



# Notice of Public Meeting

## The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, December 5, 2023, 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**
- 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 October 31, 2023
  - 3.2 Approval of Audit Committee Minutes from October 31, 2023
- 4. Approval of the Consent Agenda\***

4.1 Disability Retirements (6) <ul style="list-style-type: none"><li>• Arakaki-Barbanica, Roderick</li><li>• Gan, Shao Mei</li><li>• Gonzalez, Nidia</li><li>• Manilla, Edgar</li><li>• Ramirez, Rosa</li><li>• Tafreshiha, Hadi</li></ul>	4.4 Continuances
4.2 Survivor Death Benefits	4.5 Deferred Retirements
4.3 Service 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
	4.10 Affirm Procedure for Determination of Whether Compensation Was Paid to Enhance a Member's Pension
	4.11 Affirm Procedure for Auditing of Employer Data
- 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 Preliminary Monthly Portfolio Performance Report for the Period Ended October 31, 2023
  - 6.2 Report on Quarterly Investment Performance for the Period Ended September 30, 2023
  - 6.3 Report on Manager Reviews - Absolute Return
  - 6.4 Report on Investment Consultant Annual Review
  - 6.5 Presentation of Private Asset Semi-Annual Performance Reports as of June 30, 2023
  - 6.6 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 Annual Review of SamCERA's Audit Firm, Brown Armstrong
  - 7.2 Discussion of Board Staff Retreat Topics

# Notice of Public Meeting

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- 7.3 Review and Approval of Trustee Special Request to Attend an Educational Event
- 7.4 Review and Discussion of SamCERA's Education Policy

### 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

**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 6.6)

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

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

Gordon, Mary L	September 5, 2023	Courts
McCreagh, Helen	October 13, 2023	Courts
Gonzales, Kathleen	October 28, 2023	Probation
Messier, Robert	October 31, 2023	Sheriff's Office
Jordan, Karel	October 31, 2023	Human Services
Oda, Wenonah	November 1, 2023	Probation
Nolan, Muriel	November 1, 2023	Social Services
Swanson, Bob	November 15, 2023	Weights & Measures
Bresler, Roland	November 16, 2023	County Manager's Office
Wish, Helen	November 24, 2023	Social Services
Horsley, Donald	November 24, 2023	Sheriff's Office

Scott Hood, Chief Executive Officer

Posted: November 29, 2023

(\* 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 [www.samcera.org](http://www.samcera.org). 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.

**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
OCTOBER 31, 2023 – REGULAR BOARD MEETING MINUTES**

**2310.1 Call to Order, Roll Call and Miscellaneous Business**

**Call to Order:** Mr. Battey, Chair, called the Regular Meeting of the Board of Retirement to order at 9:59 a.m.

**Roll Call:**

Present: Mark Battey, Al David, April DeCarsky (for Katherine O'Malley), Kurt Hoefer, Kimathi Marangu, Robert Raw, and Alma Salas.

Absent: Sandie Arnott, Katherine O'Malley, and Elaine Orr.

Alternates: Nicole McKay.

Staff: Tat-Ling Chow, Michael Coultrip, Lili Dames, Scott Hood, Jenny Lukan, Elizabeth LeNguyen, Doris Ng, Paul Okada, and Gladys Smith.

Consultants: Joe Abdou and John Nicolini (Verus); Chris Philips (Zeno AN Solutions); Patrick Richardson (Byers/Richardson), and Ashley Green (Brown Armstrong).

Mr. Battey noted that, due to scheduling concerns, Items 7.1 and 7.2 would be considered immediately after the Series 4 consent items and prior to Item 5.1.

**2310.2.1 Oral Communications from the Board:** Mr. Battey informed the Board about the passing of Ms. Arnott's father earlier in the month and the passing of her brother last Thursday and offered condolences.

**2310.2.2 Oral Communications from the Public:** None.

**2310.3.1 Approval of Board Meeting Minutes from September 26, 2023:** Mr. Battey asked if there were any changes or corrections, or objections, to the minutes from the regular meeting held on September 26, 2023. There were no changes, corrections, or objections presented.

**Action:** Mr. Raw moved to approve the minutes from the September 26, 2023 regular Board meeting. The motion was seconded by Ms. DeCarsky and carried with a vote of 6-0-1, with trustees Battey, DeCarsky, Hoefer, Marangu, Raw, and Salas all in favor; none opposed; David abstained.

**2310.4.0 Approval of the Consent Agenda:** Mr. Battey asked if there were any items to be removed for discussion from the Consent Agenda. Baker, Catherine was removed from Item 4.1.

