asset and submarket, (ii) underwriting the asset including rigorous stress test of assumptions (iii) analyzing the proposed acquisition impact on the fund's existing portfolio (iv) negotiating and completing final contracts and financing, if applicable (v) preparing initial business plan for the asset (vi) managing and completing closing check list.

#### Performance

Kate Davis provided an update on the Core Fund's recent performance. In 2024, Harrison Street Core Fund was up 0.6% (gross) vs. the NCRIEF ODCE Index, which was down 1.4% (gross). Notably, the Core Fund has outperformed the NCREIF ODCE since its inception, with strong outperformance in the interim (3 & 5-year trailing). The Fund's performance was driven as much by the relative outperformance of alternative property types as traditional core sectors like office and multifamily.

In 2024, Storage (14% of the portfolio), Senior Housing (19%), and Student Housing (22%) led the way, up 2.5% or more on a total gross return basis. Appreciation across the five sectors (the three mentioned and Medical Office and Life Science) was broadly negative. Still, all sectors had enough income return to more than offset negative appreciation for the year, ending in positive territory. We expect valuations to have bottomed, and as a result, we would expect limited negative appreciation going forward. Relative to the ODCE universe of funds, we anticipate Harrison Street will continue to outperform on a relative basis due to lower-than-average debt levels, minimal redemption queue, and more defensive sector exposure.



# Research Meeting Notes

Investment Organization	Invesco
Business Type	Publicly Traded
Firm Inception Date	1935
Firm \$AUM	\$1.8 trillion
<b>Investment Org Attendees</b>	Max Swango, Michelle Foss
Verus Attendees	Matt Foppiano
SamCERA Attendees	Michael Coultrip, Doris Ng
Interview Date(s)	5/1/2025
Meeting Type	In office
Meeting Purpose	Update
Strategy Name	Invesco Core Real Estate
Strategy Inception Date	2004
Asset Class (Style)	Real Estate
If other, please name	
Sub-Style	Equity
Strategy \$AUM	\$14.3 billion (Core)
AIC Approved (Yes or No)	Yes

# Notes and Analysis

#### Firm

Invesco is a large investment management firm with assets under management of \$1.8 trillion and more than 8,500 employees worldwide. The company's product mix is broad, with both public and private market strategies and a mix of retail and institutional clients. Growth within the platform has come from ETF market acquisitions and a growing alternative asset class platform.

As of December 30, 2023, the real estate platform had assets of \$87.9 billion. It has also become increasingly global in terms of offices and product offerings. Invesco manages core open-end funds in all three developed market regions, North America, Europe, and Asia. In addition to direct real estate Investments, Invesco offers U.S. and Global real estate securities (REIT) offerings and has approximately \$15.5 billion in these vehicles. Assets in the Core Fund declined materially from 2022 to 2024, from \$17.3 billion to \$14.3 billion. At its peak in 2022, the Core Fund had a \$2.2 billion redemption queue. Since 2022, the Fund has paid over \$1.1 billion to redeeming investors. Despite paying out a substantial amount, and over 20 recissions totaling \$365 million, the fund's current redemption queue stands at \$2.1 billion or 15% of NAV.



# Team/People:

The structure of Invesco's real estate team emphasizes specialization and a focus on accountability. The Invesco Core Real Estate fund is overseen by three committees composed of senior professionals. The Investment Committee is responsible for approving acquisitions and sales. The Steering Committee governs the Fund's investment and governance policy. The Chief Investment Council replaced the Investment Strategy Group as of July 1, 2023. The CIO Council sets top-down views for sector and market selection. In addition to the Portfolio Management Team, INVESCO employs professionals dedicated to various real estate specializations, including research, acquisitions, financing, underwriting, closing, due diligence, asset management, and accounting and reporting.

Michelle Foss is the lead portfolio manager on the Core Fund alongside co-portfolio manager Chad Provost. Michelle joined Invesco in 2014 and was most recently with Bailard, where she was a core, open-end real estate fund manager. Bill Grubbs, the long-time lead portfolio manager for the Core Fund retired in October 2023. Michelle had worked with Bill previously at Prudential 24 years ago. The broader North American real estate team consists of 266 employees located in five regional offices. Michelle Foss is based in San Francisco, Chad Provost in New York, and Dallas is the real estate team's headquarters.

# Process/Philosophy

SamCERA was a founding investor in the Invesco Core Real Estate fund in 2004. As a founding investor, SamCERA has benefited from lower fees than those paid by more recent investors. This fund is Invesco's largest and, in combination with the flagship real estate fund, has assets of \$15.6 billion. Invesco's Core Fund invests in high-quality office, apartment, industrial, specialty, and retail properties in major markets while utilizing a conservative balance sheet. The Fund's performance target is to outperform the NCREIF ODCE Index.

Four broad principles underlie Invesco's approach to core real estate investing. They seek to manage a diversified portfolio, both geographically and by property type. The portfolio holds office, industrial, retail, specialty, and apartment properties. The portfolio maintains an income-oriented investment approach. Attractive markets and properties must offer investments that are "durable" with barriers to entry, in growing areas and liquid, meaning that it's possible to redeem if desired. They strive to have a conservative risk profile, with strong balance sheets, limited leverage, and selective exposure to value-add investments. Invesco also seeks to be transparent and efficient in client communication and reporting.

The investment process has both top-down and bottom-up elements. Invesco has long-term strategic ranges for each property type, with a broad overweight in apartments when implementing the portfolio. They develop a view about different regions and cities and focus on specific target markets. Invesco is looking primarily at gateway cities and up-and-coming markets. They are most selective in office and industrial properties, where they believe a market needs to have high-value jobs and high barriers to entry to be attractive. Invesco also seeks to generate returns on a bottom-up basis with property-specific selection within their target property type ranges and preferred regions.



The Core Fund will selectively make value-add investments (up to 15% allowed). But they do so only in cases where the replacement cost is lower than purchasing an existing property. Value-add investments are not made with the expectation of a quick sale, but of holding the property in the portfolio to generate income. While some value-add investments are in the Core Fund, there isn't an overlap in exposure with the Value-Add Fund. The Value-Add Fund has higher return/risk expectations of 12-15%. Most transactions that fit that mandate would fall outside the risk parameters of the Core Fund.

#### Performance

The core Fund's net since inception performance as of December 31, 2024, is 5.69%, narrowly above the benchmark NCREIF ODCE at 5.62%. The one-year trailing return for the Fund was -6.19% (Net) relative to the benchmark's return of -2.43% (Net). The Fund has underperformed the benchmark during the 3, 5, and 10-year periods on a net basis.

Since the fourth quarter of 2022, to the second quarter of 2024 the portfolio has suffered broad markdowns across all six sectors: retail (-8.6%), Self-Storage (-19.1%), Single-Family Renta (-11.9%), Industrial (-10.6%), Apartments (-22.2%), and Office (-36.4%). In the last two quarters trailing December 31, 2024, retail and self-storage have been marginally marked-up, while single-family rentals, industrial, and apartments have looked to have troughed.

The current portfolio is weighted 3% Life Science, 15% Retail, 23% Apartments, 5% Single Family Rental, 5% Self Storage, 33% Industrial, 15% Office. The most notable sector over/underweight within the Core Fund is the overweight to retail and specialty sectors (single-family rentals), and underweight to industrial and apartments, relative to the ODCE Index. Invesco has been overweight in retail for many years and has been working to move that allocation to underweight. Given the strength of retail fundamentals, it seeks to maintain its overweight. Though the team has been growing their exposure to industrial assets, they have been relatively late to the sector, which has been a performance headwind given the strength in the sector. Invesco has utilized its build-to-core portfolio to grow exposure in the industrial sector as it looks to add modern buildings near key submarkets. The apartment allocation has moved to an underweight, relative to the ODCE universe, with Invesco planning to maintain that position. The allocation to office had been overweight relative to the ODCE benchmark but has reduced drastically over the past 3 years and now sits in line with the universe.

Given the large redemption queue, the Fund may struggle to deploy capital in the next year, hindering it from being offensive or furthering its top-down sector allocation.

# SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 6.4

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer Michael R. Coultrip

**SUBJECT:** Report on SamCERA's Risk Dashboard

#### Recommendation

Accept the SamCERA risk dashboard report.

# **Background**

Verus provides semi-annual risk management reporting (SamCERA Risk Dashboard) using index level holdings to better highlight various risk exposures of the plan. Verus presents the Risk Dashboard on an annual basis to the Board.

# Discussion

Joe Abdou of Verus will present the SamCERA Risk Dashboard with data as of March 31, 2025.

#### **Attachment**

SamCERA Risk Dashboard



# San Mateo County Employees' Retirement Association Portfolio Risk Report

# March 31, 2025

# 1 Portfolio risk







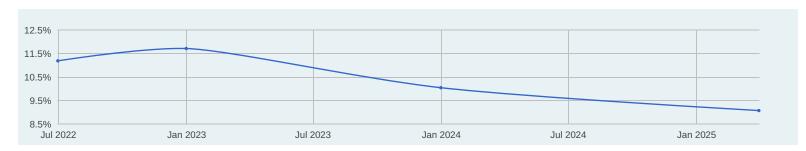
Policy: 9.1%



Average Public Pension: 9.7%



Global 60/40: 9.3%



# 2 Portfolio equity beta



Portfolio: 0.62



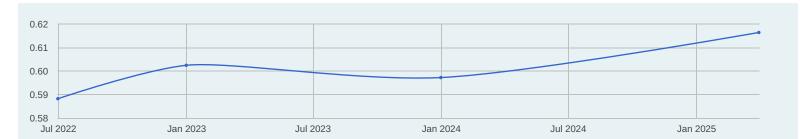
Policy: 0.62



Average Public Pension: 0.65



Global 60/40: 0.63



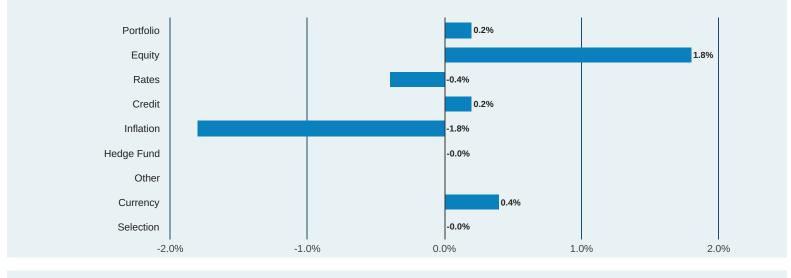
# 3 Portfolio interest rate risk - Duration



# 4 Portfolio credit risk - Spread duration

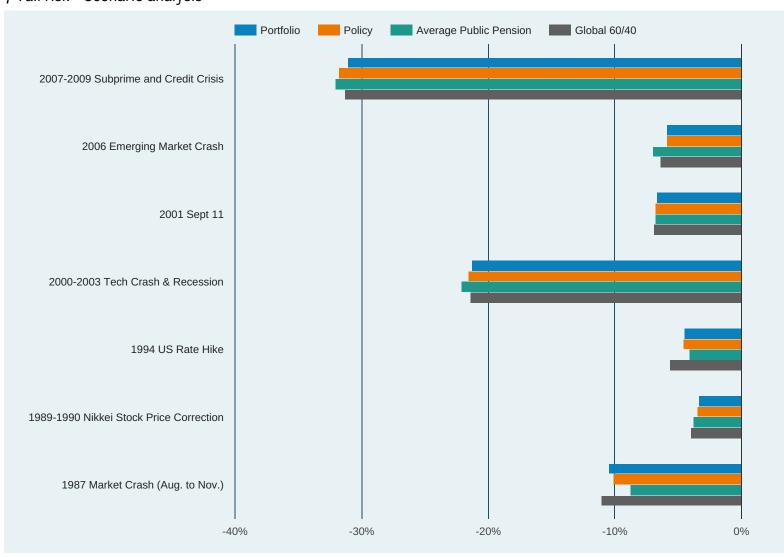


## 6 Risk factor weight relative to target

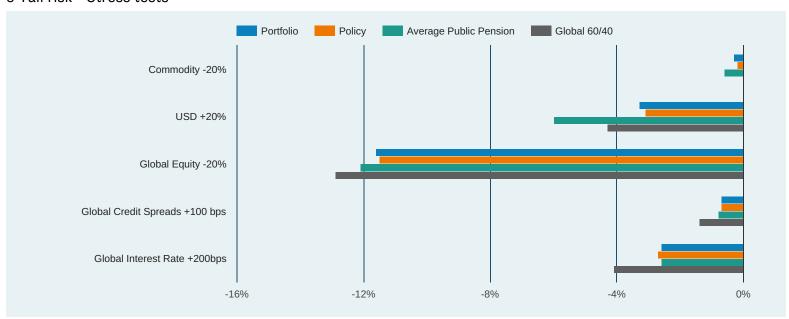




## 7 Tail risk - Scenario analysis



#### 8 Tail risk - Stress tests

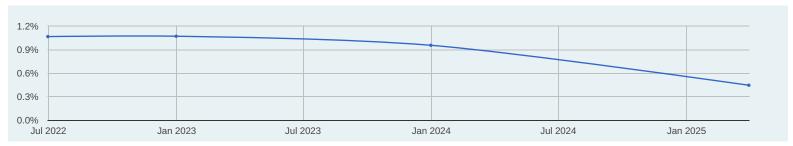


## 9 Risk contribution by risk factor

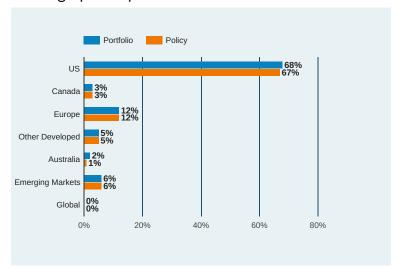


## 10 Active risk contribution by risk factor

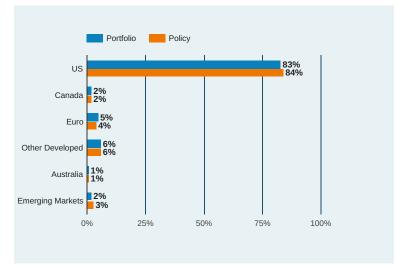




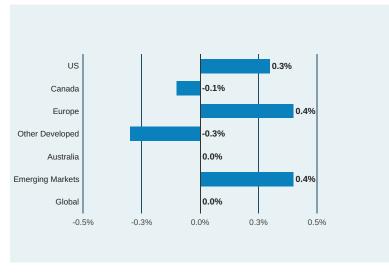
## 11 Geographic exposure



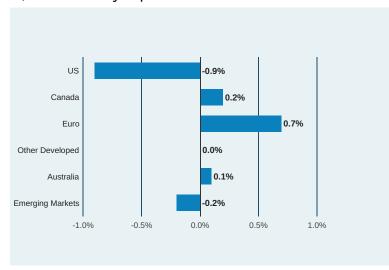
## 12 Currency exposure



## 13 Net geographic exposure



## 14 Net currency exposure



## 15 Market value summary per BarraOne

Cash         Insight Investment         SAMCERA0397         27           General Account         SAMCERA049         17           County Treasury Pool         SAMCERA098         2           Cash Overlay         17812648         1           Record Dynamic Currency Hedge         27906301         2           Transition Account         SAMCERA078         1           Currency Hedge Cash Overlay         17812653         1           Futures Offsets (SMCE03001)         17812647         -6           Cash Total         42           Credit         Global Credit         Eaton Vance Emerging Markets Debt Opportunities Fund         17908751         6           HY Bonds         Beach Point Select         SAMCERA028         12           PIMCO Diversified         SAMCERA028         12           Brigade Capital         SAMCERA029         10           One William Street         27907303         7           Golden Tree Select Partners         17916399         6           Private Credit         PIMCO Private Income         SAMCERA072         4           Blackrock DL Feeder IX-U         SAMCERA074         3
County Treasury Pool SAMCERAog8 2  Cash Overlay 17812648 1  Record Dynamic Currency Hedge 17906301  Transition Account SAMCERAo78 1  Currency Hedge Cash Overlay 17812653 1  Futures Offsets (SMCE02001) 17812647 6  Cash Total 2  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund 17908751 6  HY Bonds Beach Point Select SAMCERAo28 12  PIMCO Diversified SAMCERAo28 12  Brigade Capital SAMCERAo29 10  One William Street 17907303 7  GoldenTree Select Partners 17907303 7  Private Credit PIMCO Private Income SAMCERAo72 4
Cash Overlay   17812648   1
Record Dynamic Currency Hedge 17906301  Transition Account SAMCERA078  Currency Hedge Cash Overlay 17812653  Futures Offsets (SMCE02001) 17812647 -6  Cash Total  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund 17908751 6  HY Bonds Beach Point Select SAMCERA028 12  PIMCO Diversified SAMCERA064 10  One William Street 17907303 77  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 44
Transition Account  Currency Hedge Cash Overlay  Futures Offsets (SMCE02001)  17812653  Futures Offsets (SMCE02001)  17812647  -6  Cash Total  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund  17908751  6  HY Bonds Beach Point Select SAMCERA028  12  PIMCO Diversified SAMCERA064  10  Brigade Capital SAMCERA064  10  One William Street  17907303  7  GoldenTree Select Partners  17916399  6  Private Credit PIMCO Private Income  SAMCERA072  4
Currency Hedge Cash Overlay  Futures Offsets (SMCE02001)  17812647  -6  Cash Total  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund  17908751  6  HY Bonds Beach Point Select SAMCERA028  12  PIMCO Diversified SAMCERA064  10  One William Street  17907303  7  GoldenTree Select Partners  17916399  6  Private Credit PIMCO Private Income  SAMCERA072  4
Futures Offsets (SMCE02001) 17812647 -6  Cash Total  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund 17908751 6  HY Bonds Beach Point Select SAMCERA028 12  PIMCO Diversified SAMCERA064 10  Brigade Capital SAMCERA029 10  One William Street 17907303 77  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 44
Cash Total  Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund 17908751 6  HY Bonds Beach Point Select SAMCERA028 12  PIMCO Diversified SAMCERA064 10  Brigade Capital SAMCERA029 10  One William Street 17907303 77  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 44
Credit Global Credit Eaton Vance Emerging Markets Debt Opportunities Fund 17908751 6  HY Bonds Beach Point Select SAMCERA028 12  PIMCO Diversified SAMCERA064 10  Brigade Capital SAMCERA029 10  One William Street 17907303 77  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 44
HY Bonds Beach Point Select SAMCERAo28 12 PIMCO Diversified SAMCERAo64 10 Brigade Capital SAMCERAo29 10 One William Street 17907303 70 GoldenTree Select Partners 17916399 6 Private Credit PIMCO Private Income SAMCERAO72 4
PIMCO Diversified SAMCERA064 10  Brigade Capital SAMCERA029 10  One William Street 17907303 70  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 4
Brigade Capital SAMCERA029 10 One William Street 17907303 71 GoldenTree Select Partners 17916399 6 Private Credit PIMCO Private Income SAMCERA072 41
One William Street 17907303 74  GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 44
GoldenTree Select Partners 17916399 6  Private Credit PIMCO Private Income SAMCERA072 4
Private Credit PIMCO Private Income SAMCERA072 4:
Blackrock DL Feeder IX-U SAMCERA074
White Oak YSF V SamCERA094 3
White Oak Yield SAMCERAo62 3
AG CSF II 17908756 2:
Comvest Credit Partners VII 17910209 20
400 Capital Asset Based Term Fund IV 17916398
Angelo Gordon Credit Solutions SAMCERA075
TCP Direct Lending VIII SAMCERA057
AG CSF III 17916386
AG CSF ADF II SamCERA100

Credit Total				765.5
Equity	Global Equity	Mondrian	SAMCERA017	292.4
		Baillie Gifford	SAMCERA014	269.5
	International Equity	BlackRock MSCI ACWI EX-US IMI	SAMCERA091	545.8
	Private Equity	Private Equity	SAMCERA_PE	470.4
	US Equity	BlackRock Russell 1000	SAMCERAo59	959-5
		DE Shaw	SAMCERA004	289.4
		PanAgora Defuseq	SAMCERAo6g	227.0
		PGIM Quant Solutions	SAMCERA055	122.6
		Domestic Equity Overlay	17812644	44.4
Equity Total				3,221.1
Hedge Fund	Hedge Fund	CFM Systematic Global Macro	SamCERA093	124.3
		PIMCO MAARS Fund LP	SAMCERA080	122.4
		Graham Quant Macro	SAMCERA076	114.3
Hedge Fund Tot	al			361.0
Inflation	Commodities	SSgA Custom Real Asset	SAMCERAo <sub>5</sub> 8	305.1
	Real Estate	Private Real Asset	SAMCERA_RA	299.7
		Invesco	SAMCERA044	219.5
		Harrison Street Core Property	SAMCERA073	91.2
		PGIM RE US Debt Fund	SAMCERAo63	72.4
		Brookfield Super-Core Infrastructure Partners	17909804	67.9
		KKR Diversified Core Infrastructure Fund (DCIF)	17909805	64.7
		Invesco US Val VI	SamCERA099	27.0
		Stockbridge Value IV	SamCERA095	26.6
		Invesco US Val V	SAMCERA071	23.6
		Stockbridge Value V	17910188	10.6
		Invesco US Val IV	SAMCERA045	0.1

Inflation Total				1,208.3
Rates	Core Bonds	NISA Core Bond	SAMCERA090	295.5
		Core Fixed Income Overlay	17812646	7.3
	US Bonds	DoubleLine	SAMCERA077	275.1
		FIAM Bond	SAMCERA021	193.8
		NISA LONG TREASURY	17906628	104.1
Rates Total				875.7
Total Portfolio (m	nillions)			6,855.9

#### **Chart Definitions**

#### 1 Portfolio risk

Total risk comparison of Portfolio, Policy, Average Public Pension, and Global 60/40. Policy is composed of: 10.0% Bloomberg Barclays U.S. Corporate High Yield, 15.5% Bloomberg Barclays Aggregate Index, 7.0% HFRI FOF Diversified, 2.5% Bloomberg 1-3 Yr Gov Credit, 4.5% Custom Real Asset Index, 4.5% Custom Real Asset Index, 9.0% NCREIF ODCE, 15.0% MSCI EAFE, 4.0% MSCI EM, 7.0% Private Equity, 19.0% Russell 1000 Index, and 2.0% Russell 2000 Index. Average Public Pension consists of: 24.7% S&P 500 - Daily, 5.0% MSCI ACWI IMI - Daily, 16.1% MSCI ACWI ex USA IMI - Daily, 1.0% MSCI EAFE - Daily, 2.8% MSCI EM (EMERGING MARKETS) - Daily, 1.1% Bloomberg Barclays Global Aggregate, 2.1% Bloomberg Barclays Global Treasury ex US, 19.0% Bloomberg Barclays US Aggregate, 1.1% Bloomberg Barclays Emerging Markets Debt, 5.6% HFRI FOF Index, 8.0% Private Equity Proxy (BURGISS), 3.0% Bloomberg Commodity Index, 8.4% NCREIF Property Index, 2.1% Cash. Global 60/40 is composed of 60% MSCI ACWI IMI and 40% Bloomberg Barclays Global Aggregate.

#### 2 Portfolio equity beta

Equity risk presented by equity beta to market. Equity beta is a measure describing the sensitivity of portfolio returns with returns of the equity market (MSCI ACWI).

#### 3 Portfolio interest rate risk - Duration

For investments, bonds, with fixed cash flows, interest rate duration is the estimated price change given a 1% change in interest rates, calculated by the weighted average of the instruments cash flows (including both interest and maturity payments).

#### 4 Portfolio credit risk - Spread duration

Credit risk presented by spread duration and dollar movement of portfolios. Spread duration measures the percentage change in price for a one percentage point change in spreads.

#### 5 Exposure allocation

Exposure allocation among major risk buckets (rates, credit, equity, inflation, currency) and net currency exposure (domestic vs. foreign). Full Cash collateral is assumed for all derivatives.

#### 6 Risk factor weight relative to target

Contribution by factor to total relative risk of the Portfolio vs the Policy: For example, Equity is equity risk contribution to Portfolio minus equity risk contribution to the Policy, divided by total risk of the Policy. The factor overweights are additive to the total relative risk at the top line. Other includes Country factors and World factors.

#### 7 Tail risk - Scenario analysis

Tail risk is a form of risk measurement that considers the possibility that a market will experience losses greater than what the normal distribution would suggest. This graph shows the expected performance under various historical scenarios (described in the appendix at the end of this report). For each historical scenario, the current market value is recalculated to determine return under identical market conditions, assuming an instantaneous shock. Note: nomial rates are not floored at 0%.

#### 8 Tail risk - Stress tests

This display shows expected performance when individual risk factors are subjected to instantaneous shocks. Directly affected assets are revalued at factor level.

#### 9 Risk contribution by risk factor

Risk contribution by risk factor. Volatility measures the price variation of a portfolio or financial instrument over time.

#### 10 Active risk contribution by risk factor

Active risk in terms of annual tracking error: Tracking Error (TE) measures how closely a portfolio follows its benchmark. It is the standard deviation of the difference between the portfolio and benchmark returns.

#### 11 Geographic exposure

Geographic exposures are calculated using the notional exposure as a percentage of market value, including derivatives, cash securities and currency holdings, but excluding currency derivatives. Any portfolio that uses derivatives may have a total different than 100% because both cash and derivative country exposures are included.

#### 12 Currency exposure

Currency portfolio allocation. Currency exposures from both the underlying securities and the purchasing currency of the futures contract are included.

#### 13 Net geographic exposure

Difference between portfolio and policy allocation among major geographic areas.

#### 14 Net currency exposure

Difference between portfolio and policy allocation among major currencies.

#### 15 Market value summary per BarraOne

Market Value is presented by account and risk bucket in dollars as reported by BarraOne. Some differences may exist due to timing, pricing sources and availability of information on new investments.

#### Tail Risk Scenario Definitions

#### 1 2007-2009 Subprime and Credit Crisis

(9/30/2007 - 3/4/2009) The burst of the housing bubble in mid-2007 marked the beginning of the years-long subprime mortgage crisis, rooted from the easy credit, low interest rates, and loose regulatory environment in the early 2000s, which made low quality (subprime) mortgaging extremely easy. The contagious meltdown quickly led to plunging asset prices in the financial markets, rising bankruptcies, delinquencies, and foreclosures, and central bank monetary rescues and fiscal interventions by governments around the globe.

#### 2 2006 Emerging Market Crash

(5/10/2006 - 6/14/2006) A number of emerging markets, including Brazil, India, and Argentina, plunged rapidly in May 2006.

#### 3 2001 Sept 11

(9/7/2001 - 9/21/2001) The U.S. stock market was closed for a week upon a series of coordinated suicide attacks upon the United States on September 11, 2001. It plunged sharply over the week upon reopening.

#### 4 2000-2003 Tech Crash & Recession

(1/19/2000 - 3/12/2003) Period of crisis and slowdown for technological firms due to a rapid jump in stock prices when a speculative technology bubble began to burst, triggering a sell-off of companies. The period includes a slowdown for internet companies that went out of business as the stock market plummeted further.

#### 5 1994 US Rate Hike

(1/31/1994 - 12/13/1994) In combating inflation, the U.S. Federal Reserve raised its interest rate from 3.25% in February to 5.5% in November 1994.

#### 6 1989-1990 Nikkei Stock Price Correction

(12/29/1989 - 3/30/1990) After hitting the Nikkei stock index's all-time high on December 29, 1989, the Japan financial market crashed and plunged to a low in March 1990.

#### 7 1987 Market Crash (Aug. to Nov.)

(8/3/1987 - 11/30/1987) The U.S. stock market began to topple on October 14, 1987 after reaching a record high. It was triggered by reports of a larger trade deficit and the elimination of the tax benefits of financing mergers. The aggravating selling pressure in October 19 from confused and fearful investors and the failing portfolio insurers' models led to a substantial global market sell-off.

#### **DISCLAIMERS AND NOTICES**

All the information presented in this risk report is furnished on a confidential basis for use solely by the client in connection with Verus Advisory, Inc. and/or Verus Investors, LLC (hereinafter collectively or individually the "Company") and the entity to whom this risk report is provided (hereinafter the client). It is agreed that use of the risk report is acceptance that the information contained therein is subject to the terms and conditions of the confidentiality agreement by and between the Company and the client and that such information is being presented through the proprietary technology known as the risk report.

The information contained in the risk report may not be copied, reproduced or distributed, in whole or in part, nor may its contents or facts or terms of any securities (if any) contained therein be disclosed to any other person except in accordance with the terms of the confidentiality agreement or unless in full conformity with prevailing NASD or SEC regulations. The information presented does not constitute a recommendation by the Company and cannot be used for advertising or sales promotion purposes.

The information presented has been prepared by the Company from sources that it believes to be reliable and the Company has exercised all reasonable professional care in preparing the information presented. However, the Company cannot insure the accuracy of the information contained therein. Subject to specific contractual terms between the Company and the client, the Company shall not be liable to clients or anyone else for inaccuracy or in-authenticity of information in the analysis or for any errors or omissions in content, except to the extent arising from sole gross negligence, regardless of the cause of such inaccuracy, in-authenticity, error, or omission. In no event shall the Company be liable for consequential damages.

Nothing contained therein is, or should be relied on as, a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the client should be prepared to bear. The information presented may be deemed to contain "forward looking" information. Examples of forward looking information including, but are not limited to, (a) projections of or statements regarding return on investment, future earnings, interest income, other income, growth prospects, capital structure, and other financial terms, (b) statements of plans or objectives of management, (c) statements of future economic performance, and (d) statements of assumptions, such as economic conditions underlying other statements. Such forward looking information can be identified by the use of forward looking terminology such as "believes," "expects," "may," "will," "should," "anticipates," or the negative of any of the foregoing or other variations thereon or comparable terminology, or by discussion of strategy. No assurance can be given that the future results described by the forward looking information will be achieved. Such statements are subject to risks, uncertainties, and other factors which could cause the actual results to differ materially from future results expressed or implied by such forward looking information. Such factors that could cause the actual results to differ materially from those in forward looking statements include among other items, (i) an economic downturn, (ii) changes in the competitive marketplace and/or client requirements, (iii) unanticipated changes in Company management, (iv) inability to perform client contracts at anticipated cost levels, (v) changes in the regulatory requirements of the industry, and (vi) other factors that affect businesses within the various industries within which they work.

The information presented does not purport to be all-inclusive nor does it contain all information that the client may desire for its purposes. The information presented should be read in conjunction with any other material furnished by the Company will be available, upon request, to discuss the information presented in the risk report that clients may consider necessary, as well as any information needed to verify the accuracy of the information set forth therein, to the extent Company possesses the same or can acquire it without unreasonable effort or expense.

#### Company disclaimers required by information and service providers

(The identification of the information and service provider in the heading of each paragraph is for reference only)

#### Barra, LLC

This report has been prepared and provided by the Company solely for the client's internal use and may not be redistributed in any form or manner to any third party other than on a need to know basis to your board of directors, investment consultants, and other third parties with direct responsibility for monitoring the client's investments. The report contains proprietary third party data from Barra, LLC.

The data is provided to the client on an "as is" basis. The Company, its information providers (including without limitation Barra, LLC), and any other third party involved in or related to the making or compiling of the data make no representation or warranty of any kind, either express or implied, with respect to the data in this report (or the results to be obtained by the use thereof). Company, its information providers (including without limitation Barra, LLC) and any other third party involved in or related to the making or compiling of the data expressly disclaim any and all implied warranties of originality, accuracy, completeness, non-infringement, merchantability and fitness for a particular purpose.

The client assumes the entire risk of any use the client may make of the data. In no event shall the Company, its information providers (including without limitation Barra, LLC) or any third party involved in or related to the making or compiling of the data, be liable to the client, or any other third party, for any direct or indirect damages, including, without limitation, any lost profits, lost savings or other incidental or consequential damages arising out of this agreement or the inability of the client to use the data, regardless of the form of action, even if Company, any of its information providers (including without limitation Barra, LLC), or any other third party involved in or related to the making or compiling of the data has been advised of or otherwise might have anticipated the possibility of such damages.

#### FTSE TMX Global Debt Capital Markets, Inc.

The client agrees that FTSE TMX Global Debt Capital Markets, Inc. and the parties from whom FTSE TMX Global Debt Capital Markets, Inc. obtains data do not have any liability for the accuracy or completeness of the data provided or for delays, interruptions or omissions therein or the results to be obtained through the use of this data. The client further agrees that neither FTSE TMX Global Debt Capital Markets, Inc. nor the parties from whom it obtains data make any representation, warranty or condition, either express or implied, as to the results to be obtained from the use of the data, or as to the merchantable quality or fitness of the data for a particular purpose.

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 6.5

**TO:** Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer Michael R. Coultrip

**SUBJECT:** Approval of Resolution Amending SamCERA's Investment Policy Statement

#### Recommendation

Adopt a resolution amending SamCERA's Investment Policy Statement.

#### Background

SamCERA's Investment Policy Statement ("Policy") is periodically updated to reflect the Board's recent decisions regarding investments. The Board typically updates the Policy twice a year as warranted. The Investment Policy Statement was last updated in January 2025.

#### Discussion

To maximize earnings and program flexibility, staff recommends changing the 20% borrower limit from "the program assets on loan" to "total lendable assets".

To reflect this update, staff recommends amending Section 16.0 "Securities Lending".

#### Attachments

Proposed Amendments to the Investment Policy Statement (Redlined Version) Proposed Amendments to the Investment Policy Statement (Clean Version) Resolution Revising the Investment Policy Statement



# SamCERA's Investment Policy Statement

**Latest Revision Juneanuary 2025** 

#### 1.0 ESTABLISHMENT OF INVESTMENT POLICY

The Board of Retirement (the "Board"), having exclusive authority and exclusive fiduciary responsibility for the investment and administration of the Trust Fund (the "Fund"), hereby establishes the following Investment Policy (the "Policy") for the investment of the San Mateo County Employees' Retirement Association ("SamCERA") assets. The Board reserves the right to amend, supplement or rescind this Policy at any time.

The purpose of this Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937 ("the 1937 Act"), the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers (the "Manager(s)") and investment consultants (the "Consultant(s)").

#### A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

The powers and duties of the Board are set forth in the 1937 Act and in Article XVI of the State Constitution. They are further defined by the Mission and Goals adopted by the Board.

SamCERA was created by San Mateo County Ordinance No. 564 adopted by the Board of Supervisors, effective July 1, 1944. This ordinance established the retirement system in accordance with the provisions of California's County Employees' Retirement Law of 1937.

#### **Constitution of the State of California**

Article XVI, Section 17, relates to the administration of the system and investment of the Fund assets. It reads in pertinent part:

- "(a)...The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.
- "(b) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.
- "(c) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- "(d) The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize the risk of loss and to

maximize the rate of return, unless under the circumstances it is clearly not prudent to do so."

#### The 1937 Act

The 1937 Act contains language similar to that in the State Constitution regarding the investments of the Fund:

Government Code section 31595.

"The board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the board.

The board and its officers and employees shall discharge their duties with respect to the system: (a) Solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

- (b) With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (c) Shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

#### SamCERA's Mission and Goals

The Board has adopted a Mission and Goals statement. The Mission summarizes SamCERA's reason to exist.

"Mission: SamCERA exists to serve as loyal fiduciary for its members and as prudent administrator of the retirement system."

The Mission is further defined by three goals. One goal speaks to the management of the assets of the Fund. This asset management goal reads:

"Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers."

In recognition of the requirements of the California Constitution, the 1937 Act, the SamCERA Mission and Goals and other legal requirements, the SamCERA Board has established this Investment Policy.

#### 2.0 MANAGEMENT OF THE FUND

#### A. ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored by the Board. Investment Staff (the "Staff"), Investment Consultant (the "Consultant"), Custodian Bank (the "Custodian"), and Investment Managers (the "Managers") shall support the Board in this activity. The roles are set forth below:

- 1. The Board establishes and maintains the investment policy, including: investment philosophy, investment objectives, strategic asset allocation, allocation-level performance benchmarks, and risk philosophy. The Board makes investment and monitoring decisions based upon the recommendations of Staff, Consultants, and other service providers engaged by the Board. The Board reviews and monitors all investments, as well as the policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund. From time to time, the Board will utilize its Investment Committee to assist the Board in these activities and related specified tasks.
- 2. Staff oversees the Fund's investment program activities, implements the Board's decisions, manages the existing fund investments, and makes recommendations to the Board regarding Fund management, including investment-related policies and procedures. Staff makes recommendations regarding the selection of the Consultant, Managers, Custodian as set forth below and monitors the performance and compliance of these and other investment related service providers.
- 3. The Consultant reviews, analyzes and evaluates the Fund's effectiveness and efficiency and makes fund management related recommendations. Consultant assists Staff in implementing the Board's decisions and developing all investment-related policies. Consultant's responsibilities are detailed in the service agreement between SamCERA and Consultant.
- 4. The Custodian provides custody of SamCERA's investment assets. In addition, the Custodian manages the securities lending program. The Custodian's responsibilities are detailed in the service agreement between SamCERA and Custodian.
- 5. The Managers manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. For separately managed accounts, managers' responsibilities are detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager. For commingled funds, managers' responsibilities are detailed in the related Fund documents.

#### **B. INVESTMENT PORTFOLIO MANAGEMENT**

The Board, with the assistance of Staff and Consultant, select and monitor Managers to manage the assets of the Fund.

#### 1. Hiring New Managers

For public markets manager searches (i.e. non private equity and private real assets), Staff will inform the Board about the search process, including scope of the mandate, and the investment style, benchmark, and the minimum qualifications for candidates. Staff will update the Board on the short list of potential managers. Consultant and Staff will perform due diligence activities deemed applicable by the Chief Investment Officer, which may include analysis of performance records, meetings, due diligence questionnaires, interviews, and on-site visits. Upon completion of such due diligence, Staff and Consultant will bring a finalist to the Board for approval. The recommendation shall provide the Board with a summary description of the conducted due diligence activities.