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

**2310.4.1 Disability Retirements:**

a) The Board found that **Tanganyika Adams** (1) is permanently incapacitated from the performance of her usual and customary duties as a Group Supervisor III, (2) found that her disability was the result of an injury arising out of and in the course of her employment and (3) granted her application for a service-connected disability retirement.

b) The Board found that **Michael Arguel** (1) is permanently incapacitated from the performance of his usual and customary duties as a Sheriff's Sergeant, (2) found that his disability was the

result of an injury arising out of and in the course of his employment and (3) granted his application for a service-connected disability retirement.

c) The Board, regarding **Catherine Baker**, (1) accepted the proposed decision of the Hearing Officer, John Shupe, and (2) confirmed the Service-Connected Disability retirement date of January 22, 2016.

d) The Board found that **Saul Lopez** (1) is permanently incapacitated from the performance of his usual and customary duties as a Sheriff's Captain, (2) found that his disability was the result of an illness arising out of and in the course of his employment and (3) granted his application for a service-connected disability retirement.

2310.4.2 **Survivor Death Benefits:** None.

2310.4.3 **Service Retirements:**

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Baquirin, Pedro	August 3, 2023	Sheriff's Office
Caceres-Chu, Evelyn	August 5, 2023	Deferred - Behavioral Health
Davis, Rawlen	August 26, 2023	Human Resources
De Alba, Claudia	September 1, 2023	San Mateo County Health
Dominguez, Melida	August 16, 2023	San Mateo County Health
Hood, Eileen	August 5, 2023	Sheriff's Office
Lynch, Damon	August 18, 2023	Probation
Modha, Ritu	August 5, 2023	Behavioral Health
Nolte, Mark	August 12, 2023	Deferred - Child Support Services
Ruiz, Patricia	July 18, 2023	San Mateo County Health
Schiantarelli, Jennifer	August 11, 2023	Deferred - Sheriff's Office
Thompson, Laura	August 7, 2023	Deferred – Planning and Building
Velez, Luis	August 6, 2023	Sheriff's Office

2310.4.4 **Continuances:**

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Robinson, Debra	Robinson, Ronald R.
Walker, Ruth	Walker, Burton
Youngdahl, Kathleen	Youngdahl, Raynor

2310.4.5 **Deferred Retirements:**

<b>Name</b>	<b>Retirement Plan Type</b>
Brewster, Brianna	G7, Non-Vested - Reciprocity
Cohen, Sara	G7, Vested
Constantino, Amanda	G7/S7, Vested - Auto Defer – Code 31700
Gee, Erica	G7, Vested - Reciprocity
Hart, Kristopher	S7, Vested
Laperruque, Kenneth	S7, Vested – Reciprocity
Morales, Pamela	G7, Non-Vested Reciprocity
Noble, Ederlyn	G4, Vested - Reciprocity
Pineda, Zuleyma	G4, Vested Auto Defer – Code 31700
Ramirez, Lester	G4, Vested - Reciprocity
Rodriguez, Crispin	G4, Vested Auto Defer – Code 31700

Taylor, Connor

G7, Non-Vested – Reciprocity

2310.4.6 **Member Account Refunds:**

<b>Name</b>	<b>Retirement Plan Type</b>
Conway, Terese (FBO: Conway, James)	G4, Vested
Estrada, Mathew	G7, Non-vested
Fischer, Keith	G7, Non-vested
Hoke, Christopher	G7, Non-vested
Marasigan, Arnold	G7, Non-vested
Netane, Siupeli	G7, Non-vested
Perryman, Desmon (FBO: Perryman, Jessica)	G7, Non-vested
Phillips, Thomas (FBO: Phillips, Bruce)	G4, Vested
Robertson, Frances	G7, Non-vested
Taufou, Priscilla	G7, Non-vested
Wilke, Tyler Jacob	G7, Non-vested

2310.4.7 **Member Account Rollovers:**

<b>Name</b>	<b>Retirement Plan Type</b>
Conway, Terese (FBO: Conway, James)	G4, Vested
Phillips, Thomas (FBO: Phillips, Bruce)	G4, Vested
Wilson, David I	G7, Non-vested

2310.4.8 **Member Account Redeposits:**

<b>Name</b>	<b>Retirement Plan Type</b>
Aenlle, Victor	G4
Pene, Garrett	G5

2310.4.9 **Acceptance of Trustees' Reports of Educational Activities:** The Board accepted the submitted report for educational activities attended by Mr. David, Ms. McKay, Mr. Raw, and Ms. Salas.

2310.4.10 **Trustee Special Request to Attend an Educational Event:** The Board discussed continuing this request to the December Regular Board Meeting to allow for Ms. Orr to be present to answer any questions.

Action: Mr. David moved to continue Ms. Orr's Special Request to Attend an Educational Event to the December Regular Board Meeting. The motion was seconded by Ms. Salas and carried with a vote of 7-0-0, with trustees Battey, David, DeCarsky, Hoefer, Marangu, Raw, and Salas all in favor; none opposed; none abstained.

2310.5.1 **Consideration of Agenda Items, if any, removed from the Consent Agenda:** See Item C1.

2310.5.2 **Annual Review of SamCERA's Actuarial Services Firm, Milliman, Inc.:** Ms. Smith shared the results of Milliman, Inc.'s annual review which included high ratings from Board and staff. She and Mr. Hood thanked Mr. Collier and Mr. Glyde for their knowledge, professionalism and partnership all these years. This item was informational and for discussion only, no action was taken.

2310.6.1 **Report on Preliminary Monthly Portfolio Performance Report for the Period Ended September 30, 2023:** Mr. Coultrip reported that SamCERA's net preliminary return for September was -1.9%, bringing the preliminary trailing twelve-month net return ending September 2023 to 8.1%, which is below our benchmark return of 10.6% but above our assumed earnings rate of 6.25%. He reported SamCERA's

estimated market value as of September was \$5.94 billion, while the actuarial funded ratio as of June 30, 2023, was 88.3%.

- 2310.6.2 **Report on Inflation Hedge Manager Annual Review:** Ms. Ng reviewed the meeting notes from the annual review meetings with SamCERA's real assets investment managers, Brookfield Asset Management on September 7, 2023 and State Street Global Advisors (SSgA) on September 14<sup>th</sup>, 2023. Each meeting lasted approximately 1 hour and consisted of a firm/organizational update, an investment process review, performance review and attribution, and current positioning/market outlook. This item was informational and for discussion only, no action was taken.
- 2310.6.3 **Report on Opportunistic Credit Manager Annual Review:** Ms. Ng reviewed the meeting notes from the annual review meeting with one of SamCERA's opportunistic credit managers, Angelo Gordon, on September 14, 2023. The meeting lasted approximately one hour, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. This item was informational and for discussion only, no action was taken.
- 2310.6.4 **Report on Absolute Return Manager Annual Review:** Ms. Ng reviewed the meeting notes from the annual review meeting with one of SamCERA's absolute return managers, Graham Capital Management, on September 14, 2023. The meeting lasted approximately 1 hour, and consisted of a firm/organizational update, investment process review, performance review and attribution, and current positioning/market outlook. This item was informational and for discussion only, no action was taken.
- 2310.6.5 **Presentation on Trade Cost Analysis for 2022:** Chris Phillips of Zeno AN Solutions presented an analysis of SamCERA's trading costs for the calendar year of 2022 and answered questions from the Board. This item was informational and for discussion only, no action was taken.
- 2310.6.6 **Report on Emerging Market Debt Manager Search:** Ms. Ng reported that SamCERA sent a request for information (RFI) to an initial list of eight investment managers and received responses back from seven managers. After reviewing the responses and information provided, SamCERA plans to conduct further due diligence with a short list of two investment managers. Mr. Abdou of Verus provided an update on the emerging market debt manager search process with the Board. This item was informational and for discussion only, no action was taken.
- 2310.6.7 **Approval of Cash Flow-Matching Replenishment Recommendation:** Mr. Coultrip discussed staff's recommendation to replenish the cash flow match pool to include fiscal year 2026's net cash flows while also adding an additional year's worth (fiscal year 2027), resulting in pre-funding the next four years' worth of expected net benefit payments (for fiscal years 2024, 2025, 2026, and 2027). No additional new money is expected to be needed to be added to the Insight cash flow-match account.

Action: Mr. Hoefer moved to approve SamCERA's cash flow-matching replenishment recommendation. The motion was seconded by Mr. David and carried with a vote of 7-0-0, with trustees Battey, David, DeCarsky, Hoefer, Marangu, Raw, and Salas all in favor; none opposed; none abstained.

- 2310.7.1 **Presentation by Brown Armstrong of 2023 Financial Audit Management Reports:** Ms. Green presented the results of the independent financial audit for fiscal year ended June 30, 2023. She reported that SamCERA received an unmodified (clean) opinion. Mr. David reported that the Audit Committee met and reviewed the financial audit report and recommended that the Board accept the report and findings.

2310.7.2 **Approval of SamCERA’s 2023 Annual Comprehensive Financial Report (ACFR):** Ms. Chow provided a summary of the Annual Comprehensive Financial Report for the fiscal year ended June 30, 2023. She discussed SamCERA’s net position at fiscal year-end, the operating results for the fiscal year then ended, and the funding status as of June 30, 2023. Ms. Chow thanked Ms. Green and her audit team, Milliman, Inc., as well as SamCERA staff for their contributions in putting the ACFR together.

**Action:** Mr. Hoefer moved to approve SamCERA’s 2023 Annual Comprehensive Financial Report. The motion was seconded by Ms. Salas and carried with a vote of 7-0-0, with trustees Battey, David, DeCarsky, Hoefer, Marangu, Raw, and Salas all in favor; none opposed; none abstained.

2310.7.3 **Approval of Voting Delegates and direction to delegates for Fall 2023 SACRS Business Meeting:** Mr. Hood discussed staff’s recommendation to designate him as the Voting Delegate to cast SamCERA’s votes at the SACRS business meeting on November 10, 2023.

**Action:** Mr. David moved to approve staff’s recommendation to designate Scott Hood, CEO as the Voting Delegate to cast SamCERA’s votes at the SACRS Fall 2023 Conference. The motion was seconded by Ms. Salas and carried with a vote of 7-0-0, with trustees Battey, David, DeCarsky, Hoefer, Marangu, Raw, and Salas all in favor; none opposed; none abstained.