For private markets, the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when a decision for a private market investment must be made prior to the date of the next regularly scheduled Board meeting. In these instances, and for investments of \$35 million or less, the Chief Executive Officer is authorized to make an investment-related decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, one member of the Investment Committee, the Board's Investment Consultant, staff and legal counsel as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

#### 2. Managing and Monitoring Existing Managers

The Board monitors the individual investment managers on a continuous basis through information provided by Staff, the Consultant, the Managers, and other investment service providers. Monthly, the Chief Investment Officer will present a preliminary performance report to the Board that is meant to provide a high-level summary of how the fund and each monthly-valued manager is performing. In addition, for SamCERA's separate accounts, Staff receives holdings and attribution reports from each separate account Manager on a monthly basis. For commingled funds, staff receives from the Manager either monthly or quarterly portfolio performance, attribution, exposure, and commentary reports.

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 13.0 (Quarterly Investment

Performance Reporting) in the Investment Policy. This report provides a more detailed performance attribution for the total plan and individual Managers, and helps to identify any short-term outlier deviations from expectations.

Semi-annually (month-end June and December of each year), every public markets (i.e. not private equity or private real asset) Manager completes a compliance statement identifying any significant firm, regulatory, and portfolio issues. In addition, semi-annually as of June and December of each year, Consultant will present performance reports for both the Private Equity and Private Real Assets programs that summarize each program and shows total program performance and program diversification by strategy, geography, industry, and vintage year.

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 14.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

During these presentations, Managers will provide an update on the Manager's organization and business plan, any changes to the investment process, and a summary of investment performance. Staff and Consultant report to the Board following these meetings.

After the Board approves an initial investment to be held in a separate account or open-end evergreen commingled fund, staff will be responsible for managing that allocation, including initiating any adjustments to that allocation amount, consistent with the allocation ranges outlined in Section 6.0. For those investments held in closed-end (or non-perpetual life) commingled funds (e.g. private equity, private real assets, private credit, value-add real estate), staff will seek Board approval for any additional allocation to those funds, including re-up commitments, unless the timing of the decision is subject to the policy exception set forth in paragraph 1.

#### 3. Terminating Existing Managers

The Board recognizes investments may need to be adjusted or removed from the Fund from time to time for a variety of reasons, including organization changes at the Manager, changes in Manager style, underperformance relative to expectations, and the Manager's strategy is no longer appropriate for the fund. The Board determines if a Manager should be terminated after receiving input and or recommendations from Staff and Consultant.

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member

of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its key portfolio managers on the strategy, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

#### 3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, to meet the primary goal of ensuring liquidity is available to provide for the required monthly benefit payments in a timely manner. In addition, the following secondary objectives will be considered:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Achieve long-term real growth while minimizing the funded status volatility.
- C. Provide a more consistent return stream and diversification than a simple implementation of our Asset Allocation Policy Benchmark (consisting of four primary asset classes: 1) Global Equities, 2) Core Bonds, 3) Short-Term Bonds, and 4) Core Real Estate). This will be measured by having lower portfolio drawdowns over a full market cycle than the simple implementation of our Asset Allocation Policy Benchmark.

#### **4.0 INVESTMENT BELIEFS**

The following section summarizes the Board's investment beliefs that have guided it in the development of this Policy document and will guide it in the oversight of the Plan assets.

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Focus on income and capital appreciation should be balanced and not overly dependent on one or the other.
- Diversification is fundamental.

- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.
- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.
- Incorporating sustainability criteria into the decision-making process can positively impact long-term risk and reward characteristics of an investment.

#### 5.0 GENERAL INVESTMENT POLICIES

Consistent with the investment beliefs contained in Section 4.0, it is the investment policy of the Board to:

- A. Achieve long-term risk-adjusted returns consistent with its fiduciary duty.
- B. Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of this Investment Policy.
- C. Further diversify other risks, including extreme events, liquidity, and leverage by looking beyond traditional asset class definitions by utilizing multiple lenses on portfolio risks.
- D. Adopt an asset allocation target to guide the structure of the investment portfolio, as provided for in Section 6.0, and reevaluate on an annual basis.
- E. Reevaluate the asset-liability study every three to five years.
- F. Determine whether to replenish the cash flow match account on an annual basis.
- G. Delegate to staff the management of existing investment managers, and for those strategies in separately managed accounts and evergreen (or open-end) commingled fund structures, the on-going adjustments to allocations to such managers consistent with the investment policies and investment ranges contained in Section 6.0.
- H. Delegate full discretion, including whether to include environmental, social, and governance factors, if such factors have a direct relationship to the economic and financial value of an investment, when analyzing the financial merits of competing investment choices on behalf of SamCERA, to each investment manager to the extent authorized in their Investment Management Agreement (IMA).
- I. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- J. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- K. Rebalance the portfolio in accordance with the Rebalancing Policy set forth in Section 7.0.

#### 6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

#### A. Asset Allocation by Performance Driver

In addition to grouping investments into traditional asset classes (Public Equity, Fixed Income, Alternative Assets, Inflation Hedge and Liquidity), SamCERA also groups its investments by the underlying performance drivers within each asset class composite. As part of this process, SamCERA classifies its portfolio into four main drivers of performance listed below.

#### Growth

The Growth category includes assets in which their primary driver of returns is tied to the general strength of economic output. These assets will generally do well when economic conditions are favorable, but generally struggle in times of economic weakness and recession. Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit (consisting of Public Credit and Private Credit) within Fixed Income.

#### **Diversifying**

Diversifying assets provide protection from equity risk and may be characterized as being more defensive (i.e. may help provide stability when markets fall) or more absolute-return oriented (i.e. performance is not as dependent on the overall strength of equity markets). Assets classified in the Diversifying category include Defensive Fixed Income and Absolute Return within Alternatives.

#### <u>Inflation Hedge</u>

Inflation Hedge assets provide additional diversification from equity risk and provide a potential hedge against unexpected inflation. Assets classified in this category include Real Estate, Public Real Assets, and Private Real Assets.

#### Liquidity

The Liquidity category consists of liquid assets with the primary purposes to pre-fund net benefit payments, satisfy expense obligations in the near-term (e.g. capital calls and management fees), support the overlay and currency hedge overlay accounts, and also meet any unforeseen cash needs. Assets classified in this category include two subcategories: 1) Cash Flow-Matched Liquidity and 2) Cash & Cash Overlay. The Cash Flow-

Matched Liquidity category includes our Cash Flow-Matched Liquidity account and our County Treasury Pool, which are both used for the primary purpose of pre-funding and paying out benefit payments. SamCERA typically pre-funds up to 36 months of net benefit payments, depending on market conditions, plan performance and other factors.

The Cash & Cash Overlay category includes our general cash account (used to satisfy capital calls, pay management fees, meet unforeseen cash needs, etc.) and our cash overlay and currency hedge overlay account.

#### Updated Asset Allocation Policy^

Performance Driver View	Target Allocation	Rebalancing Range	Traditional Asset Class View *
Growth	59%	±3%	
Public Equity	41%	±3%	Public Equity
Private Equity **	7%	±2%	Alternatives
Opportunistic Credit	11%	±2%	Fixed Income
Public Credit	8%	±2%	
Private Credit	3%	±2%	
Diversifying	18.5%	±2%	
Defensive Fixed Income	12.5%	±2%	Fixed Income
Absolute Return	6%	±2%	Alternatives
Inflation Hedge	17%	±2%	
Real Estate	9%	±2%	Inflation Hedge
Private Real Assets **	5%	±2%	Inflation Hedge
Public Real Assets	3%	±2%	Inflation Hedge
Liquidity	5.5%	NA	
Cash Flow-Matched Liquidity ***	4.5%	NA	Liquidity
Cash & Cash Overlay	1%	±2%	Liquidity

<sup>^</sup>The updated asset allocation policy was approved in the February 2023 board meeting. The long-term strategic asset allocation policy will include a 1% increase to Private Equity (long-term target of 8%, funded from public equity), which will take multiple quarters to reach the target.

<sup>\*</sup> Traditional Asset Allocation: 41% Public Equity, 28% Fixed Income, 13% Alternatives, 17% Inflation Hedge, and 1% Liquidity.

\*\* Recognizing the illiquidity of the asset class, rebalancing will be considered over six- to twelve-month periods.

\*\*\* The Cash Flow-Matched Liquidity sub-category doesn't have rebalancing bands as the target will naturally fluctuate over time as payments are made and cash is replenished in the accounts.

#### **B. Growth Asset Allocation**

Growth assets shall be allocated to managers within the following asset/sub-asset classes:

GROWTH ASSET CLASSES	TARGET ALLO	TARGET ALLOCATION	
Public Equity	41%		±3%
Large Capitalization Domestic	23.0	%	±2%
Passive Core		19.0%	±2%
Active Core		4.0%	±2%
Small Capitalization Domestic	2.0%	6	±2%
Active Core		2.0%	±2%
International	16.09	%	±2%
Passive Core		8.0%	±2%
Growth		.0%	±2%
Value		.0%	±2%
Private Equity	7%		±2%
Opportunistic Credit	11%		±2%
<b>Total Growth Assets</b>	59%		±3%

#### C. Diversifying Asset Allocation

Diversifying assets shall be allocated to managers within the following asset/sub-asset classes:

DIVERSIFYING ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Defensive Fixed Income	12.5%	±2%
Core	5.5%	±2%
Core Securitized	4.0%	±2%
Long Treasury	3.0%	±2%

Absolute Return	6%	±2%
TOTAL DIVERSIFYING ASSETS	18.5%	±2%

#### **D. Inflation Hedge Asset Allocation**

Inflation Hedge assets shall be allocated as follows:

INFLATION HEDGE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate	9.0%	±2%
Private Real Assets	5.0%	±2%
Public Real Assets	3.0%	±2%
TOTAL INFLATION HEDGE ASSETS	17.0%	±2%

#### **E. Liquidity Asset Allocation**

Liquidity assets shall be allocated as follows:

LIQUIDITY ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Cash Flow-Matched Liquidity	4.5%	NA
Cash & Cash Overlay	1%	±2%
TOTAL LIQUIDITY	5.5%	NA

#### F. Asset Allocation Policy Benchmark

The Asset Allocation Policy Benchmark defined below is derived by assigning a passive benchmark to each of the sub-asset classes referenced in Sections 6.0 (A) through 6.0 (E) and weighting each by the Target Allocation. The performance of the Asset Allocation Policy Benchmark is computed by the Plan's investment consultant.

	Asset Allocation
	Policy
Benchmark	Benchmark
Growth Assets	59%
Russell 3000 Index	25%

MSCI ACWI x US IMI Index Hedged^	16%
Russell 3000 +3% (One Quarter Lagged)	7%
Custom Opportunistic Credit Index*	11%
Diversifying Assets	18.5%
BC Aggregate Index	9.5%
BC Long Treasury Index	3%
SOFR + 4%	6%
Inflation Hedge	17%
NCREIF ODCE	9%
Custom Private Real Asset Index**	5%
Custom Public Real Asset Index***	3%
Liquidity	5.5%
BC 1-3 Year Gov't/Credit Index	4.5%
91 Day T-Bills	1%

#### 7.0 REBALANCING POLICY

- A. The Chief Investment Officer (CIO) shall rebalance the portfolio as needed in conformance with the asset allocation rebalance ranges set forth in Section 6.0.
- B. The potential need to rebalance will be continuously monitored, and will be subject to deviations within the established rebalance ranges specified in Section 6.0.
- C. The CIO will have discretion to rebalance to Target or to some other allocation, as long as it is within policy ranges.
- D. Cash flows will be used first to rebalance, and to the extent possible, exchange-traded derivatives will be used to rebalance in a cost-effective manner.
- E. All rebalancing activity shall be reported to the Board at the next scheduled meeting.

#### 8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

Commodity and Resources Index + 2% (One Quarter Lagged)

<sup>^ 50%</sup> hedge ratio

<sup>\*</sup>Comprised of 73% BC High Yield Index and 27% Credit Suisse Leveraged Loan Index (One Quarter Lagged). Only Credit Suisse Leveraged Loan Index portion is lagged by one quarter. \*\*Comprised of 75% S&P Global Infrastructure Index and 25% S&P Global LargeMidCap

<sup>\*\*\*</sup>Comprised of 25% Bloomberg Roll Select Commodity Index, 25% Bloomberg US TIPS Index, 25% S&P Global LargeMidCap Commodity and Resources Index, and 25% S&P Global Infrastructure Index.

The responsibility for securities selection, purchase and sale decisions, and proxy voting (where appropriate) is delegated to the external investment managers. The individual investment guideline parameters (including diversification constraints, concentration limits, asset type exclusions, etc.) and performance objectives for each investment manager will be established within the IMA or other applicable legal agreement(s) with each firm.

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short, intermediate, and long-term performance of its investment managers. Generally, the Board will focus on a complete market cycle (defined as between three and five years) when analyzing a manager's performance relative to their broad-market-based benchmark, stated style, peer group, and other criteria deemed acceptable to the Board.

#### 9.0 GROWTH ASSETS INVESTMENT POLICIES

#### **GROWTH ASSETS OVERVIEW:**

Assets classified in the Growth category include Public Equity (consisting of Domestic and International Equity), Private Equity within Alternatives, and Opportunistic Credit (consisting of Public Credit and Private Credit) within Fixed Income.

**Public Equity:** Public equity assets include funds shares/stock of a company through a public market. SamCERA invests utilizing both passive approaches (meant to track the performance and characteristics of major market indices, like the Russell 1000 Index and MSCI ACWI ex US IMI Index), and via active approaches that are meant to outperform the major market benchmarks. Public Equity is expected to produce returns higher than that provided from Fixed Income but at potentially higher levels of volatility. Exposure to this asset class will provide return streams generally correlated to that of general economic growth. There are two primary components to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

- 1) Domestic Equity: SamCERA further breaks out its U.S. public equity holdings into two subcomposites: 1) U.S. Large Capitalization Domestic, which is comprised of U.S. companies valued generally over \$10 billion, and 2) U.S. Small Capitalization Domestic, which is comprised of U.S. companies valued generally under \$2 billion.

  For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The Domestic Equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. Large Capitalization Equity will consist of three Core strategies: one passive, and one low-tracking error active. Small-Capitalization Equity will consist of an actively managed Core strategy.
- 2) International Equity: International Equity consists of developed (public companies domiciled in developed market countries such as Germany, France, UK, Japan, etc.) and

emerging markets (public companies domiciled in emerging market countries such as China, Brazil, Mexico, India, etc.)

International Equity will consist of three strategies: 1) Passive Core, 2) Active Value, and 3) Active Growth. All three strategies will have exposure to both developed and emerging markets. Additionally, a dynamic currency hedging strategy is utilized to dynamically hedge certain developed market currency exposures within the three equity strategies.

**Private Equity:** Private Equity are funds, typically illiquid investments, that directly invest in private companies, or that engage in buyouts of public companies. Private Equity is expected to be one of the highest returning asset classes over the long-term. Its role in the portfolio is to provide high return potential to maximize the ability of the Fund to meet its performance objectives.

The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Distressed/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments, and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Buyouts	70%	+/- 30%
Venture Capital	30%	0 – 40%
Distressed/Special Situations	0%	0 – 30%

The responsibility for private equity sourcing is delegated to SamCERA's investment consultant. The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

(a) <u>Diversification:</u> Subject to availability of sufficient attractive opportunities, the portfolio is to be diversified over multiple years by the following:

Vintage Year: It is expected that roughly equal amounts of new funding will be committed in each calendar year, with deviations permitted to accommodate market opportunities and to facilitate initial entry into the asset class.

Investment Manager: The reported value plus unfunded commitments of any one investment manager (excluding fund of funds) up to no more than twenty (20) percent of the reported value plus unfunded commitments of the total private equity portfolio.

Geography: Through commitments to funds located and/or investing both in and outside of the United States.

Industry: It is expected that the private equity portfolio will be generally diversified by sector/industry.

(b) Quality: All commitments to private equity by SamCERA must be of institutional quality as evidenced by other tax-exempt institutional investors' commitments to the investment manager's prior or current funds.

Fund managers are expected to comply with SamCERA's private placement disclosure rules.

**Opportunistic Credit:** Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Opportunistic Credit is expected to be the highest-risk category within fixed income, and will be used to enhance return by investing via public and private investments in non-traditional sectors of the fixed income market, including emerging market debt, high yield bonds, direct lending, bank loans, convertible bonds, and RMBS/CMBS/ABS securities. This category will be exposed to general economic risk factors, similar to public equities, but may provide a steadier stream of returns than public equity asset classes. There are two primary components to the Opportunistic Credit category: 1) Public Credit, and 2) Private Credit.

#### **GROWTH ASSETS PERFORMANCE OBJECTIVE:**

The performance objective of the Growth Assets Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 42% Russell 3000, 27% MSCI ACWI ex US IMI Index hedged, 12% Russell 3000 Index + 3% (one quarter lagged), and 19% Custom Opportunistic Credit Index).

The Public Equity composite has a maximum tracking error of 3% to its composite benchmark.

#### GROWTH ASSETS RISK EXPOSURES AND RISK MITIGATION:

**Public Equity:** The primary risk factors for Public Equity are correlation to general economic growth, high volatility in returns, and potential illiquidity in smaller-capitalization and certain emerging market stocks. SamCERA will control for these risk factors by diversifying the plan across assets that exhibit limited correlation to economic growth. In addition, SamCERA's rebalancing ranges for small-cap equity will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

**Private Equity:** Private Equity, while expected to provide attractive returns, also have a number of risks. Chief among these are illiquidity risk and leverage. By their nature Private Equity is generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by private equity managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

**Opportunistic Credit:** Opportunistic Credit is generally the highest risk, lowest liquidity subcategory within Fixed Income. SamCERA will consider unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations. Opportunistic Credit typically includes the risk factors contained in Core, but depending on the mandate, with higher emphasis to credit default risks, emerging markets sovereign/corporate default risk, potential leverage, and potential illiquidity. It is expected that strategies within Opportunistic Credit will have a maximum leverage ratio of 2.5x at the fund level (i.e. certain holdings may be levered higher than the 2.5x limit, as long as the fund (or strategy) has a maximum 2.5x leverage). Strategies employing higher leverage will be relegated to the distressed/special situations category of Private Equity (see above).

GROWTH ASSET CLASSES	BENCHMARK INDEX
Growth Assets	Customized Benchmark Portfolio
Public Equity	
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	Russell 1000
Active Core	Russell 1000
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000
International Equity	MSCI All Country World ex US IMI hedged*
International Passive Core	MSCI ACWI ex US IMI
International Growth	MSCI ACWI Free ex US Growth
International Value	MSCI ACWI Free ex US Value
Private Equity	Russell 3000 + 3% (One Quarter Lagged)
Opportunistic Credit	73% BC High Yield Index and 27% Credit Suisse
	Leveraged Loan Index (One Quarter Lagged)

<sup>\* 50%</sup> hedge ratio

#### 10.0 DIVERSIFYING ASSETS INVESTMENT POLICIES

#### **DIVERSIFYING ASSETS OVERVIEW:**

Assets classified in the Diversifying category include Defensive Fixed Income and Absolute Return within Alternatives.