2310.8.1 **Chief Executive Officer’s Report:** Mr. Hood thanked Ms. Chow’s team for their work on the audit and the ACFR. Mr. Hood gave the Board a real estate market update and a packet will be provided next meeting. Mr. Hood informed the Board that he will be at SACRS next week and mentioned the CALAPRS General Assembly in March 2024. Lastly, Mr. Hood also informed the Board that agenda items for the December Board Meeting will include policy updates, the funding dashboard and staff retreat topics.

2310.8.2 **Assistant Executive Officer’s Report:** Ms. Smith informed the Board that the survey for the annual Brown Armstrong review will be sent next week. Ms. Smith also mentioned that next year, SamCERA will be conducting several RFPs. Ms. Lukan informed the Board of upcoming education opportunities in 2024.

2310.8.3 **Chief Investment Officer’s Report:** Mr. Coultrip informed the Board that SamCERA will be sending out the Verus annual review survey soon, with results planned to be presented in December. Mr. Coultrip also informed the Board that the date and time were changed for the private equity and private real asset annual review to Monday, November 27<sup>th</sup> at 11:00 am via Teams.

2310.8.4 **Chief Legal Counsel’s Report:** Mr. Okada informed the Board he will be working with Ms. Orr and the rest of the CEO ad hoc evaluation committee to schedule some dates, likely in the second week in November, to meet. The evaluation responses will be discussed in closed session in January.

C1 **Consideration of Disability Items, if any, removed from the Consent Agenda:** The Board met in Closed Session regarding the service-connected disability retirement application of Catherine Baker. The member’s counsel, Martin Glickfield, and SamCERA’s counsel, Patrick Richardson, were present.

Following presentations by both counsel, questions from the Board, and Board discussion, there was a motion and a second to (1) accept the proposed decision of the Hearing Officer, John Shupe, and (2) confirm the service-connected disability retirement date of January 22, 2016.

The motion was approved unanimously by Battey, David, Decarsky, Hoefer, Marangu, Raw, and Salas. Board members Arnott and Orr were absent. There were no “nay” votes and no abstentions.

No other reported action was taken and there were no other disability retirement matters heard in Closed Session.

**C2 Conference with Legal Counsel – Anticipated Litigation  
Significant Exposure to Litigation (Govt. Code section 54956.9(d)(2)) - One Case:**

The Board met in Closed Session to confer with legal counsel regarding anticipated litigation/significant exposure to litigation (one case) (Govt Code section 54956.9(d)(2)). No reportable action was taken. No other matters were discussed in Closed Session.

2310.9.0 **Reports on Actions Taken in Closed Session:** Mr. Okada reported on Items C1 and C2 above. There were no additional closed session items.

2310.10 **Adjournment:** Mr. Battey adjourned the meeting at 1:11 p.m. in memory of the deceased members listed below.

Travers, Elizabeth	September 9, 2023	Health Services
Perkins, Agnes	September 24, 2023	Social Services
Bradley, Jean	September 26, 2023	Hospital
Allen, Rosemary	September 27, 2023	Aging & Adult Services
Compton, Irma	September 30, 2023	Planning & Building
Gooden, Quillie	October 4, 2023	Public Works
Evans, Randolph	October 5, 2023	San Mateo County Health
Botti, Lou	October 6, 2023	Human Services Agency
Radojevich, Milan	October 9, 2023	Sheriff's
Niapas, Deborah	October 11, 2023	Probation

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Mark Battey  
Chair



**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
OCTOBER 31, 2023 – AUDIT COMMITTEE MEETING MINUTES**

A **Call to Order:** Al David, Vice Chair, called the meeting of the Audit Committee to order at 9:11 a.m.

**Roll Call:**

Present: Al David (Vice Chair), Kimathi Marangu, and Alma Salas.

Absent: Sandie Arnott and Elaine Orr (Chair).

Staff: Tat-Ling Chow, Scott Hood, Jenny Lukan, Paul Okada, and Gladys Smith.

Consultants: Ashley Green (Brown Armstrong)

B **Oral Communications**

**Oral Communications from the Committee:** None.

**Oral Communications from the Public:** None.

C **Review and Discussion of the following Items:**

**Presentation by Brown Armstrong of 2023 Financial Audit Management Reports:** Ms. Green reviewed the audit process and presented the financial audit management reports and findings with the Committee. She reported that SamCERA received an unmodified (clean) opinion and that there were no issues performing the audit and no material weaknesses, significant deficiencies, or control deficiencies identified. Ms. Green thanked Ms. Chow, SamCERA management, and staff for their assistance and support during the audit.

**1. Approval of Recommendation to the Board to Accept 2023 Financial Audit Management Reports:**

**Action:** Ms. Salas moved to recommend that the Board of Retirement accept the financial audit management reports and findings, as prepared by Brown Armstrong. The motion was seconded by Mr. Marangu with a vote of 3-0-0, with trustees David, Marangu, and Salas all in favor; and none opposed; none abstained.

Ms. Chow provided a summary of the six sections of the Annual Comprehensive Financial Report (ACFR) for the fiscal year ended June 30, 2023. She expressed her gratitude to Ms. Green, her entire audit team, and SamCERA staff for their hard work in putting together the ACFR.

**2. Approval of Recommendation of SamCERA's 2023 Annual Comprehensive Financial Report:**

**Action:** Mr. Marangu moved to recommend that the Board of Retirement approve SamCERA's 2023 Annual Comprehensive Financial Report (ACFR). The motion was seconded by Ms. Salas and carried with a vote of 3-0-0, with trustees, David, Marangu, and Salas all in favor; and none opposed; none abstained.

D **Adjournment:** With no further business, Mr. David adjourned the meeting at 9:39 a.m.

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Al David  
Audit Committee Vice Chair

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

December 5, 2023

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**

- a) The Board finds that **Roderick Arakaki-Barbanica** (1) is permanently incapacitated from the performance of his usual and customary duties as a Cook II, (2) find that his disability was the result of an injury arising out of and in the course of his employment and (3) grant his application for a service-connected disability retirement.
- b) The Board finds that **Shao Mei Gan** (1) is permanently incapacitated from the performance of her usual and customary duties as a Library Assistant I, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.
- c) The Board finds that **Nidia Gonzalez** (1) is permanently incapacitated from the performance of her usual and customary duties as a Patient Services Supervisor, (2) find that her disability was the result of an injury arising out of and in the course of her employment and (3) grant her application for a service-connected disability retirement.
- d) The Board finds that **Edgar Manilla** (1) is permanently incapacitated from the performance of his usual and customary duties as a Deputy Sheriff, (2) find that his disability was the result of an injury arising out of and in the course of his employment and (3) grant his application for a service-connected disability retirement.
- e) The Board finds that **Rosa M. Ramirez** (1) is able to substantially perform her usual and customary duties as a Patient Services Assistant II and (2) deny her application for a service-connected disability retirement.
- f) The Board finds that **Hadi Tafreshiha** (1) is permanently incapacitated from the performance of his usual and customary duties as an IS Client Systems Specialist II, (2) find that his disability was the result of an injury arising out of and in the course of his employment and (3) grant his application for a service-connected disability retirement.

#### 4.2 Survivor Death Benefits

None.

#### 4.3 Service Retirements

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

<b>Name</b>	<b>Effective Retirement Date</b>	<b>Department</b>
Cardoza, Manuel	September 13, 2023	San Mateo County Health
Dunbar, Michael	October 1, 2023	Deferred - Public Works
Escobar, Roberto	September 7, 2023	San Mateo County Health
Flannery, Kelly	September 8, 2023	Def'd - San Mateo County Health
Gathright, Marcus	September 28, 2023	Sheriff's Office
Healy, Diane	September 18, 2023	Deferred - Aging & Adult Services
Idarius, Kristine	September 2, 2023	San Mateo County Health
Jimenez, Joaquin	September 13, 2023	Deferred - Probation
Lewis, Brian	September 25, 2023	Deferred - Behavioral Health
Monheit, Juliette	September 30, 2023	Deferred - Behavioral Health
Muccia, Charles	July 12, 2023 (rescinded)	QDRO of Wright, Tamara
Perez, Antonio	September 12, 2023	San Mateo County Health
Rogers, Bryan	September 14, 2023	Deferred - Human Services
Salas, Heather	September 29, 2023	Family Health
Smyser, Michael	September 17, 2023	Sheriff's Office
Valdez, Robert	September 30, 2023	Deferred - Public Works
Villagrancia, Marites	September 16, 2023	Probation
West, Karen	November 17, 2022	San Mateo County Health

#### 4.4 Continuances

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

<b>Survivor's Name</b>	<b>Beneficiary of:</b>
Cardoza, Regina	Cardoza, Ronald
Coleman, Mary	Coleman, Jerome
Hickman, Maryanne	Hickman, Philip
Holm, Carolyn	Holm, Carl