**Defensive Fixed Income:** Defensive fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Defensive Fixed Income is expected to provide a lower, but steadier stream of returns than public equity asset classes, and also to reduce the risk of the overall portfolio as bonds have lower risk than most other major asset classes. That said, there are several sub-categories within Defensive Fixed Income, which exhibit different risk/return trade-offs and hold slightly different tasks in terms of role in the portfolio but have the common goal of dampening portfolio volatility and/or protecting against an equity drawdown. Defensive Fixed Income is broken out into three subcategories:

1) Core, and 2) Core Securitized, and 3) Long Treasury

**Core:** Core is generally considered a lower-risk fixed income category, and one that invests in primarily liquid, investment grade U.S. Dollar denominated bonds. It also generally consists of sectors that comprise the Bloomberg Barclays Aggregate Bond Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

**Core Securitized:** Core Securitized is a low/medium-risk fixed income sub-category, and contains securitized sectors, including mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities. Core Securitized's role in the portfolio, in addition to dampening portfolio volatility, is to provide higher yield and slightly lower interest rate sensitivity as compared to the Bloomberg Barclays Aggregate Bond Index.

**Long Treasury:** Long Treasury is a portfolio of long-duration U.S. Treasury securities that are expected to provide risk mitigation to the growth portfolio. Long Treasury's role is to protect the growth portfolio (public equity, private equity, and opportunistic credit) in times of economic duress. The high quality, liquid securities should perform well in times of economic crisis, which is when we would expect our growth portfolio (public equity, private equity, and opportunistic credit) to not do as well.

Absolute Return: The Absolute Return category will focus on funds that have an absolute return orientation and are not expected to contain significant levels of public market beta over the long term. This category is expected to provide a diversifying return stream to the total plan that is not correlated to the public markets. Suitable investment strategies include multi-strategy funds, alternative risk premia funds, GTAA or global macro funds, and CTA/Managed Futures trend following funds. It is expected that this category will be implemented via commingled funds and not in separate accounts so that SamCERA's investment in any single fund would be 'ring-fenced' (i.e. any potential losses would be limited to the investment in the single fund, and not extend to the total plan assets).

#### **DIVERSIFYING ASSETS PERFORMANCE OBJECTIVE:**

The performance objective of the Diversifying Assets Composite is to outperform, on a net-of-fee-basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for two composite sub-asset classes (which results in the following weights: 52% Bloomberg Barclays Aggregate Index, 32% to SOFR + 4, and 16%

Bloomberg Long Treasury Index. The Defensive Fixed Income sub-asset class has a maximum tracking error of 3% to its composite benchmark.

#### **DIVERSIFYING ASSETS RISK EXPOSURES AND RISK MITIGATION:**

The Defensive Fixed Income sub-sectors have different risk factor exposures. SamCERA will take into account these unique risk factors when constructing the Defensive Fixed Income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

**Core:** The primary risk factors are sensitivity to changes in interest rates, changes in mortgage prepayment speeds, and investment-grade corporate and sovereign credit risk.

**Core Securitized:** The primary risk factors are complexity, credit and prepayment risk across various securitized sectors (e.g. ABS, CMBS, and RMBS) with interest rate sensitivity being a relatively lower risk factor as compared to assets within Core (above). The focus is on higher quality securitized investments to minimize credit risk.

**Long Treasury:** The primary risk factor is sensitivity to changes in interest rates (given the longer interest rate duration). In addition, another risk factor is the possibility of potential positive correlation of bonds to equity, which would diminish the risk mitigation attribute of long-duration Treasury securities.

**Absolute Return:** Absolute Return, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, also has a number of risks. Chief among these is leverage. Leverage can be employed by absolute return managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through fund selection as well as portfolio construction and diversification.

DIVERSIFYING ASSET CLASSES	BENCHMARK INDEX
DIVERSIFYING ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Defensive Fixed Income	
Core/Core Securitized	Bloomberg Barclays Aggregate Bond Index
Long Treasury	Bloomberg Long Treasury Index
Absolute Return	SOFR + 4%

#### 11.0 INFLATION HEDGE INVESTMENT POLICIES

#### INFLATION HEDGE OVERVIEW:

The Inflation Hedge category combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan's overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are

taken into account. The Inflation Hedge category is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan. Inflation Hedge is broken out into three subcategories:

1) Real Estate, 2) Private Real Assets, and 3) Public Real Assets

**Real Estate:** Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. Real estate will be composed of three sub-categories: 1) Core, 2) Value-Add, and 3) Debt. Most of the exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. Value-Add proprieties are expected to provide somewhat higher return potential along with somewhat higher risk than Core assets. Real Estate Debt strategies range from lower risk senior loans on stable properties to higher risk/return mezzanine loans, construction loans and preferred equity. SamCERA utilizes Debt strategies for risk mitigation and to enhance the portfolio's yield.

Income will be a large part of the return stream generated from the Real Estate portfolio. The role of this portfolio is to provide diversification benefits, some protection against unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Real Assets composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment opportunity set compared to Core, Value-Add, and Debt strategies. The sub-allocation targets and target ranges are summarized below:

Real Estate Strategy	<b>Target Allocation</b>	Range
Core Real Estate	60%	50 -70%
Value-Add Real Estate	20%	0 - 30%
Real Estate Debt	20%	0 - 30%

**Private Real Assets:** Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of two sub-categories: 1) Infrastructure (Core and Value-Add, Secondary, Midstream Energy, and Power), and 2) Natural Resources (Energy Exploration & Production, Mining, Farmland, Timber, and Water). These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	<b>Target Allocation</b>	Range
Infrastructure	75%	+/- 25%

The responsibility for Private Real Asset sourcing is delegated to SamCERA's investment consultant.

**Public Real Assets:** Similar to Private Real Assets, Public Real Assets is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. Public Real Assets may be used to fund new strategies in Private Real Assets and will be composed of four sub-categories: 1) Commodities, 2) U.S. TIPS, 3) Listed Global Natural Resources, and 4) Listed Global Infrastructure. All four sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.

The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Commodities	25%	0 - 50%
U.S. TIPS	25%	0 - 50%
Listed Global Natural Resources	25%	0 – 50%
Listed Global Infrastructure	25%	0 – 50%

#### INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 53% NCREIF ODCE, 29% Custom Private Real Asset Index, and 18% Custom Public Real Asset Index).

#### INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

**Real Estate:** Many real estate funds utilize leverage to enhance returns. Lack of liquidity is also a concern, but less so for core real estate and senior debt investments. Value-add, mezzanine debt, and opportunistic strategies also tend to have more exposure to general economic conditions than core properties.

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA's real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties and Debt strategies. Opportunistic-oriented strategies will reside in our Private Real Assets portfolio due to their higher risk profile.

**Private Real Assets:** By their nature, Private Real Assets are generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that

this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by alternative managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

INFLATION HEDGE ASSET CLASSES	BENCHMARK INDEX
INFLATION HEDGE ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM PRIVATE REAL ASSET INDEX
PUBLIC REAL ASSETS	CUSTOM PUBLIC REAL ASSET INDEX

#### 12.0 LIQUIDITY INVESTMENT POLICIES

#### LIQUIDITY ASSETS OVERVIEW:

Assets classified in the Liquidity category include 1) Cash Flow-Matched Liquidity, and 2) Cash & Cash Overlay.

The Cash Flow-Matched Liquidity category consists of both our Cash Flow-Matched Liquidity account and our County Treasury Pool. The Cash Flow-Matched Liquidity account consists mainly of investment grade, shorter-term government and credit securities with a liquidity profile that matches the next three-year's projected benefit payment schedule to satisfy benefit payment obligations. The County Treasury Pool consists of shorter-term fixed income and cash equivalent investments.

On an annual basis, cash projections of expected contributions and plan benefit payments will be updated by our actuary, and an assessment by the Board will be made as to whether to replenish the Cash Flow-Matched Liquidity account at that time. Given that benefit payments are paid monthly, the Cash Flow-Matched Liquidity account will be drawn down monthly as well. Assuming annual replenishment, the balance in the Cash Flow-Matched Liquidity account is expected to fluctuate between 24 and 48 months. It is anticipated that SamCERA will maintain a minimum of 12 months balance.

Cash & Cash Overlay investments will be used for satisfying miscellaneous liquidity needs, including capital calls, expenses, and other unforeseen needs, and also supporting the derivatives positions in our cash overlay and currency hedge overlay account.

#### LIQUIDITY ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Liquidity Assets Composite is to meet the plan's liquidity needs.

#### **LIQUIDITY ASSETS RISK EXPOSURES AND RISK MITIGATION:**

The primary risk in the Cash Flow-Matched Liquidity account component is credit risk. The portfolio is structured to be primarily a buy and maintain strategy using cash flows from coupons and principal maturities to line up with benefit payments. The biggest risk to the strategy is risk of default.

LIQUIDITY ASSET CLASSES	BENCHMARK INDEX
LIQUIDITY ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Liquidity	
Cash Flow-Matched Liquidity	BC 1-3 Year Gov't/Credit Index
Cash & Cash Overlay	91 Day T-Bills

#### 13.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

The quarterly investment performance reports will be designed as a risk management tool and will afford the Board the opportunity to timely identify potential risk issues within the portfolio and to assess the relative performance of the investment managers.

The report will provide sufficient information to assess the following:

- A. Total and active risk assessment at total fund, composite and individual manager level.
- B. Performance attribution at total fund, composite and individual manager level.
- C. Adherence to the investment style for which the manager is retained, as measured by the quarterly risk adjusted active return (deviation of the manager's performance from the specified performance benchmark) over the last quarter, six months, one-, three-, and five-year periods, including updates from previous quarterly reports regarding adherence to the style for which the firm was retained;
- D. Ability of the active manager to demonstrate consistently positive information ratios, including updates from previous quarterly reports regarding the firm's information ratios;
- E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

#### 14.0 ANNUAL INVESTMENT STRATEGY

Annually, the Board/Staff shall convene an investment strategy session with the objective of addressing strategic investment policy issues and to deliberate any policies that could benefit the performance of the retirement Fund. The agenda for these sessions should include (but is not limited to) the following information:

- (a) Compare the Fund's actual investment performance for the prior fiscal year against the investment objectives set forth in Section 3.0 and evaluate the relative success or failure of the prior year's performance; specific commentary to this objective shall be an integral part of the performance measurement process.
- (b) Compare each investment manager's investment performance for the prior fiscal year against the relevant benchmarks and peer groups and evaluate the relative success or failure of their prior year's performance.
- (c) Evaluate and review the total Fund performance attribution and contribution to return at the composite level to isolate performance drivers.
- (d) Evaluate and review the various risk exposures of the plan versus appropriate policy limits and on-going trends through time.
- (e) Evaluate and review the portfolio rebalancing activity for the year.
- (f) Evaluate the Fund's liquidity requirements for the current and next fiscal years.
- (g) Compare each investment manager's fees to their respective peer universe.

#### 15.0 PROXY VOTING

The Investment Managers are delegated authority for the voting of proxies, subject to the following guidelines:

- A. All proxies shall be voted in the best interest of the shareholders, but in no instance shall the economic interests of the retirement Fund be subordinated to any other interest.
- B. Investment managers shall provide staff with monthly or quarterly reports on all proxies cast, in a mutually acceptable format.

#### **16.0 SECURITIES LENDING**

- A. Pursuant to Section 2.0 (A), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
- (i) All loans shall be marked-to-market daily.
- (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
- (iii) Acceptable collateral shall be in the form of cash or obligations issued or guaranteed by the U.S. Government, or its agencies or instrumentalities, as well as highly-rated OECD Debt (rated AA- or better).

- (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
- (v) The maximum allowable amount of assets on loan to any single borrower shall not be greater than 20% of total lendable assets the program assets on loan.
- (vi) The maximum total amount of program assets on loan shall not be greater than 50% of total lendable assets.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

#### APPENDIX A

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Investment Committee Charter as Amended RESOLUTION 99-00-09

This Resolution, adopted by the Board of Retirement (Board) of the San Mateo County Employees' Retirement Association (SamCERA), sets forth the Charter for the Board's Investment Committee.

**WHEREAS**, Article XVI, §17 of the Constitution of the State of California as amended in 1992 to read, in pertinent part, as follows:

Notwithstanding any other provisions of law or this Constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys and administration of the system, subject to all of the following:

- (a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.
- (b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses

of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

- (c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.
- (e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

#### WHEREAS, California Government Code §31595 states, as follows:

The Board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board...; &

**WHEREAS**, The Board of Retirement, wishes to exercise these powers as follows: **Exercise of Powers**: The Board shall exercise its investment, management and administrative authority and responsibility through the approval of motions recorded in public meeting &

**WHEREAS**, the Board has adopted SamCERA's Investment Policy and amendments thereto to direct the investments of the Retirement Fund and now wishes to establish an Investment Committee to guide the future evolution of SamCERA's Investment Policy. Therefore, be it

**RESOLVED** that the Board hereby establishes a standing Investment Committee to direct the Board in its ongoing evaluation of SamCERA's Investment Policy, including but not limited to

- 1.0 CONDUCT ASSET ALLOCATION STUDIES
- 1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows
- 2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS
  - 2.1 Establish allowable asset classes
  - 2.2 Determine asset class benchmarks
  - 2.3 Develop risk, return & correlation projections
- 3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES
  - 3.1 Define risk, return and correlation

- 3.2 Evaluate mean variance optimization
- 3.3 Determine low risk alternatives and high risk alternatives
- 3.4 Scale portfolios between two extremes
- 3.5 Evaluate optimized efficient frontier
- 3.6 Integrate optimized efficient frontier with asset-liability relationships
- 4.0 ANALYZE BOARD RISK TOLERANCE
  - 4.1 Assess risk/reward trade-offs
  - 4.2 Assess contribution rate sensitivity & variability
  - 4.3 Assess ability to exceed actuarial interest rate
  - 4.4 Assess comfort level with characteristics of specific asset mixes
- 5.0 RECOMMEND PREFERRED ASSET MIX
  - 5.1 Evaluate differences from current target
  - 5.2 Evaluate Board's willingness to implement new target asset mix
  - 5.3 Evaluate appropriateness of variance from peer public fund norms
- 6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY
  - 6.1 Adjust target asset mix
  - 6.2 Introduce new benchmarks
  - 6.3 Include required asset class/portfolio modifications
- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
  - 7.1 Adjust manager/style line-up as necessary
  - 7.2 Introduce new managers/asset classes
  - 7.3 Terminate managers/asset classes as necessary
  - 7.4 Establish active & passive allocation targets as appropriate
- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
  - 8.1 Recommend time-line & approach to revise structure
  - 8.2 Conduct manager evaluations
  - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
  - 9.1 Monitor results of managers both gross and net of investment management fees
  - 9.2 Assess consistency of portfolio decision making
  - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
  - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
  - 10.2 Define and assign special projects as warranted
  - 10.3 Monitor performance of Investment Consultant(s)
  - 10.4 Conduct evaluations of Investment Consultant(s)
  - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 Initiate & Evaluate Special Investment Studies
- 12.0 Undertake other work assigned to it by the Board Be it further

**RESOLVED** that the Chair may appoint the members of the Investment Committee per Regulation 2.5.1. Be it further

**RESOLVED** that the Chief Executive Officer is hereby instructed to provide the Committee with access to all appropriate and available resources and records, so long as such access is consistent with sound fiduciary practices. Be it further

**RESOLVED** that the Chief Executive Officer is hereby authorized to provide compensation of \$100 per meeting for not more than two meetings per month to the members of the Committee eligible for such compensation, per GC§31521. Be it further

**RESOLVED** that the Board hereby reserves to itself sole authority to accept, modify, or reject the recommendations, which the Investment Committee may present from time to time pursuant to the provisions of this Resolution, per Regulation 2.3.

ADOPTED by unanimous vote, January 25, 2000 AMMENDED by unanimous vote, May 22, 2001 AMMENDED by unanimous vote, October 25, 2004

#### APPENDIX B

# **Derivatives Investment Policy**

# 1) Introduction

There is a genuine need to allow SamCERA's separate account managers to evaluate new securities and introduce them into their portfolios, given that the investment process followed by the investment managers complies with the subsequent provisions of this policy statement. This policy statement allows SamCERA's separate account Managers to exercise reasonable investment freedom, while minimizing the possibility of adverse implications for the Board.

# 2) Derivative Definition

A 'derivative' commonly is defined as a financial instrument whose performance is derived, at least in part, from the performance of an underlying asset (such as a security or an index of securities).

# 3) Types of Securities Included or Excluded

Since the derivative sector of the market is likely to experience considerable change, provisions must be made for the general characteristics of a derivative security, its evaluation and monitoring. Therefore, it is most appropriate to not attempt to definitively list all of the derivative securities that are covered by this policy. Instead, what will be explicitly stated is the investment process that governs derivative investments and the evaluation and monitoring requirements of this policy.

# 4) Approach to Policy

An approach has been developed which states allowable derivative investments, limited allocation derivative investments and restricted derivative investments.

Derivative securities not specified in the above three groups of securities must be evaluated in accordance with the following section entitled Derivative Investment Process. If the security meets these provisions and the spirit of these policies, the manager may establish a prudent position in the instrument. However, the manager must be able to demonstrate the appropriateness of such an investment in light of SamCERA's guidelines.

#### 5) Counter-Party Evaluation

When entering into a non-exchange traded derivative investment, the investment manager must fully evaluate the other side of the derivative transaction—the counter-parties to the trade. Due to the possibility of counter-party default, SamCERA's investment managers must evaluate the risks associated with the counter-party as if an investment were being made in the traditional securities issued by the counter-party.

At a minimum, the investment manager must evaluate the counter-party's following criteria:

- a) Corporate earnings stream
- b) Corporate asset quality
- c) Capitalization
- d) Corporate liquidity
- e) Moody's and Standard & Poor's debt ratings
- f) Other fundamental investment and risk characteristics

For those counter-parties that are broker/dealers, they must:

- a) Have investment grade (Moody's and S&P rated) debt
- b) Be registered with the SEC
- c) Have significant net capital to protect against potential adverse market circumstances

For those counter-parties that are financial institutions (banks), they must have:

- a) Investment grade (Moody's and S&P rated) debt
- b) Total assets in excess of \$1 billion
- c) Significant net capital to protect against potential adverse market circumstances

The investment manager must monitor individual investment and total portfolio exposure to counterparties. Individual counter-party exposure must be well diversified and not concentrated in a small number of organizations.

# 6) Purposes for Derivatives

The acceptable investment purposes for the use of derivatives are as follows:

- a. Appropriate to use futures, options and forward currency contracts to assist investment managers in mitigating portfolio risk.
- b. Useful substitute for an existing, traditional investment. In certain circumstances it may be cheaper, quicker or easier to invest in a derivative instrument or security rather than transacting in the cash or traditional security market.
- c. Provides investment value to the portfolio, while being consistent with SamCERA's overall and specific investment policies.
- d. Obtains investment exposure that is appropriate with the manager's investment strategy and SamCERA's investment guidelines, but could not be made through traditional investment securities.

Given that one or more of these investment purposes are clearly met, it is the responsibility of the investment manager to explain and demonstrate how derivative investments impact portfolio risk and the context of the investment within the overall portfolio.

Any other derivative investment purpose is not allowed. Derivatives may not be introduced into the portfolio to create economic leverage or to create investment exposures that are otherwise excluded by SamCERA's Investment Policy. However, if a manager develops an investment purpose other than those listed above which he/she feels is legitimate and consistent with the spirit of SamCERA's guidelines, this purpose should be proposed in writing to the Board.