#### 4.5 Deferred Retirements

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

<b>Name</b>	<b>Retirement Plan Type</b>
Aison, Marvin	G7, Vested Auto Defer – Code 31700
Brown, Mark	G4, Vested - Reciprocity
Ernst, Diana	G7, Vested Auto Defer – Code 31700
Ford, Tracy	G7, Vested Auto Defer – Code 31700
Forman, Emily	G7, Vested Auto Defer – Code 31700
Hernandez, Alberto	G4, Vested - Reciprocity
Hurrell, Angelina	G7, Vested - Reciprocity
Kumar, Divya	G7, Vested Auto Defer – Code 31700
Lee, I-Chieh	G4, Vested Auto Defer – Code 31700
Llamas, Jennifer	G7, Vested Auto Defer – Code 31700
Madrigal, Heriberto	G5, Vested Auto Defer – Code 31700
Martinez Tostado, Lisvette	G7, Vested Auto Defer – Code 31700
Masic, Mirsad	G7, Vested Auto Defer – Code 31700
Medina, Jamie	G7, Vested Auto Defer – Code 31700
Romero Davila, Gerardo	S7, Vested Auto Defer – Code 31700
Ruybal, Kevin	G7, Vested Auto Defer – Code 31700
Silva, Rosalinda	G7, Non-Vested - Reciprocity
Tsang, Suzanne	G7, Non-Vested - Reciprocity
Verber, Nicholas	S7, Vested Auto Defer – Code 31700
Wang, Joshua	S5, Vested - Reciprocity
Wu, Winnie	G7, Vested Auto Defer – Code 31700

#### 4.6 Member Account Refunds

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

<b>Name</b>	<b>Retirement Plan Type</b>
Aldanese, Michael John	G7, Non-vested
Berlanga, Jr, Frank	G7, Vested
Borghgi, Gabriel (FBO: Borghi, Beverly)	G2, Vested
Jackson, Raven	G7, Non-vested

Lujan, Janneth	G5, Vested
Mesele, Nigest Assefa	G7, Non-vested
Myers, David	G4, Non-vested
Nagrampa, Wencesla	G4, Non-vested
Perdomo, Le'Russyan	G7, Vested
Rodriguez, Hector	G7, Non-vested
Trujillo, Isidro	G7, Non-vested
Woods, Simone Kaitlyn	G7, Vested

#### 4.7 Member Account Rollovers

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

Name	Retirement Plan Type
Bell, Joanna	G7, Non-vested
DeLipski, Paul	G2, Vested
Hertz, Annabel	G7, Non-vested
Huang, Annieyuhong	G7, Non-vested
Muccia, Charles	G7, Vested
Quan, Daisy	G7, Non-vested
Tsang, Agnes	G7, Non-vested

#### 4.8 Member Account Redeposits

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

Name	Retirement Plan Type
Aenlle, Victor	G2

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


None.

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

December 5, 2023

Agenda Item 4.10

**TO:** Board of Retirement

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

**SUBJECT:** Board Procedure for Assessment of Compensation

**Recommendation**

Reaffirm the "Board Procedures for Assessment and Determination of Whether an Element of Compensation Was Paid to Enhance a Member's Pension Benefit."

**Background & Discussion**

Pursuant to state law, the Board adopted a procedure to determine whether an element of compensation was paid to enhance a member's pension and, if so, to exclude it from the member's pension.

The Board's procedures provide that staff make an initial assessment as to whether any item of compensation was paid to enhance a member's pension. Factors to be considered include, for example, whether it was a one-time ad hoc payment paid only to the member, or whether similarly situated members received the same element of compensation. In making its initial assessment, Staff considers explanations provided by the member and the employer as to the circumstances of any such payments.

If staff determines that a compensation item should be excluded from a member's pension, either the employer or the member can respond to the initial assessment and request the Chief Executive Officer to review the initial assessment. If, following review of staff's initial assessment and the member's and/or employer's response, the Chief Executive Officer confirms that the compensation should be excluded, then the matter will be brought to the Board for approval along with a staff report setting forth the specific facts and circumstances supporting staff's recommendation along with any response submitted by the member and/or employer. If the Board excludes the pay item, either the member or the employer, or both, may seek judicial review.

It should be noted that staff educates our employers regarding what pay items are includable and what is not. On an ongoing basis, staff participates in County HR/Payroll Solution Committee meetings and SamCERA's new pension administration software system automatically rejects unauthorized payroll items. Accordingly, these matters are, for the most part not disputed. For those specific issues that arise just prior to retirement, staff addresses and resolves them during the member's record review.

staff is of the opinion that no material changes to the policy last approved by the Board are necessary; however, minor revisions to the December 2020 policy have been made for readability and clarity. Clean and redlined versions of the revised policy are attached.

**Attachments**

Board of Retirement Procedure for Assessment and Determination of Whether an Element of Compensation Was Paid to Enhance a Member's Pension Benefit (Clean and Redlined)

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

### BOARD OF RETIREMENT PROCEDURE FOR ASSESSMENT AND DETERMINATION OF WHETHER AN ELEMENT OF COMPENSATION WAS PAID TO ENHANCE A MEMBER'S PENSION BENEFIT

#### I. BACKGROUND

Pursuant to Government Code Section 31542, the Board of Retirement is required to adopt a procedure for assessing and determining whether an element of compensation was paid to enhance a member's retirement benefit and, if the Board determines that it was paid to enhance a benefit, to provide a process for the member or the employer to seek review of the Board's determination.