#### 7) Investment Restrictions and Derivatives Policy

For the purpose of these guidelines, convertible debt, traditional zero coupon bonds, mortgage pass-through securities and asset-backed securities are not viewed as derivatives. Based upon the factors enumerated in the above Section 4 entitled Approach to Policy, the following guidelines have been established:

#### Allowable derivative investments

- a. Stable and well-structured mortgage CMO's (Collateralized Mortgage Obligations)
- b. Financial futures (if Exchange Traded)
- c. Currency forward contracts and currency options (Exchange and OTC traded)
- d. Interest rate swaps

#### Derivative investments with allocation limits

- a. Interest only mortgage CMO's
- b. Principal only mortgage CMO's
- c. Options (if Exchange Traded)
- d. Caps and floors as they apply to the above stated allowable derivative investments
- e. Credit Default Swaps (CDS)

Derivative investments with allocation limits, as listed above, may not represent more than 5% of the individual portfolio manager's assets (based on market value) managed for SamCERA. At the same time, derivative investments with allocation limits in aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets managed for SamCERA. In addition, the use of options, caps and floors, and CDS may be used only for defensive investment purposes.

Managers investing in the above-defined limited allocation derivative instruments should ensure that portfolio exposure is maintained within the stated constraints, and communicate the assumptions and model used to estimate VAR (Value at Risk) and/or other reasonable risk measurement procedures annually to the Boards.

#### Restricted derivative investments

- a. Inverse floating rate notes and bonds
- b. Structured notes

Restricted derivatives cannot be held in SamCERA's separate account portfolios at any time.

# 8) Risk Analysis and Monitoring of Derivatives

For those securities that are classified as derivative investments with allocation limits, the investment managers are required to test and measure derivative investment sensitivities to changes in key risk factors. These risk factors include extreme changes in interest rates, volatility, liquidity, credit quality, and cash market prices.

These risk factors will be assessed prior to initial investment and on a quarterly basis. Results of such risk testing on derivative investments with allocation limits will be supplied to SamCERA on an annual basis (December 31). If the investment manager identifies additional risks that should be evaluated, these other risk factors should be added to the list and handled in a manner consistent with the previously stated approach.

#### 9) Derivative Investment Process

Investment managers are expected to cover the following issues before purchasing a derivative instrument or security, whether specifically stated as an allowable derivative investment, a derivative investment with

allocation limits, or a derivative not specifically discussed in the Investment Restrictions and Derivatives Policy section above:

- a. Determine if the purpose for investing in a derivative security is consistent with one or more of the purposes in the previous section entitled Purposes for Derivatives.
- b. Determine where the security fits into the classification system, if at all, stated in the Investment Restrictions and Derivatives Policy.
- c. Evaluate, at a minimum, the counter-party risk and the risks stated in the Risk Analysis and Monitoring section of the derivatives policy.
- d. Evaluate the derivative in a comparably thorough manner as the firm would any other traditional investment opportunity.

#### 10) Reporting Requirements

It is the responsibility of SamCERA's investment managers to certify and demonstrate that their portfolios are in compliance with SamCERA's overall guidelines as well as those that apply to derivative investments. On an annual basis (December 31), SamCERA's investment managers will provide the following minimum monitoring information on all derivative securities:

- a. A general statement from the investment manager that its portfolio is in compliance with this Derivatives Policy.
- b. When stating the market value of the derivative exposure, the manager will specify the security pricing sources. The pricing source must be exchange-listed.
- c. A statement of the risks (credit risk—an evaluation of potential counter-party default on obligations, market risk—percent of portfolio invested in derivatives, and any other relevant risks) associated with the derivative investments.
- d. Potential adverse impact on market values if extreme adverse market movements occur.
- e. A statement regarding the liquidity of the derivative investments.
- f. Summary comments and the firm's list of approved counter-parties, ratings, and a statement regarding any changes to this list.
- g. An overall statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

# Appendix C

# DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

This amended policy is effective immediately upon its adoption. This policy is intended to supplement any applicable provisions of state or federal law, which shall govern in the event of any inconsistency.

#### I. PURPOSE

This Policy is adopted pursuant to the requirements set forth in Government Code Section 7513.85 to help ensure that San Mateo County Employees' Retirement Association's (SamCERA's) investment decisions are made solely on the merits of the investment opportunity. This Policy requires broad, timely, and updated disclosure of all Placement Agents, as well as their relationships, compensation, and fees. All capitalized terms used herein shall be defined as set forth in California Government Code section 7513.8.

#### II. APPLICATION

This Policy applies broadly to every type of SamCERA investment manager including, but not limited to, general partners, sponsors of hedge funds, private equity funds, real estate funds, and infrastructure funds, as well as public market investment managers.

This Policy, as last amended, applies to all agreements with External Managers that are:

- (1) Entered into after the date this Policy, as last amended, is adopted; or
- (2) Amended to extend the term of the agreement or the investment period, increase the commitment of funds by SamCERA, or otherwise change the agreement's substantive term, including increasing or accelerating the fees or compensation payable to the External Manager, to the extent such amendments to the agreement (referred to hereafter as "Amendment") are executed subsequent to the adoption of amendments to this Policy. In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

#### III. RESPONSIBILITIES

#### A. The Board is responsible for:

- 1. Only entering into agreements with External Managers which agree in writing to comply with this policy.
- 2. Not entering into any agreements with External Managers that have violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

# B. Each External Manager is responsible for:

- 1. Executing an agreement requiring that the External Manager comply with this policy.
- Providing the following information to SamCERA Investment Staff within 45 days of the date that investment discussions are initiated with the External Manager, and, in any event, prior to the completion of due diligence. In the case of Amendments, an updated Placement Agent Information Disclosure is required prior to execution of the Amendment.
- a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents, or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SamCERA investments.
- b. A resume for each officer, partner, and principal of the Placement Agent detailing their education, professional designations, regulatory licenses, and investment and work experience. If any such person is a current or former SamCERA Board Member, employee, or Consultant, or a member of the immediate family of any such person, this fact shall be specifically noted.
- c. A description of any and all compensation of any kind provided, or agreed to be provided, to a Placement Agent, including the nature, timing, and value thereof. Compensation to Placement Agents includes, but is not limited to, compensation from the External Manager to third parties as well as the External Manager's own employees who solicit or market investments to SamCERA, or who are paid based upon investment commitments secured by such employees.
- d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
- e. A written copy of any and all agreements between the External Manager and the Placement Agent.
- f. A statement whether the Placement Agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
- g. A statement whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any state or national government.
- h. The names of any current or former SamCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.

- 3. Providing an update of any changes to any of the information provided pursuant to Section B.2 above within 30 calendar days of the date that the External Manager knew or should have known of the change in information.
- 4. Representing and warranting the accuracy of the information described in Section B.2 above.
- 5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SamCERA:
- a. All campaign contributions made by the Placement Agent to any publicly elected SamCERA Board Member during the prior 24 month period. Additionally, any subsequent campaign contribution(s) made by the Placement Agent to any publicly elected SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
- b. All gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SamCERA Board Member during the prior 24 month period. Additionally, any subsequent gift(s) made by the Placement Agent to any SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
- 6. Acknowledging and agreeing that SamCERA reserves the right to deem any failure by a Placement Agent to disclose the information required by Sections B.5(a) and B.5(b) as a material breach of the External Manager's agreement with SamCERA.

# C. SamCERA Investment Staff ("Staff") are responsible for:

- 1. Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
- Confirming, within 45 days of the time the execution of the investment contract or Amendment, that the information in Section B above has been received from the External Manager.
- 3. Securing the agreement of each External Manager in any contract or Amendment that is entered into after the date this Policy (as last amended) is adopted, that, in the event that there was or is an intentional material omission or inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SamCERA reserves the right to reimbursement of any management or advisory fees paid by SamCERA from the date of violation to the date of the imposition of the fees.

- 4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SamCERA for five years after they have committed a material violation of this Policy; provided, however, that SamCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
- 5. Providing the Board with Placement Agent information relating to each investment at the time the investment is brought to the Board for its decision.
- 6 Maintaining Placement Agent Information Disclosures as a public record and reporting to the Board any a material violation of this Policy.

Adopted December 14, 2010 Amended October 25, 2011 Amended March 28, 2017 Amended April 25, 2023

#### **DEFINITIONS:**

The following definitions are excerpted from California Government Code section 7513.8 and are current as of March 28, 2017. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

"External Manager" means either of the following: (1) a Person who is seeking to be, or is, retained by a board or an Investment Vehicle to manage a portfolio of securities or other assets for compensation; (2) a Person who manages an Investment Fund and who offers or sells, or has offered or sold, an ownership interest in the Investment Fund to a board or an Investment Vehicle. (All code section references are to the Government Code, unless otherwise noted.)

"Person" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

"Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

"Investment Fund" means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets. Notwithstanding the preceding sentence, an investment company that is registered with the

Securities and Exchange Commission pursuant to the Investment Company Act of 1940 (15 U.S.C. Sec. 8a-1 et seq.) and that makes a public offering of its securities is not an Investment Fund.

"Placement Agent" means any Person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager or an Investment Fund managed by an External Manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale to a board or an Investment Vehicle either of the following: in the case of an External Manager as defined in subpart (1) of the definition of an External Manager, the investment management services of the External Manager; in the case of an External Manager as defined in subpart (2) of the definition of an External Manager, an ownership interest in an Investment Fund managed by the External Manager. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.



# SamCERA's Investment Policy Statement

**Latest Revision June 2025** 

#### 1.0 ESTABLISHMENT OF INVESTMENT POLICY

The Board of Retirement (the "Board"), having exclusive authority and exclusive fiduciary responsibility for the investment and administration of the Trust Fund (the "Fund"), hereby establishes the following Investment Policy (the "Policy") for the investment of the San Mateo County Employees' Retirement Association ("SamCERA") assets. The Board reserves the right to amend, supplement or rescind this Policy at any time.

The purpose of this Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937 ("the 1937 Act"), the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers (the "Manager(s)") and investment consultants (the "Consultant(s)").

#### A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

The powers and duties of the Board are set forth in the 1937 Act and in Article XVI of the State Constitution. They are further defined by the Mission and Goals adopted by the Board.

SamCERA was created by San Mateo County Ordinance No. 564 adopted by the Board of Supervisors, effective July 1, 1944. This ordinance established the retirement system in accordance with the provisions of California's County Employees' Retirement Law of 1937.

# **Constitution of the State of California**

Article XVI, Section 17, relates to the administration of the system and investment of the Fund assets. It reads in pertinent part:

- "(a)...The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.
- "(b) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.
- "(c) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- "(d) The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize the risk of loss and to

maximize the rate of return, unless under the circumstances it is clearly not prudent to do so."

# The 1937 Act

The 1937 Act contains language similar to that in the State Constitution regarding the investments of the Fund:

Government Code section 31595.

"The board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the board.

The board and its officers and employees shall discharge their duties with respect to the system: (a) Solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system.

- (b) With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (c) Shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly prudent not to do so.

#### SamCERA's Mission and Goals

The Board has adopted a Mission and Goals statement. The Mission summarizes SamCERA's reason to exist.

"Mission: SamCERA exists to serve as loyal fiduciary for its members and as prudent administrator of the retirement system."

The Mission is further defined by three goals. One goal speaks to the management of the assets of the Fund. This asset management goal reads:

"Prudently manage the assets in order to appropriately fund the actuarial liabilities of the retirement system, to ensure the ability to pay all earned benefits while minimizing the costs to employers."

In recognition of the requirements of the California Constitution, the 1937 Act, the SamCERA Mission and Goals and other legal requirements, the SamCERA Board has established this Investment Policy.

#### 2.0 MANAGEMENT OF THE FUND

#### A. ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored by the Board. Investment Staff (the "Staff"), Investment Consultant (the "Consultant"), Custodian Bank (the "Custodian"), and Investment Managers (the "Managers") shall support the Board in this activity. The roles are set forth below:

- 1. The Board establishes and maintains the investment policy, including: investment philosophy, investment objectives, strategic asset allocation, allocation-level performance benchmarks, and risk philosophy. The Board makes investment and monitoring decisions based upon the recommendations of Staff, Consultants, and other service providers engaged by the Board. The Board reviews and monitors all investments, as well as the policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund. From time to time, the Board will utilize its Investment Committee to assist the Board in these activities and related specified tasks.
- 2. Staff oversees the Fund's investment program activities, implements the Board's decisions, manages the existing fund investments, and makes recommendations to the Board regarding Fund management, including investment-related policies and procedures. Staff makes recommendations regarding the selection of the Consultant, Managers, Custodian as set forth below and monitors the performance and compliance of these and other investment related service providers.
- 3. The Consultant reviews, analyzes and evaluates the Fund's effectiveness and efficiency and makes fund management related recommendations. Consultant assists Staff in implementing the Board's decisions and developing all investment-related policies. Consultant's responsibilities are detailed in the service agreement between SamCERA and Consultant.
- 4. The Custodian provides custody of SamCERA's investment assets. In addition, the Custodian manages the securities lending program. The Custodian's responsibilities are detailed in the service agreement between SamCERA and Custodian.
- 5. The Managers manage their mandated allocations in accordance with all applicable laws, Board-established policies, guidelines and procedures, as well as specific investment guidelines. For separately managed accounts, managers' responsibilities are detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager. For commingled funds, managers' responsibilities are detailed in the related Fund documents.

#### B. INVESTMENT PORTFOLIO MANAGEMENT

The Board, with the assistance of Staff and Consultant, select and monitor Managers to manage the assets of the Fund.

#### 1. Hiring New Managers

For public markets manager searches (i.e. non private equity and private real assets), Staff will inform the Board about the search process, including scope of the mandate, and the investment style, benchmark, and the minimum qualifications for candidates. Staff will update the Board on the short list of potential managers. Consultant and Staff will perform due diligence activities deemed applicable by the Chief Investment Officer, which may include analysis of performance records, meetings, due diligence questionnaires, interviews, and on-site visits. Upon completion of such due diligence, Staff and Consultant will bring a finalist to the Board for approval. The recommendation shall provide the Board with a summary description of the conducted due diligence activities.

For private markets, the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when a decision for a private market investment must be made prior to the date of the next regularly scheduled Board meeting. In these instances, and for investments of \$35 million or less, the Chief Executive Officer is authorized to make an investment-related decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, one member of the Investment Committee, the Board's Investment Consultant, staff and legal counsel as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

#### 2. Managing and Monitoring Existing Managers

The Board monitors the individual investment managers on a continuous basis through information provided by Staff, the Consultant, the Managers, and other investment service providers. Monthly, the Chief Investment Officer will present a preliminary performance report to the Board that is meant to provide a high-level summary of how the fund and each monthly-valued manager is performing. In addition, for SamCERA's separate accounts, Staff receives holdings and attribution reports from each separate account Manager on a monthly basis. For commingled funds, staff receives from the Manager either monthly or quarterly portfolio performance, attribution, exposure, and commentary reports.

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 13.0 (Quarterly Investment

Performance Reporting) in the Investment Policy. This report provides a more detailed performance attribution for the total plan and individual Managers, and helps to identify any short-term outlier deviations from expectations.

Semi-annually (month-end June and December of each year), every public markets (i.e. not private equity or private real asset) Manager completes a compliance statement identifying any significant firm, regulatory, and portfolio issues. In addition, semi-annually as of June and December of each year, Consultant will present performance reports for both the Private Equity and Private Real Assets programs that summarize each program and shows total program performance and program diversification by strategy, geography, industry, and vintage year.

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 14.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

During these presentations, Managers will provide an update on the Manager's organization and business plan, any changes to the investment process, and a summary of investment performance. Staff and Consultant report to the Board following these meetings.

After the Board approves an initial investment to be held in a separate account or open-end evergreen commingled fund, staff will be responsible for managing that allocation, including initiating any adjustments to that allocation amount, consistent with the allocation ranges outlined in Section 6.0. For those investments held in closed-end (or non-perpetual life) commingled funds (e.g. private equity, private real assets, private credit, value-add real estate), staff will seek Board approval for any additional allocation to those funds, including re-up commitments, unless the timing of the decision is subject to the policy exception set forth in paragraph 1.

#### 3. Terminating Existing Managers

The Board recognizes investments may need to be adjusted or removed from the Fund from time to time for a variety of reasons, including organization changes at the Manager, changes in Manager style, underperformance relative to expectations, and the Manager's strategy is no longer appropriate for the fund. The Board determines if a Manager should be terminated after receiving input and or recommendations from Staff and Consultant.

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member

of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its key portfolio managers on the strategy, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

#### 3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, to meet the primary goal of ensuring liquidity is available to provide for the required monthly benefit payments in a timely manner. In addition, the following secondary objectives will be considered:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Achieve long-term real growth while minimizing the funded status volatility.
- C. Provide a more consistent return stream and diversification than a simple implementation of our Asset Allocation Policy Benchmark (consisting of four primary asset classes: 1) Global Equities, 2) Core Bonds, 3) Short-Term Bonds, and 4) Core Real Estate). This will be measured by having lower portfolio drawdowns over a full market cycle than the simple implementation of our Asset Allocation Policy Benchmark.

#### **4.0 INVESTMENT BELIEFS**

The following section summarizes the Board's investment beliefs that have guided it in the development of this Policy document and will guide it in the oversight of the Plan assets.

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Focus on income and capital appreciation should be balanced and not overly dependent on one or the other.
- Diversification is fundamental.

- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.
- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.
- Incorporating sustainability criteria into the decision-making process can positively impact long-term risk and reward characteristics of an investment.

#### **5.0 GENERAL INVESTMENT POLICIES**

Consistent with the investment beliefs contained in Section 4.0, it is the investment policy of the Board to:

- A. Achieve long-term risk-adjusted returns consistent with its fiduciary duty.
- B. Pursue an investment strategy that reduces the volatility of returns through prudent diversification of the portfolio across a broad selection of distinct asset classes, as provided for in Section 6.0 of this Investment Policy.
- C. Further diversify other risks, including extreme events, liquidity, and leverage by looking beyond traditional asset class definitions by utilizing multiple lenses on portfolio risks.
- D. Adopt an asset allocation target to guide the structure of the investment portfolio, as provided for in Section 6.0, and reevaluate on an annual basis.
- E. Reevaluate the asset-liability study every three to five years.
- F. Determine whether to replenish the cash flow match account on an annual basis.
- G. Delegate to staff the management of existing investment managers, and for those strategies in separately managed accounts and evergreen (or open-end) commingled fund structures, the on-going adjustments to allocations to such managers consistent with the investment policies and investment ranges contained in Section 6.0.
- H. Delegate full discretion, including whether to include environmental, social, and governance factors, if such factors have a direct relationship to the economic and financial value of an investment, when analyzing the financial merits of competing investment choices on behalf of SamCERA, to each investment manager to the extent authorized in their Investment Management Agreement (IMA).
- I. Adopt objectives that encourage investment managers to maximize their performance, within acceptable risk parameters, relative to their individual investment style benchmark.
- J. Refrain from drastically shifting asset class allocations over short time spans, unless it is in the Fund's best interest to do so.
- K. Rebalance the portfolio in accordance with the Rebalancing Policy set forth in Section 7.0.