#### II. FACTORS TO BE CONSIDERED IN STAFF REVIEW

With respect to all retirement applications with an effective date of retirement on or after January 1, 2013, Staff shall review all compensation included within the calculation of the member's final compensation within the meaning of the following Government Code sections: 7522.32 (final compensation PEPRA Plan); 7522.34 (pensionable compensation PEPRA Plan); 31461 (compensation earnable); 31462 (final compensation), 31462.1 (final compensation – 1 year period), 31462.11 (final compensation – 1 year period); and 31462.2 (final compensation – 3 year period), as applicable. This review will be for the purpose of making an initial assessment as to whether any item of compensation included in final compensation was paid to enhance a member's retirement benefit.

**A. Non-PEPRA Plan Members.** For all members commencing employment before January 1, 2013, and those members who commence employment after that date who are not members of a PEPRA Plan, the determination can be guided by Government Code §31461(b) which provides that "compensation earnable" shall not include, in any case, the following:

1. Any compensation determined by the Board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:
  - (a) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.
  - (b) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.
  - (c) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period regardless of when reported or paid.



2. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.
3. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
4. Payments made at the termination of employment, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.

**B. PEPRA Plan Members.** For all members commencing employment on or after January 1, 2013, who are members of a PEPRA Plan, the determination can be governed by Government Code §7522.34, which provides that pensionable compensation does not include the following:

1. Any compensation determined by the Board to have been paid to increase a member's retirement benefit.
2. Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.
3. Any one-time or ad hoc payments made to a member.
4. Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment but is received by the member while employed.
5. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.
6. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
7. Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.
8. Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.
9. Employer contributions to deferred compensation or defined contribution plans.
10. Any bonus paid in addition to the compensation described in subdivision (a) of Government Code §7522.34.
11. Any other form of compensation the Board determines is inconsistent with the requirements of 7522.34 (a).

12. Any other form of compensation that this Board determines should not be pensionable compensation.

**C. All Members.** In addition to the factors listed above, Staff shall consider one or more of the following factors:

1. Whether the earnings codes reported are in accordance with the Board resolutions defining “Compensation Earnable” and “Pensionable Compensation” and the statutes cited in this policy, and any amendments thereto, and other applicable statutory or case law.
2. Whether the item of compensation was earned or received within the period during which final compensation is to be calculated.
3. Whether the item of compensation was earned or received at any other time during the member’s employment outside of the final compensation period and, if so, how frequently;
4. Whether similarly situated members received the same element of compensation for the same period(s) of time.
5. Whether the member was entitled to receive the item of compensation pursuant to a collective bargaining agreement that was subsequently deferred or otherwise modified as a result of a negotiated amendment of that agreement. *(If so, the pay item shall not be deemed to have been paid to enhance a member’s retirement benefit pursuant to Government code section 31542(c).)*
6. The percentage increase to the member’s pension due to the inclusion of the pay item.
7. Information and any explanation(s) provided by the member and the employer in response to SamCERA’s request as to the facts and circumstances concerning an item of compensation that staff believes may have been paid to enhance the member’s retirement benefit.
8. Any other factors that cause staff to believe that an item of compensation included in final compensation was paid to enhance a member’s retirement benefit.

### **III. PROCESS**

#### **A. Initial Staff Review.**

After the member has elected the year or years, if applicable, to be used to determine such member’s final compensation; Staff shall make an initial assessment of whether any item of compensation included in final compensation period was paid to enhance the member’s retirement benefit.

#### **B. Staff Decision.**

1. Initial Determination and Processing of Benefit. If Staff initially determines that the item of compensation was paid to enhance a member’s benefit and payment of the member’s benefit would be delayed by seeking resolution through the administrative processes set forth below, Staff may process the benefit excluding the compensation in question. If it is later determined

the compensation should be included, Staff will adjust the benefit retroactive to the effective retirement date.

2. Notice of Initial Staff Determination. Staff shall notify the member and the employer (if the employer is the County, then the member's department head will be notified) of its initial determination to exclude an item of compensation on the basis that it was paid to enhance a member's retirement benefit. The notification shall be sent via regular mail and electronic mail and shall set forth the reasons for the determination.

3. Written Response to Staff Determination. If the member and/or employer disagree with the determination, either or both shall submit a written response to the Chief Executive Officer setting forth the reasons why the item of compensation was not paid to enhance the member's retirement benefit. The member and the employer shall have 20 days from the date of mailing to respond to staff regarding its initial determination.

**C. Response to Staff Decision by Member and/or Employer.**

1. No Response Submitted. If no response to Staff's initial determination is received from the member or the employer within the 20 day period set forth in Section B.3. above, Staff shall present a report with a recommendation to the Board for its approval to exclude the item on the basis that it was to enhance the member's benefit. The report shall contain a description of the reasons for Staff's recommendation, including the specific facts and circumstances supporting Staff's recommendation. The report shall also set forth information, if any, received from the member and/or employer.

2. Response Submitted. If a response is received, and after a review by the Chief Executive Officer, or the Chief Executive Officer's designee, it is determined that the pay item should be excluded on the basis that it was to enhance the member's benefit, Staff shall prepare a report to be presented to the Board for its approval to exclude the item on the basis that it was to enhance the member's benefit. The report shall contain a description of the reasons for Staff's recommendation, including the specific facts and circumstances supporting Staff's recommendation. It shall also set forth the response received by the member and/or employer as well as any information received from the member and/or employer.