#### **6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE**

#### A. Asset Allocation by Performance Driver

In addition to grouping investments into traditional asset classes (Public Equity, Fixed Income, Alternative Assets, Inflation Hedge and Liquidity), SamCERA also groups its investments by the underlying performance drivers within each asset class composite. As part of this process, SamCERA classifies its portfolio into four main drivers of performance listed below.

#### Growth

The Growth category includes assets in which their primary driver of returns is tied to the general strength of economic output. These assets will generally do well when economic conditions are favorable, but generally struggle in times of economic weakness and recession. Assets classified in the Growth category include Public Equity (consisting of U.S. and International Equity), Private Equity within Alternatives, and Opportunistic Credit (consisting of Public Credit and Private Credit) within Fixed Income.

# **Diversifying**

Diversifying assets provide protection from equity risk and may be characterized as being more defensive (i.e. may help provide stability when markets fall) or more absolute-return oriented (i.e. performance is not as dependent on the overall strength of equity markets). Assets classified in the Diversifying category include Defensive Fixed Income and Absolute Return within Alternatives.

#### <u>Inflation Hedge</u>

Inflation Hedge assets provide additional diversification from equity risk and provide a potential hedge against unexpected inflation. Assets classified in this category include Real Estate, Public Real Assets, and Private Real Assets.

#### Liquidity

The Liquidity category consists of liquid assets with the primary purposes to pre-fund net benefit payments, satisfy expense obligations in the near-term (e.g. capital calls and management fees), support the overlay and currency hedge overlay accounts, and also meet any unforeseen cash needs. Assets classified in this category include two subcategories: 1) Cash Flow-Matched Liquidity and 2) Cash & Cash Overlay. The Cash Flow-

Matched Liquidity category includes our Cash Flow-Matched Liquidity account and our County Treasury Pool, which are both used for the primary purpose of pre-funding and paying out benefit payments. SamCERA typically pre-funds up to 36 months of net benefit payments, depending on market conditions, plan performance and other factors.

The Cash & Cash Overlay category includes our general cash account (used to satisfy capital calls, pay management fees, meet unforeseen cash needs, etc.) and our cash overlay and currency hedge overlay account.

Updated Asset Allocation Policy^

Performance Driver View	Target Allocation	Rebalancing Range	Traditional Asset Class View *
Growth	59%	±3%	
Public Equity	41%	±3%	Public Equity
Private Equity **	7%	±2%	Alternatives
Opportunistic Credit	11%	±2%	Fixed Income
Public Credit	8%	±2%	
Private Credit	3%	±2%	
Diversifying	18.5%	±2%	
Defensive Fixed Income	12.5%	±2%	Fixed Income
Absolute Return	6%	±2%	Alternatives
Inflation Hedge	17%	±2%	
Real Estate	9%	±2%	Inflation Hedge
Private Real Assets **	5%	±2%	Inflation Hedge
Public Real Assets	3%	±2%	Inflation Hedge
Liquidity	5.5%	NA	
Cash Flow-Matched Liquidity ***	4.5%	NA	Liquidity
Cash & Cash Overlay	1%	±2%	Liquidity

<sup>^</sup>The updated asset allocation policy was approved in the February 2023 board meeting. The long-term strategic asset allocation policy will include a 1% increase to Private Equity (long-term target of 8%, funded from public equity), which will take multiple quarters to reach the target.

<sup>\*</sup> Traditional Asset Allocation: 41% Public Equity, 28% Fixed Income, 13% Alternatives, 17% Inflation Hedge, and 1% Liquidity.

\*\* Recognizing the illiquidity of the asset class, rebalancing will be considered over six- to twelve-month periods.

\*\*\* The Cash Flow-Matched Liquidity sub-category doesn't have rebalancing bands as the target will naturally fluctuate over time as payments are made and cash is replenished in the accounts.

#### **B. Growth Asset Allocation**

Growth assets shall be allocated to managers within the following asset/sub-asset classes:

GROWTH ASSET CLASSES	TARGET ALLO	CATION	REBALANCE RANGE
Public Equity	41%		±3%
Large Capitalization Domestic	23.0	%	±2%
Passive Core		19.0%	±2%
Active Core		4.0%	±2%
Small Capitalization Domestic	2.0%	6	±2%
Active Core		2.0%	±2%
International	16.09	%	±2%
Passive Core		8.0%	±2%
Growth		.0%	±2%
Value		.0%	±2%
Private Equity	7%		±2%
Opportunistic Credit	11%		±2%
<b>Total Growth Assets</b>	59%		±3%

# C. Diversifying Asset Allocation

Diversifying assets shall be allocated to managers within the following asset/sub-asset classes:

DIVERSIFYING ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Defensive Fixed Income	12.5%	±2%
Core	5.5%	±2%
Core Securitized	4.0%	±2%
Long Treasury	3.0%	±2%

Absolute Return	6%	±2%
TOTAL DIVERSIFYING ASSETS	18.5%	±2%

# **D. Inflation Hedge Asset Allocation**

Inflation Hedge assets shall be allocated as follows:

INFLATION HEDGE ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Real Estate	9.0%	±2%
Private Real Assets	5.0%	±2%
Public Real Assets	3.0%	±2%
TOTAL INFLATION HEDGE ASSETS	17.0%	±2%

# E. Liquidity Asset Allocation

Liquidity assets shall be allocated as follows:

LIQUIDITY ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Cash Flow-Matched Liquidity	4.5%	NA
Cash & Cash Overlay	1%	±2%
TOTAL LIQUIDITY	5.5%	NA

# F. Asset Allocation Policy Benchmark

The Asset Allocation Policy Benchmark defined below is derived by assigning a passive benchmark to each of the sub-asset classes referenced in Sections 6.0 (A) through 6.0 (E) and weighting each by the Target Allocation. The performance of the Asset Allocation Policy Benchmark is computed by the Plan's investment consultant.

	Asset Allocation	
	Policy	
Benchmark	Benchmark	
Growth Assets	59%	
Russell 3000 Index	25%	

MSCI ACWI x US IMI Index Hedged^	16%
Russell 3000 +3% (One Quarter Lagged)	7%
Custom Opportunistic Credit Index*	11%
Diversifying Assets	18.5%
BC Aggregate Index	9.5%
BC Long Treasury Index	3%
SOFR + 4%	6%
Inflation Hedge	17%
NCREIF ODCE	9%
Custom Private Real Asset Index**	5%
Custom Public Real Asset Index***	3%
Liquidity	5.5%
BC 1-3 Year Gov't/Credit Index	4.5%
91 Day T-Bills	1%

#### 7.0 REBALANCING POLICY

- A. The Chief Investment Officer (CIO) shall rebalance the portfolio as needed in conformance with the asset allocation rebalance ranges set forth in Section 6.0.
- B. The potential need to rebalance will be continuously monitored, and will be subject to deviations within the established rebalance ranges specified in Section 6.0.
- C. The CIO will have discretion to rebalance to Target or to some other allocation, as long as it is within policy ranges.
- D. Cash flows will be used first to rebalance, and to the extent possible, exchange-traded derivatives will be used to rebalance in a cost-effective manner.
- E. All rebalancing activity shall be reported to the Board at the next scheduled meeting.

#### 8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

<sup>^ 50%</sup> hedge ratio

<sup>\*</sup>Comprised of 73% BC High Yield Index and 27% Credit Suisse Leveraged Loan Index (One Quarter Lagged). Only Credit Suisse Leveraged Loan Index portion is lagged by one quarter. \*\*Comprised of 75% S&P Global Infrastructure Index and 25% S&P Global LargeMidCap

Commodity and Resources Index + 2% (One Quarter Lagged)

<sup>\*\*\*</sup>Comprised of 25% Bloomberg Roll Select Commodity Index, 25% Bloomberg US TIPS Index, 25% S&P Global LargeMidCap Commodity and Resources Index, and 25% S&P Global Infrastructure Index.

The responsibility for securities selection, purchase and sale decisions, and proxy voting (where appropriate) is delegated to the external investment managers. The individual investment guideline parameters (including diversification constraints, concentration limits, asset type exclusions, etc.) and performance objectives for each investment manager will be established within the IMA or other applicable legal agreement(s) with each firm.

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short, intermediate, and long-term performance of its investment managers. Generally, the Board will focus on a complete market cycle (defined as between three and five years) when analyzing a manager's performance relative to their broad-market-based benchmark, stated style, peer group, and other criteria deemed acceptable to the Board.

#### 9.0 GROWTH ASSETS INVESTMENT POLICIES

#### **GROWTH ASSETS OVERVIEW:**

Assets classified in the Growth category include Public Equity (consisting of Domestic and International Equity), Private Equity within Alternatives, and Opportunistic Credit (consisting of Public Credit and Private Credit) within Fixed Income.

**Public Equity:** Public equity assets include funds shares/stock of a company through a public market. SamCERA invests utilizing both passive approaches (meant to track the performance and characteristics of major market indices, like the Russell 1000 Index and MSCI ACWI ex US IMI Index), and via active approaches that are meant to outperform the major market benchmarks. Public Equity is expected to produce returns higher than that provided from Fixed Income but at potentially higher levels of volatility. Exposure to this asset class will provide return streams generally correlated to that of general economic growth. There are two primary components to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

- 1) Domestic Equity: SamCERA further breaks out its U.S. public equity holdings into two subcomposites: 1) U.S. Large Capitalization Domestic, which is comprised of U.S. companies valued generally over \$10 billion, and 2) U.S. Small Capitalization Domestic, which is comprised of U.S. companies valued generally under \$2 billion.

  For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The Domestic Equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. Large Capitalization Equity will consist of three Core strategies: one passive, and one low-tracking error active. Small-Capitalization Equity will consist of an actively managed Core strategy.
- 2) International Equity: International Equity consists of developed (public companies domiciled in developed market countries such as Germany, France, UK, Japan, etc.) and

emerging markets (public companies domiciled in emerging market countries such as China, Brazil, Mexico, India, etc.)

International Equity will consist of three strategies: 1) Passive Core, 2) Active Value, and 3) Active Growth. All three strategies will have exposure to both developed and emerging markets. Additionally, a dynamic currency hedging strategy is utilized to dynamically hedge certain developed market currency exposures within the three equity strategies.

**Private Equity:** Private Equity are funds, typically illiquid investments, that directly invest in private companies, or that engage in buyouts of public companies. Private Equity is expected to be one of the highest returning asset classes over the long-term. Its role in the portfolio is to provide high return potential to maximize the ability of the Fund to meet its performance objectives.

The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Distressed/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments, and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Buyouts	70%	+/- 30%
Venture Capital	30%	0 – 40%
Distressed/Special	0%	0 – 30%
Situations		

The responsibility for private equity sourcing is delegated to SamCERA's investment consultant. The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

(a) <u>Diversification:</u> Subject to availability of sufficient attractive opportunities, the portfolio is to be diversified over multiple years by the following:

Vintage Year: It is expected that roughly equal amounts of new funding will be committed in each calendar year, with deviations permitted to accommodate market opportunities and to facilitate initial entry into the asset class.

Investment Manager: The reported value plus unfunded commitments of any one investment manager (excluding fund of funds) up to no more than twenty (20) percent of the reported value plus unfunded commitments of the total private equity portfolio.

Geography: Through commitments to funds located and/or investing both in and outside of the United States.

Industry: It is expected that the private equity portfolio will be generally diversified by sector/industry.

(b) Quality: All commitments to private equity by SamCERA must be of institutional quality as evidenced by other tax-exempt institutional investors' commitments to the investment manager's prior or current funds.

Fund managers are expected to comply with SamCERA's private placement disclosure rules.

**Opportunistic Credit:** Fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Opportunistic Credit is expected to be the highest-risk category within fixed income, and will be used to enhance return by investing via public and private investments in non-traditional sectors of the fixed income market, including emerging market debt, high yield bonds, direct lending, bank loans, convertible bonds, and RMBS/CMBS/ABS securities. This category will be exposed to general economic risk factors, similar to public equities, but may provide a steadier stream of returns than public equity asset classes. There are two primary components to the Opportunistic Credit category: 1) Public Credit, and 2) Private Credit.

#### **GROWTH ASSETS PERFORMANCE OBJECTIVE:**

The performance objective of the Growth Assets Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 42% Russell 3000, 27% MSCI ACWI ex US IMI Index hedged, 12% Russell 3000 Index + 3% (one quarter lagged), and 19% Custom Opportunistic Credit Index).

The Public Equity composite has a maximum tracking error of 3% to its composite benchmark.

#### GROWTH ASSETS RISK EXPOSURES AND RISK MITIGATION:

**Public Equity:** The primary risk factors for Public Equity are correlation to general economic growth, high volatility in returns, and potential illiquidity in smaller-capitalization and certain emerging market stocks. SamCERA will control for these risk factors by diversifying the plan across assets that exhibit limited correlation to economic growth. In addition, SamCERA's rebalancing ranges for small-cap equity will help ensure adequate diversification within the equity portion of the SamCERA portfolio.

**Private Equity:** Private Equity, while expected to provide attractive returns, also have a number of risks. Chief among these are illiquidity risk and leverage. By their nature Private Equity is generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by private equity managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

**Opportunistic Credit:** Opportunistic Credit is generally the highest risk, lowest liquidity subcategory within Fixed Income. SamCERA will consider unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations. Opportunistic Credit typically includes the risk factors contained in Core, but depending on the mandate, with higher emphasis to credit default risks, emerging markets sovereign/corporate default risk, potential leverage, and potential illiquidity. It is expected that strategies within Opportunistic Credit will have a maximum leverage ratio of 2.5x at the fund level (i.e. certain holdings may be levered higher than the 2.5x limit, as long as the fund (or strategy) has a maximum 2.5x leverage). Strategies employing higher leverage will be relegated to the distressed/special situations category of Private Equity (see above).

GROWTH ASSET CLASSES	BENCHMARK INDEX	
Growth Assets	Customized Benchmark Portfolio	
Public Equity		
Domestic Equity	Russell 3000	
Large Capitalization Domestic Equity	Russell 1000	
Passive Core	Russell 1000	
Active Core	Russell 1000	
Small Capitalization Domestic Equity	Russell 2000	
Active Core	Russell 2000	
International Equity	MSCI All Country World ex US IMI hedged*	
International Passive Core	MSCI ACWI ex US IMI	
International Growth	MSCI ACWI Free ex US Growth	
International Value	MSCI ACWI Free ex US Value	
Private Equity	Russell 3000 + 3% (One Quarter Lagged)	
Opportunistic Credit	73% BC High Yield Index and 27% Credit Suisse	
	Leveraged Loan Index (One Quarter Lagged)	

<sup>\* 50%</sup> hedge ratio

#### **10.0 DIVERSIFYING ASSETS INVESTMENT POLICIES**

#### **DIVERSIFYING ASSETS OVERVIEW:**

Assets classified in the Diversifying category include Defensive Fixed Income and Absolute Return within Alternatives.

**Defensive Fixed Income:** Defensive fixed income assets are debt investments that provide a return in periodic payments in debt instruments issued by governments and corporations. Defensive Fixed Income is expected to provide a lower, but steadier stream of returns than public equity asset classes, and also to reduce the risk of the overall portfolio as bonds have lower risk than most other major asset classes. That said, there are several sub-categories within Defensive Fixed Income, which exhibit different risk/return trade-offs and hold slightly different tasks in terms of role in the portfolio but have the common goal of dampening portfolio volatility and/or protecting against an equity drawdown. Defensive Fixed Income is broken out into three subcategories:

1) Core, and 2) Core Securitized, and 3) Long Treasury

**Core:** Core is generally considered a lower-risk fixed income category, and one that invests in primarily liquid, investment grade U.S. Dollar denominated bonds. It also generally consists of sectors that comprise the Bloomberg Barclays Aggregate Bond Index. Core's role in the portfolio is to dampen portfolio volatility and protect the portfolio in times of economic duress.

**Core Securitized:** Core Securitized is a low/medium-risk fixed income sub-category, and contains securitized sectors, including mortgage-backed securities, commercial mortgage-backed securities, and asset-backed securities. Core Securitized's role in the portfolio, in addition to dampening portfolio volatility, is to provide higher yield and slightly lower interest rate sensitivity as compared to the Bloomberg Barclays Aggregate Bond Index.

**Long Treasury:** Long Treasury is a portfolio of long-duration U.S. Treasury securities that are expected to provide risk mitigation to the growth portfolio. Long Treasury's role is to protect the growth portfolio (public equity, private equity, and opportunistic credit) in times of economic duress. The high quality, liquid securities should perform well in times of economic crisis, which is when we would expect our growth portfolio (public equity, private equity, and opportunistic credit) to not do as well.

Absolute Return: The Absolute Return category will focus on funds that have an absolute return orientation and are not expected to contain significant levels of public market beta over the long term. This category is expected to provide a diversifying return stream to the total plan that is not correlated to the public markets. Suitable investment strategies include multi-strategy funds, alternative risk premia funds, GTAA or global macro funds, and CTA/Managed Futures trend following funds. It is expected that this category will be implemented via commingled funds and not in separate accounts so that SamCERA's investment in any single fund would be 'ring-fenced' (i.e. any potential losses would be limited to the investment in the single fund, and not extend to the total plan assets).

# **DIVERSIFYING ASSETS PERFORMANCE OBJECTIVE:**

The performance objective of the Diversifying Assets Composite is to outperform, on a net-of-fee-basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for two composite sub-asset classes (which results in the following weights: 52% Bloomberg Barclays Aggregate Index, 32% to SOFR + 4, and 16%

Bloomberg Long Treasury Index. The Defensive Fixed Income sub-asset class has a maximum tracking error of 3% to its composite benchmark.

# **DIVERSIFYING ASSETS RISK EXPOSURES AND RISK MITIGATION:**

The Defensive Fixed Income sub-sectors have different risk factor exposures. SamCERA will take into account these unique risk factors when constructing the Defensive Fixed Income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

**Core:** The primary risk factors are sensitivity to changes in interest rates, changes in mortgage prepayment speeds, and investment-grade corporate and sovereign credit risk.

**Core Securitized:** The primary risk factors are complexity, credit and prepayment risk across various securitized sectors (e.g. ABS, CMBS, and RMBS) with interest rate sensitivity being a relatively lower risk factor as compared to assets within Core (above). The focus is on higher quality securitized investments to minimize credit risk.

**Long Treasury:** The primary risk factor is sensitivity to changes in interest rates (given the longer interest rate duration). In addition, another risk factor is the possibility of potential positive correlation of bonds to equity, which would diminish the risk mitigation attribute of long-duration Treasury securities.

**Absolute Return:** Absolute Return, while expected to provide attractive returns that are less correlated to the returns provided by public asset classes, also has a number of risks. Chief among these is leverage. Leverage can be employed by absolute return managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through fund selection as well as portfolio construction and diversification.

DIVERSIFYING ASSET CLASSES	BENCHMARK INDEX
DIVERSIFYING ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Defensive Fixed Income	
Core/Core Securitized	Bloomberg Barclays Aggregate Bond Index
Long Treasury	Bloomberg Long Treasury Index
Absolute Return	SOFR + 4%

#### 11.0 INFLATION HEDGE INVESTMENT POLICIES

#### INFLATION HEDGE OVERVIEW:

The Inflation Hedge category combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan's overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are

taken into account. The Inflation Hedge category is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan. Inflation Hedge is broken out into three subcategories:

1) Real Estate, 2) Private Real Assets, and 3) Public Real Assets

**Real Estate:** Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. Real estate will be composed of three sub-categories: 1) Core, 2) Value-Add, and 3) Debt. Most of the exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. Value-Add proprieties are expected to provide somewhat higher return potential along with somewhat higher risk than Core assets. Real Estate Debt strategies range from lower risk senior loans on stable properties to higher risk/return mezzanine loans, construction loans and preferred equity. SamCERA utilizes Debt strategies for risk mitigation and to enhance the portfolio's yield.

Income will be a large part of the return stream generated from the Real Estate portfolio. The role of this portfolio is to provide diversification benefits, some protection against unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Real Assets composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment opportunity set compared to Core, Value-Add, and Debt strategies. The sub-allocation targets and target ranges are summarized below:

Real Estate Strategy	<b>Target Allocation</b>	Range
Core Real Estate	60%	50 -70%
Value-Add Real Estate	20%	0 - 30%
Real Estate Debt	20%	0 - 30%

**Private Real Assets:** Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of two sub-categories: 1) Infrastructure (Core and Value-Add, Secondary, Midstream Energy, and Power), and 2) Natural Resources (Energy Exploration & Production, Mining, Farmland, Timber, and Water). These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation targets and target ranges are summarized below:

Sub-Category	<b>Target Allocation</b>	Range
Infrastructure	75%	+/- 25%

The responsibility for Private Real Asset sourcing is delegated to SamCERA's investment consultant.

**Public Real Assets:** Similar to Private Real Assets, Public Real Assets is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. Public Real Assets may be used to fund new strategies in Private Real Assets and will be composed of four sub-categories: 1) Commodities, 2) U.S. TIPS, 3) Listed Global Natural Resources, and 4) Listed Global Infrastructure. All four sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets.

The sub-allocation targets and target ranges are summarized below:

Sub-Category	Target Allocation	Range
Commodities	25%	0 - 50%
U.S. TIPS	25%	0 - 50%
Listed Global Natural Resources	25%	0 – 50%
Listed Global Infrastructure	25%	0 – 50%

#### INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for three composite sub-asset classes (which results in the following weights: 53% NCREIF ODCE, 29% Custom Private Real Asset Index, and 18% Custom Public Real Asset Index).

#### INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

**Real Estate:** Many real estate funds utilize leverage to enhance returns. Lack of liquidity is also a concern, but less so for core real estate and senior debt investments. Value-add, mezzanine debt, and opportunistic strategies also tend to have more exposure to general economic conditions than core properties.

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA's real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties and Debt strategies. Opportunistic-oriented strategies will reside in our Private Real Assets portfolio due to their higher risk profile.

**Private Real Assets:** By their nature, Private Real Assets are generally illiquid in that the life of these fund investments can be as long as ten to twelve years. SamCERA recognizes that

this illiquidity is a necessary characteristic (and source of return premium) for these asset classes and as such will endeavor to take this illiquidity into account at the total plan level when addressing total plan liquidity needs during strategic planning asset liability studies. Leverage can be employed by alternative managers to enhance the overall risk-adjusted returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

INFLATION HEDGE ASSET CLASSES	BENCHMARK INDEX
INFLATION HEDGE ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM PRIVATE REAL ASSET INDEX
PUBLIC REAL ASSETS	CUSTOM PUBLIC REAL ASSET INDEX

#### 12.0 LIQUIDITY INVESTMENT POLICIES

# LIQUIDITY ASSETS OVERVIEW:

Assets classified in the Liquidity category include 1) Cash Flow-Matched Liquidity, and 2) Cash & Cash Overlay.

The Cash Flow-Matched Liquidity category consists of both our Cash Flow-Matched Liquidity account and our County Treasury Pool. The Cash Flow-Matched Liquidity account consists mainly of investment grade, shorter-term government and credit securities with a liquidity profile that matches the next three-year's projected benefit payment schedule to satisfy benefit payment obligations. The County Treasury Pool consists of shorter-term fixed income and cash equivalent investments.

On an annual basis, cash projections of expected contributions and plan benefit payments will be updated by our actuary, and an assessment by the Board will be made as to whether to replenish the Cash Flow-Matched Liquidity account at that time. Given that benefit payments are paid monthly, the Cash Flow-Matched Liquidity account will be drawn down monthly as well. Assuming annual replenishment, the balance in the Cash Flow-Matched Liquidity account is expected to fluctuate between 24 and 48 months. It is anticipated that SamCERA will maintain a minimum of 12 months balance.

Cash & Cash Overlay investments will be used for satisfying miscellaneous liquidity needs, including capital calls, expenses, and other unforeseen needs, and also supporting the derivatives positions in our cash overlay and currency hedge overlay account.

#### LIQUIDITY ASSETS PERFORMANCE OBJECTIVE:

The performance objective of the Liquidity Assets Composite is to meet the plan's liquidity needs.

#### LIQUIDITY ASSETS RISK EXPOSURES AND RISK MITIGATION:

The primary risk in the Cash Flow-Matched Liquidity account component is credit risk. The portfolio is structured to be primarily a buy and maintain strategy using cash flows from coupons and principal maturities to line up with benefit payments. The biggest risk to the strategy is risk of default.

LIQUIDITY ASSET CLASSES	BENCHMARK INDEX
LIQUIDITY ASSETS	CUSTOMIZED BENCHMARK PORTFOLIO
Liquidity	
Cash Flow-Matched Liquidity	BC 1-3 Year Gov't/Credit Index
Cash & Cash Overlay	91 Day T-Bills

#### 13.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

The quarterly investment performance reports will be designed as a risk management tool and will afford the Board the opportunity to timely identify potential risk issues within the portfolio and to assess the relative performance of the investment managers.

The report will provide sufficient information to assess the following:

- A. Total and active risk assessment at total fund, composite and individual manager level.
- B. Performance attribution at total fund, composite and individual manager level.
- C. Adherence to the investment style for which the manager is retained, as measured by the quarterly risk adjusted active return (deviation of the manager's performance from the specified performance benchmark) over the last quarter, six months, one-, three-, and five-year periods, including updates from previous quarterly reports regarding adherence to the style for which the firm was retained;
- D. Ability of the active manager to demonstrate consistently positive information ratios, including updates from previous quarterly reports regarding the firm's information ratios;
- E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

#### 14.0 ANNUAL INVESTMENT STRATEGY

Annually, the Board/Staff shall convene an investment strategy session with the objective of addressing strategic investment policy issues and to deliberate any policies that could benefit the performance of the retirement Fund. The agenda for these sessions should include (but is not limited to) the following information:

- (a) Compare the Fund's actual investment performance for the prior fiscal year against the investment objectives set forth in Section 3.0 and evaluate the relative success or failure of the prior year's performance; specific commentary to this objective shall be an integral part of the performance measurement process.
- (b) Compare each investment manager's investment performance for the prior fiscal year against the relevant benchmarks and peer groups and evaluate the relative success or failure of their prior year's performance.
- (c) Evaluate and review the total Fund performance attribution and contribution to return at the composite level to isolate performance drivers.
- (d) Evaluate and review the various risk exposures of the plan versus appropriate policy limits and on-going trends through time.
- (e) Evaluate and review the portfolio rebalancing activity for the year.
- (f) Evaluate the Fund's liquidity requirements for the current and next fiscal years.
- (g) Compare each investment manager's fees to their respective peer universe.

#### 15.0 PROXY VOTING

The Investment Managers are delegated authority for the voting of proxies, subject to the following guidelines:

- A. All proxies shall be voted in the best interest of the shareholders, but in no instance shall the economic interests of the retirement Fund be subordinated to any other interest.
- B. Investment managers shall provide staff with monthly or quarterly reports on all proxies cast, in a mutually acceptable format.

# **16.0 SECURITIES LENDING**

- A. Pursuant to Section 2.0 (A), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
- (i) All loans shall be marked-to-market daily.
- (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
- (iii) Acceptable collateral shall be in the form of cash or obligations issued or guaranteed by the U.S. Government, or its agencies or instrumentalities, as well as highly-rated OECD Debt (rated AA- or better).

- (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
- (v) The maximum allowable amount of assets on loan to any single borrower shall not be greater than 20% of total lendable assets.
- (vi) The maximum total amount of program assets on loan shall not be greater than 50% of total lendable assets.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

#### APPENDIX A

# SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Investment Committee Charter as Amended RESOLUTION 99-00-09

This Resolution, adopted by the Board of Retirement (Board) of the San Mateo County Employees' Retirement Association (SamCERA), sets forth the Charter for the Board's Investment Committee.

**WHEREAS**, Article XVI, §17 of the Constitution of the State of California as amended in 1992 to read, in pertinent part, as follows:

Notwithstanding any other provisions of law or this Constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of moneys and administration of the system, subject to all of the following:

- (a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.
- (b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses

of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

- (c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.
- (e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

### WHEREAS, California Government Code §31595 states, as follows:

The Board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board...; &

**WHEREAS**, The Board of Retirement, wishes to exercise these powers as follows: **Exercise of Powers**: The Board shall exercise its investment, management and administrative authority and responsibility through the approval of motions recorded in public meeting &

**WHEREAS**, the Board has adopted SamCERA's Investment Policy and amendments thereto to direct the investments of the Retirement Fund and now wishes to establish an Investment Committee to guide the future evolution of SamCERA's Investment Policy. Therefore, be it

**RESOLVED** that the Board hereby establishes a standing Investment Committee to direct the Board in its ongoing evaluation of SamCERA's Investment Policy, including but not limited to

- 1.0 CONDUCT ASSET ALLOCATION STUDIES
- 1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows
- 2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS
  - 2.1 Establish allowable asset classes
  - 2.2 Determine asset class benchmarks
  - 2.3 Develop risk, return & correlation projections
- 3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES
  - 3.1 Define risk, return and correlation

- 3.2 Evaluate mean variance optimization
- 3.3 Determine low risk alternatives and high risk alternatives
- 3.4 Scale portfolios between two extremes
- 3.5 Evaluate optimized efficient frontier
- 3.6 Integrate optimized efficient frontier with asset-liability relationships
- 4.0 ANALYZE BOARD RISK TOLERANCE
  - 4.1 Assess risk/reward trade-offs
  - 4.2 Assess contribution rate sensitivity & variability
  - 4.3 Assess ability to exceed actuarial interest rate
  - 4.4 Assess comfort level with characteristics of specific asset mixes
- 5.0 RECOMMEND PREFERRED ASSET MIX
  - 5.1 Evaluate differences from current target
  - 5.2 Evaluate Board's willingness to implement new target asset mix
  - 5.3 Evaluate appropriateness of variance from peer public fund norms
- 6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY
  - 6.1 Adjust target asset mix
  - 6.2 Introduce new benchmarks
  - 6.3 Include required asset class/portfolio modifications
- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
  - 7.1 Adjust manager/style line-up as necessary
  - 7.2 Introduce new managers/asset classes
  - 7.3 Terminate managers/asset classes as necessary
  - 7.4 Establish active & passive allocation targets as appropriate
- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
  - 8.1 Recommend time-line & approach to revise structure
  - 8.2 Conduct manager evaluations
  - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
  - 9.1 Monitor results of managers both gross and net of investment management fees
  - 9.2 Assess consistency of portfolio decision making
  - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
  - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
  - 10.2 Define and assign special projects as warranted
  - 10.3 Monitor performance of Investment Consultant(s)
  - 10.4 Conduct evaluations of Investment Consultant(s)
  - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 Initiate & Evaluate Special Investment Studies
- 12.0 Undertake other work assigned to it by the Board Be it further

**RESOLVED** that the Chair may appoint the members of the Investment Committee per Regulation 2.5.1. Be it further

**RESOLVED** that the Chief Executive Officer is hereby instructed to provide the Committee with access to all appropriate and available resources and records, so long as such access is consistent with sound fiduciary practices. Be it further

**RESOLVED** that the Chief Executive Officer is hereby authorized to provide compensation of \$100 per meeting for not more than two meetings per month to the members of the Committee eligible for such compensation, per GC§31521. Be it further

**RESOLVED** that the Board hereby reserves to itself sole authority to accept, modify, or reject the recommendations, which the Investment Committee may present from time to time pursuant to the provisions of this Resolution, per Regulation 2.3.

ADOPTED by unanimous vote, January 25, 2000 AMMENDED by unanimous vote, May 22, 2001 AMMENDED by unanimous vote, October 25, 2004

#### APPENDIX B

# **Derivatives Investment Policy**

# 1) Introduction

There is a genuine need to allow SamCERA's separate account managers to evaluate new securities and introduce them into their portfolios, given that the investment process followed by the investment managers complies with the subsequent provisions of this policy statement. This policy statement allows SamCERA's separate account Managers to exercise reasonable investment freedom, while minimizing the possibility of adverse implications for the Board.

# 2) Derivative Definition

A 'derivative' commonly is defined as a financial instrument whose performance is derived, at least in part, from the performance of an underlying asset (such as a security or an index of securities).

# 3) Types of Securities Included or Excluded

Since the derivative sector of the market is likely to experience considerable change, provisions must be made for the general characteristics of a derivative security, its evaluation and monitoring. Therefore, it is most appropriate to not attempt to definitively list all of the derivative securities that are covered by this policy. Instead, what will be explicitly stated is the investment process that governs derivative investments and the evaluation and monitoring requirements of this policy.

# 4) Approach to Policy

An approach has been developed which states allowable derivative investments, limited allocation derivative investments and restricted derivative investments.

Derivative securities not specified in the above three groups of securities must be evaluated in accordance with the following section entitled Derivative Investment Process. If the security meets these provisions and the spirit of these policies, the manager may establish a prudent position in the instrument. However, the manager must be able to demonstrate the appropriateness of such an investment in light of SamCERA's guidelines.

### 5) Counter-Party Evaluation

When entering into a non-exchange traded derivative investment, the investment manager must fully evaluate the other side of the derivative transaction—the counter-parties to the trade. Due to the possibility of counter-party default, SamCERA's investment managers must evaluate the risks associated with the counter-party as if an investment were being made in the traditional securities issued by the counter-party.

At a minimum, the investment manager must evaluate the counter-party's following criteria:

- a) Corporate earnings stream
- b) Corporate asset quality
- c) Capitalization
- d) Corporate liquidity
- e) Moody's and Standard & Poor's debt ratings
- f) Other fundamental investment and risk characteristics

For those counter-parties that are broker/dealers, they must:

- a) Have investment grade (Moody's and S&P rated) debt
- b) Be registered with the SEC
- c) Have significant net capital to protect against potential adverse market circumstances

For those counter-parties that are financial institutions (banks), they must have:

- a) Investment grade (Moody's and S&P rated) debt
- b) Total assets in excess of \$1 billion
- c) Significant net capital to protect against potential adverse market circumstances

The investment manager must monitor individual investment and total portfolio exposure to counterparties. Individual counter-party exposure must be well diversified and not concentrated in a small number of organizations.

# 6) Purposes for Derivatives

The acceptable investment purposes for the use of derivatives are as follows:

- a. Appropriate to use futures, options and forward currency contracts to assist investment managers in mitigating portfolio risk.
- b. Useful substitute for an existing, traditional investment. In certain circumstances it may be cheaper, quicker or easier to invest in a derivative instrument or security rather than transacting in the cash or traditional security market.
- c. Provides investment value to the portfolio, while being consistent with SamCERA's overall and specific investment policies.
- d. Obtains investment exposure that is appropriate with the manager's investment strategy and SamCERA's investment guidelines, but could not be made through traditional investment securities.

Given that one or more of these investment purposes are clearly met, it is the responsibility of the investment manager to explain and demonstrate how derivative investments impact portfolio risk and the context of the investment within the overall portfolio.

Any other derivative investment purpose is not allowed. Derivatives may not be introduced into the portfolio to create economic leverage or to create investment exposures that are otherwise excluded by SamCERA's Investment Policy. However, if a manager develops an investment purpose other than those listed above which he/she feels is legitimate and consistent with the spirit of SamCERA's guidelines, this purpose should be proposed in writing to the Board.

# 7) Investment Restrictions and Derivatives Policy

For the purpose of these guidelines, convertible debt, traditional zero coupon bonds, mortgage pass-through securities and asset-backed securities are not viewed as derivatives. Based upon the factors enumerated in the above Section 4 entitled Approach to Policy, the following guidelines have been established:

### Allowable derivative investments

- a. Stable and well-structured mortgage CMO's (Collateralized Mortgage Obligations)
- b. Financial futures (if Exchange Traded)
- c. Currency forward contracts and currency options (Exchange and OTC traded)
- d. Interest rate swaps

### Derivative investments with allocation limits

- a. Interest only mortgage CMO's
- b. Principal only mortgage CMO's
- c. Options (if Exchange Traded)
- d. Caps and floors as they apply to the above stated allowable derivative investments
- e. Credit Default Swaps (CDS)

Derivative investments with allocation limits, as listed above, may not represent more than 5% of the individual portfolio manager's assets (based on market value) managed for SamCERA. At the same time, derivative investments with allocation limits in aggregate may not expose the individual manager's portfolio to losses in excess of 5% of the manager's total assets managed for SamCERA. In addition, the use of options, caps and floors, and CDS may be used only for defensive investment purposes.

Managers investing in the above-defined limited allocation derivative instruments should ensure that portfolio exposure is maintained within the stated constraints, and communicate the assumptions and model used to estimate VAR (Value at Risk) and/or other reasonable risk measurement procedures annually to the Boards.

### Restricted derivative investments

- a. Inverse floating rate notes and bonds
- b. Structured notes

Restricted derivatives cannot be held in SamCERA's separate account portfolios at any time.

# 8) Risk Analysis and Monitoring of Derivatives

For those securities that are classified as derivative investments with allocation limits, the investment managers are required to test and measure derivative investment sensitivities to changes in key risk factors. These risk factors include extreme changes in interest rates, volatility, liquidity, credit quality, and cash market prices.

These risk factors will be assessed prior to initial investment and on a quarterly basis. Results of such risk testing on derivative investments with allocation limits will be supplied to SamCERA on an annual basis (December 31). If the investment manager identifies additional risks that should be evaluated, these other risk factors should be added to the list and handled in a manner consistent with the previously stated approach.

### 9) Derivative Investment Process

Investment managers are expected to cover the following issues before purchasing a derivative instrument or security, whether specifically stated as an allowable derivative investment, a derivative investment with

allocation limits, or a derivative not specifically discussed in the Investment Restrictions and Derivatives Policy section above:

- a. Determine if the purpose for investing in a derivative security is consistent with one or more of the purposes in the previous section entitled Purposes for Derivatives.
- b. Determine where the security fits into the classification system, if at all, stated in the Investment Restrictions and Derivatives Policy.
- c. Evaluate, at a minimum, the counter-party risk and the risks stated in the Risk Analysis and Monitoring section of the derivatives policy.
- d. Evaluate the derivative in a comparably thorough manner as the firm would any other traditional investment opportunity.

### 10) Reporting Requirements

It is the responsibility of SamCERA's investment managers to certify and demonstrate that their portfolios are in compliance with SamCERA's overall guidelines as well as those that apply to derivative investments. On an annual basis (December 31), SamCERA's investment managers will provide the following minimum monitoring information on all derivative securities:

- a. A general statement from the investment manager that its portfolio is in compliance with this Derivatives Policy.
- b. When stating the market value of the derivative exposure, the manager will specify the security pricing sources. The pricing source must be exchange-listed.
- c. A statement of the risks (credit risk—an evaluation of potential counter-party default on obligations, market risk—percent of portfolio invested in derivatives, and any other relevant risks) associated with the derivative investments.
- d. Potential adverse impact on market values if extreme adverse market movements occur.
- e. A statement regarding the liquidity of the derivative investments.
- f. Summary comments and the firm's list of approved counter-parties, ratings, and a statement regarding any changes to this list.
- g. An overall statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

# Appendix C

# DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

This amended policy is effective immediately upon its adoption. This policy is intended to supplement any applicable provisions of state or federal law, which shall govern in the event of any inconsistency.

### I. PURPOSE

This Policy is adopted pursuant to the requirements set forth in Government Code Section 7513.85 to help ensure that San Mateo County Employees' Retirement Association's (SamCERA's) investment decisions are made solely on the merits of the investment opportunity. This Policy requires broad, timely, and updated disclosure of all Placement Agents, as well as their relationships, compensation, and fees. All capitalized terms used herein shall be defined as set forth in California Government Code section 7513.8.

#### II. APPLICATION

This Policy applies broadly to every type of SamCERA investment manager including, but not limited to, general partners, sponsors of hedge funds, private equity funds, real estate funds, and infrastructure funds, as well as public market investment managers.

This Policy, as last amended, applies to all agreements with External Managers that are:

- (1) Entered into after the date this Policy, as last amended, is adopted; or
- (2) Amended to extend the term of the agreement or the investment period, increase the commitment of funds by SamCERA, or otherwise change the agreement's substantive term, including increasing or accelerating the fees or compensation payable to the External Manager, to the extent such amendments to the agreement (referred to hereafter as "Amendment") are executed subsequent to the adoption of amendments to this Policy. In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

### III. RESPONSIBILITIES

### A. The Board is responsible for:

- 1. Only entering into agreements with External Managers which agree in writing to comply with this policy.
- 2. Not entering into any agreements with External Managers that have violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

# B. Each External Manager is responsible for:

- 1. Executing an agreement requiring that the External Manager comply with this policy.
- Providing the following information to SamCERA Investment Staff within 45 days of the date that investment discussions are initiated with the External Manager, and, in any event, prior to the completion of due diligence. In the case of Amendments, an updated Placement Agent Information Disclosure is required prior to execution of the Amendment.
- a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents, or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SamCERA investments.
- b. A resume for each officer, partner, and principal of the Placement Agent detailing their education, professional designations, regulatory licenses, and investment and work experience. If any such person is a current or former SamCERA Board Member, employee, or Consultant, or a member of the immediate family of any such person, this fact shall be specifically noted.
- c. A description of any and all compensation of any kind provided, or agreed to be provided, to a Placement Agent, including the nature, timing, and value thereof. Compensation to Placement Agents includes, but is not limited to, compensation from the External Manager to third parties as well as the External Manager's own employees who solicit or market investments to SamCERA, or who are paid based upon investment commitments secured by such employees.
- d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
- e. A written copy of any and all agreements between the External Manager and the Placement Agent.
- f. A statement whether the Placement Agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
- g. A statement whether the Placement Agent, or any of its affiliates, is registered as a lobbyist with any state or national government.
- h. The names of any current or former SamCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.

- 3. Providing an update of any changes to any of the information provided pursuant to Section B.2 above within 30 calendar days of the date that the External Manager knew or should have known of the change in information.
- 4. Representing and warranting the accuracy of the information described in Section B.2 above.
- 5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SamCERA:
- a. All campaign contributions made by the Placement Agent to any publicly elected SamCERA Board Member during the prior 24 month period. Additionally, any subsequent campaign contribution(s) made by the Placement Agent to any publicly elected SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
- b. All gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SamCERA Board Member during the prior 24 month period. Additionally, any subsequent gift(s) made by the Placement Agent to any SamCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SamCERA investment shall also be disclosed.
- 6. Acknowledging and agreeing that SamCERA reserves the right to deem any failure by a Placement Agent to disclose the information required by Sections B.5(a) and B.5(b) as a material breach of the External Manager's agreement with SamCERA.

# C. SamCERA Investment Staff ("Staff") are responsible for:

- 1. Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
- Confirming, within 45 days of the time the execution of the investment contract or Amendment, that the information in Section B above has been received from the External Manager.
- 3. Securing the agreement of each External Manager in any contract or Amendment that is entered into after the date this Policy (as last amended) is adopted, that, in the event that there was or is an intentional material omission or inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SamCERA reserves the right to reimbursement of any management or advisory fees paid by SamCERA from the date of violation to the date of the imposition of the fees.

- 4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SamCERA for five years after they have committed a material violation of this Policy; provided, however, that SamCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
- 5. Providing the Board with Placement Agent information relating to each investment at the time the investment is brought to the Board for its decision.
- 6 Maintaining Placement Agent Information Disclosures as a public record and reporting to the Board any a material violation of this Policy.

Adopted December 14, 2010 Amended October 25, 2011 Amended March 28, 2017 Amended April 25, 2023

### **DEFINITIONS:**

The following definitions are excerpted from California Government Code section 7513.8 and are current as of March 28, 2017. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

"External Manager" means either of the following: (1) a Person who is seeking to be, or is, retained by a board or an Investment Vehicle to manage a portfolio of securities or other assets for compensation; (2) a Person who manages an Investment Fund and who offers or sells, or has offered or sold, an ownership interest in the Investment Fund to a board or an Investment Vehicle. (All code section references are to the Government Code, unless otherwise noted.)

"Person" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

"Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

"Investment Fund" means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets. Notwithstanding the preceding sentence, an investment company that is registered with the

Securities and Exchange Commission pursuant to the Investment Company Act of 1940 (15 U.S.C. Sec. 8a-1 et seq.) and that makes a public offering of its securities is not an Investment Fund.

"Placement Agent" means any Person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager or an Investment Fund managed by an External Manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale to a board or an Investment Vehicle either of the following: in the case of an External Manager as defined in subpart (1) of the definition of an External Manager, the investment management services of the External Manager; in the case of an External Manager as defined in subpart (2) of the definition of an External Manager, an ownership interest in an Investment Fund managed by the External Manager. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

# RESOLUTION AMENDING SAMCERA'S INVESTMENT POLICY STATEMENT

RESOLUTION 2025-\_\_\_

WHEREAS, pursuant to Article XVI, Section 17, of the California Constitution, the Board of Retirement (the "Board"), has the exclusive authority and fiduciary responsibility for the investment and administration of the assets of the retirement system (the "Fund"), and on January 28, 2025, established an Investment Policy Statement (the "Policy") for the investment of the Fund assets; and

WHEREAS, the purpose of the Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937, the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers and investment consultants; and

**WHEREAS**, the Board periodically reviews its Policy and amends it as necessary so as to remain up to date to reflect recent actions of the Board; and

WHEREAS, Staff is proposing the following change to the Investment Policy Statement:

WHEREAS, the Board and desires to make such amendments; Now, therefore, be it

**RESOLVED**, that the SamCERA "Investment Policy Statement" be revised to read as set forth in the attached document.

To maximize earnings and program flexibility, staff recommends changing the 20% borrower limit from "the program assets on loan" to "total lendable assets".

To reflect this update, staff recommends amending Section 16.0 "Securities Lending".

1

\* \* \* \* \*

Association, Board of Retirement, on June 3, 2025.	
Ayes, Trustees:	
Noes, Trustees:	
Absent, Trustees:	
Abstain, Trustees:	

Sandie Arnott, Board Secretary

Regularly passed and adopted, by the San Mateo County Employees' Retirement

# SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION **Board of Retirement**

June 3, 2025 Agenda Item 7.1

Chowdath

TO: **Board of Retirement** 

Tat-Ling Chow, Finance Officer FROM:

Diane Webster, Information Technology Officer
Lilibeth Dames, Investment Analyst
Lilibeth Dames

Doris Ng, Investment Analyst

SUBJECT: SamCERA's Proposed Budget for Fiscal Year 2025-26

### RECOMMENDATION

Approve SamCERA's proposed budget for fiscal year (FY) 2025-26 totaling \$58.6 million, which is 20% higher than the adopted budget for FY 2024-25.

	F	Y 2025-26	FY 2024-25		% of		
	Proposed		Proposed		Adopted	Increase	Change
Professional Services	\$	46,952,434	\$ 38,579,193	\$8,373,241	22%		
Administrative		9,207,135	8,712,755	494,380	6%		
Information Technology		2,446,828	1,365,200	1,081,628	79%		
Total Budget - SamCERA	\$	58,606,397	\$ 48,657,148	\$9,949,249	20%		

### **BACKGROUND**

SamCERA's budget consists of three units: professional services, administrative, and information technology.

Professional Services Budget – covers professional fees that are authorized by Government Code §31596.1. This code authorizes the Board of Retirement (the Board) to expend funds from investment earnings of the pension trust for specific professional services, which include actuarial consulting, custodial, investment management, investment consulting, and external legal services.

SamCERA employs professional investment managers to manage its portfolio. Some management fees are performance driven, dependent primarily upon the market value of the assets under management and negotiated fee schedules. As the market values of invested assets increase, so do management fees. Other management fees are based on contractual agreements. Fees for the actuarial consulting, investment consulting, and global custodian services are either on per-service or per-retainer basis.

The Chief Investment Officer and the investment consultant periodically report the portfolio's performance to the Board. Investment staff actively monitor professional service fees against respective contractual agreements.

The **professional services budget** for FY 2025-26 is projected to be \$47.0 million, 22% above the adopted budget for FY 2024-25.

	FY 2025-26	1	FY 2024-25		% of
	Proposed	_	Adopted	Increase	Change
Investment Management Fees	\$45,735,538	\$	37,519,743	\$ 8,215,795	22%
Other Professional Service Fees	1,216,896		1,059,450	157,446	15%
Total - Professional Services Budget	\$46,952,434	\$	38,579,193	\$ 8,373,241	22%

• Investment management fees consist of two components: management fees and performance fees. Management fees depend heavily on the size of assets under management, whose growth is projected by applying the latest 10-year capital market return assumptions to each asset class. The performance fee for a particular investment is generally projected by applying the incentive fee to the difference between the capital market assumption and the performance fee hurdle rate.

	FY 2025-26					FY 2024-25	
		Projected					
	Fee	Management	Pe	erformance			% of
Investment Manager	(bps)	Fee		Fee	Total	Total	Change
Total Public Equity	17.4	\$ 4,621,294	\$	478,366	\$ 5,099,660	\$ 4,581,425	11%
Total Fixed Income	67.7	9,366,773		2,034,350	11,401,123	9,223,670	24%
<b>Total Alternative Assets</b>	167.6	14,258,938		1,254,263	15,513,201	14,310,540	8%
Total Inflation Hedge	99.1	11,327,955		781,813	12,109,768	8,199,108	48%
Total Cash Overlay	n/a	1,370,892		-	1,370,892	890,000	54%
Total Liquidity	8.5	240,894		-	240,894	315,000	-24%
Total	64.6	\$41,186,746	\$	4,548,792	\$ 45,735,538	\$ 37,519,743	22%

n/a - Not applicable.

Projected management and performance fees for FY 2025-26 increase by \$8.2 million in aggregate from the prior year.

- Projected management fees increase by \$4.7 million, which are in parallel with the increase in the size of assets under management. Of this amount, \$3.1 million is from Inflation Hedge category, \$0.7 million from Alternatives, \$0.5 million from Overlay, \$0.4 million from Public Equity.
- Projected performance fees increase by \$3.5 million. Of this amount, \$2.0 million is from Fixed Income category due to newer investment managers added to the portfolio, \$0.8 million from Inflation Hedge due to an increase in capital market assumptions, and \$0.7 million from Alternatives.

• Other professional service fees, mostly on per-service basis, are expected to have a net increase of 15%.

### Other Professional Service Fees

		FY	FY 2025-26 FY 2024-25		Y 2024-25	% of		
Contractor	Service	(bps) Projected		ed Adopted		Projected Adopted		Change
Milliman Inc.	Actuarial Consulting	0.1	\$ 175,000	\$	129,450	35%		
To be determined	Actuarial Audit	0.1	110,000		-	n/a		
Verus Investments	Investment Consulting	0.5	642,146		630,000	2%		
Northern Trust Inc.	Custodian	0.2	289,750		300,000	-3%		
Total		1.0	\$ 1,216,896	\$	1,059,450	15%		

n/a - not applicable

- Actuarial consulting fees increase by 35%. The increase is predominantly driven by the Triennial Experience Study that is due in 2026 and scheduled increase on the annual valuation fee due to cost-of-living adjustment.
- An independent actuarial consulting firm will be engaged to conduct the audits of Triennial Experience Study and Actuarial Valuation that are due in 2026.
- Investment consulting fees are projected using current fees plus an inflation adjustment in March 2024.
- Custodial fees decrease modestly following a competitive Request for Proposal process.

**Administrative Budget** – accounts for administrative expenses such as salaries and benefits. Government Code §31580.2(a) of the County Employees' Retirement Law of 1937 limits SamCERA's administrative budget to twenty-one hundredths of one percent (0.21%) of the accrued actuarial liability of the retirement system.

The proposed administrative budget for FY 2025-26 is \$9.2 million, modestly above the adopted budget for FY 2024-25 by 6%. This amount approximates to 0.12% of the total accrued actuarial liability of \$7.4 billion as of June 30, 2024.

	FY 2025-26 Proposed	FY 2024-25 Adopted	ncrease ecrease)	% of Change
Salaries and Benefits				
Salaries	\$4,863,139	\$4,488,711	\$ 374,428	8%
Benefits	1,947,567	1,901,335	 46,232	2%
Total Salaries and Benefits	6,810,706	6,390,046	420,660	7%
Services, Supplies and Other Charges				
Board Expense	8,000	8,000	-	0%
Insurance	173,500	120,000	53,500	45%
Medical Record and Appeal Hearing	150,000	125,000	25,000	20%
Member Education	75,000	70,000	5,000	7%
Education and Conference	165,827	149,862	15,965	11%
Transportation and Lodging	147,019	159,753	(12,734)	-8%
Property and Equipment	55,800	55,800	-	0%
General Office Supplies	41,000	40,000	1,000	3%
Postage and Printing	30,600	25,000	5,600	22%
Leased Facilities	773,242	767,742	5,500	1%
County Services	611,600	642,010	(30,410)	-5%
Audit Services	69,800	64,800	5,000	8%
Other Professional Services	95,041	94,742	 299	0%
Total Services, Supplies, and Other Charges	2,396,429	2,322,709	73,720	3%
Total - Administrative Budget	\$9,207,135	\$8,712,755	\$ 494,380	6%

Budget items with significant changes over the year are discussed below.

- Salaries increase by 8%. The increase is due primarily to a 5% scheduled increase from the latest labor negotiation in winter 2024. The remaining 3% increase provides a buffer to absorb merit increases and compensate short-term extra help workers as needed.
- Fiduciary liability insurance premium increases significantly by 45%. With a 35% growth in SamCERA's portfolio over the last four fiscal years (from \$4.8 billion in 2020 to \$6.5 billion in 2024), Staff accepted the broker's recommendation to increase the liability coverage from \$10 million to \$20 million in aggregate.
- Medical record and appeals hearing outlays increase significantly by 20%. The medical record review procedures for disability applications are requiring a greater number of independent medical examinations than initially forecast.
- Education and conference spending increase by 11% to be in sync with the anticipated level of attendance and increases in registration fees.
- Transportation and lodging outlays are adjusted downward by 8% since certain educational events are available online.
- County service charges are adjusted downwards by 5% to match with the anticipated level of services. To support its operation, SamCERA employs services from various County

departments (such as Treasurer, Controller, Election, Human Resources, and Information Services). Direct costs of such services are determined by the servicing departments; indirect costs are determined through the County's cost allocation plan.

Audit service charges increase by 8% after factoring in cost-of-living adjustment.

**Information Technology Budget** – covers projected expenses for information technology that are authorized by Government Code §31580.2(b). The Code states that "Expenditures for computer software, computer hardware, and computer technology consulting services in support of these computer products shall not be considered a cost of administration of the retirement system."

The information technology budget for FY 2025-26 is estimated to be \$2.4 million, 79% above the adopted budget for FY 2024-25.

	FY 2025-26		FY 2024-25		Increase		% of
	Proposed		Adopted		(Decrease)		Change
Computer Equipment and Software	\$	25,000	\$	25,000	\$	-	0%
IT Infrastructure:							
Software License and Maintenance		896,828	7.	53,200	1	143,628	19%
Maintenance Tools and Equipment		225,000	2	25,000		-	0%
Contract IT Services		266,000	3	28,000		(62,000)	-19%
Imaging		25,000	:	25,000		-	0%
Consulting Services		1,000,000		-	1,0	000,000	n/a
Technology Research and Development		9,000		9,000			0%
Total - Information Technology Budget	\$	2,446,828	\$1,3	65,200	\$ 1,0	081,628	79%

n/a - Not applicable

Budget items with significant changes over the year are explained below.

- 1. The appropriation for Software License and Maintenance increases by \$143,628 or 19%, mainly in the following areas:
  - \$31,628 increase in maintenance and support fees for the Pension Administration
     System Software (PASS) due to cost-of-living adjustment.
  - \$86,000 subscription fee to Amazon Web Services, which allows fast data visualization, data integration, and online queries with analytics.
  - \$25,000 to Rubrik Inc., whose services and products significantly reduce operational complexity through automated backup management, stronger ransomware protection, and simplified data recovery in cloud.

- 2. The contract IT service charges are expected to reduce by 19% since the office door access technology upgrade was fully completed in May.
- 3. The new budget item of \$1,000,000 will be used to hire a project management consulting firm. Its main responsibilities include helping SamCERA capitalize on new technologies to improve its operational efficiency and effectiveness, preparing a request for proposal for a new pension administration system (PASS), and helping management select a potential PASS vendor.

# SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

June 3, 2025 Agenda Item 7.2

Glady 1

**TO:** Board of Retirement

FROM: Gladys Smith, Assistant Executive Officer

**SUBJECT:** Presentation and Discussion of Disability Data and Statistics

# **Background**

At the Board's December 2024 meeting, Ms. LeNguyen, Retirement Benefits Manager, delivered a verbal update on the disability statistics and processing timelines. Following a discussion with the Board, it was agreed that a more comprehensive analysis addressing procedures, constraints, resources, and processing times would be prepared and presented.

### Discussion

Ms. LeNguyen and Ms. Nagal, Senior Retirement Analyst, will present a comprehensive overview of SamCERA's disability process to ensure that new Board members are full informed about each step of the procedure, and reacquaint other Board members with the process. Additionally, they will discuss the average processing time, recent changes implemented to streamline the disability process, processing times in other CERL systems, the factors contributing to delays, and the improvements made to address these issues.