3. Notice of Recommendation to the Board. For any matter that is to be presented to the Board, Staff shall provide written notice of the Board meeting and a copy of Staff's report to the member and the employer, no later than 10 days before the recommendation is presented to the Board for action.

**D. Decision by the Board of Retirement.**

1. Opportunity to be Heard. Before the Board makes a final decision regarding whether an item of compensation should be excluded from a member's pension, Staff, the member, and the employer shall be given an opportunity to be heard by the Board.

2. Finding that a Compensation Item Should be Included. If the Board finds that the item of compensation should be included, staff will adjust the member's benefit to include said item retroactive to the effective date of retirement.

3. Finding that a Compensation Item Should Not be Included. If the Board finds that the item of compensation was paid to enhance a member's retirement benefit, Staff shall provide written notice of that determination to the member and employer. The member or the employer may obtain judicial review of the Board's action by filing a petition for writ of mandate within 30 days of the mailing of the notice. If a writ of mandate is not sought and/or obtained, the Board's decision shall become final and binding.

## SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

### BOARD OF RETIREMENT PROCEDURE FOR ASSESSMENT AND DETERMINATION OF WHETHER AN ELEMENT OF COMPENSATION WAS PAID TO ENHANCE A MEMBER'S PENSION BENEFIT

#### I. BACKGROUND

Pursuant to Government Code Section 31542, the Board of Retirement is required to adopt a procedure for assessing and determining whether an element of compensation was paid to enhance a member's retirement benefit and, if the Board determines that it was paid to enhance a benefit, to provide a process for the member or the employer to seek review of the Board's determination.

#### II. FACTORS TO BE CONSIDERED IN STAFF REVIEW

With respect to all retirement applications with an effective date of retirement on or after January 1, 2013, Staff shall review all compensation included within the calculation of the member's final compensation within the meaning of the following Government Code sections: 7522.32 (final compensation PEPRA Plan); 7522.34 (pensionable compensation PEPRA Plan); 31461 (compensation earnable); 31462 (final compensation), 31462.1 (final compensation – 1 year period), 31462.11 (final compensation – 1 year period); and 31462.2 (final compensation – 3 year period), as applicable. This review will be for the purpose of making an initial assessment as to whether any item of compensation included in final compensation was paid to enhance a member's retirement benefit.

**A. Non-PEPRA Plan Members.** For all members commencing employment before January 1, 2013, and those members who commence employment after that date who are not members of a PEPRA Plan, the determination can be guided by Government Code §31461(b) which provides that "compensation earnable" shall not include, in any case, the following:

1. Any compensation determined by the Board to have been paid to enhance a member's retirement benefit under that system. That compensation may include:
  - (a) Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member, and which was converted to and received by the member in the form of a cash payment in the final average salary period.
  - (b) Any one-time or ad hoc payment made to a member, but not to all similarly situated members in the member's grade or class.
  - (c) Any payment that is made solely due to the termination of the member's employment, but is received by the member while employed, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period regardless of when reported or paid.

2. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, in an amount that exceeds that which may be earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.
3. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
4. Payments made at the termination of employment, except those payments that do not exceed what is earned and payable in each 12-month period during the final average salary period, regardless of when reported or paid.

**B. PEPRA Plan Members.** For all members commencing employment on or after January 1, 2013, who are members of a PEPRA Plan, the determination can be governed by Government Code §7522.34, which provides that pensionable compensation does not include the following:

1. Any compensation determined by the Board to have been paid to increase a member's retirement benefit.
2. Compensation that had previously been provided in kind to the member by the employer or paid directly by the employer to a third party other than the retirement system for the benefit of the member and which was converted to and received by the member in the form of a cash payment.
3. Any one-time or ad hoc payments made to a member.
4. Severance or any other payment that is granted or awarded to a member in connection with or in anticipation of a separation from employment but is received by the member while employed.
5. Payments for unused vacation, annual leave, personal leave, sick leave, or compensatory time off, however denominated, whether paid in a lump sum or otherwise, regardless of when reported or paid.
6. Payments for additional services rendered outside of normal working hours, whether paid in a lump sum or otherwise.
7. Any employer-provided allowance, reimbursement, or payment, including, but not limited to, one made for housing, vehicle, or uniforms.
8. Compensation for overtime work, other than as defined in Section 207(k) of Title 29 of the United States Code.
9. Employer contributions to deferred compensation or defined contribution plans.
10. Any bonus paid in addition to the compensation described in subdivision (a) of Government Code §7522.34.
11. Any other form of compensation the Board determines is inconsistent with the requirements of 7522.34 (a).

12. Any other form of compensation that this Board determines should not be pensionable compensation.

**C. All Members.** In addition to the factors listed above, Staff shall consider one or more of the following factors:

1. Whether the earnings codes reported are in accordance with the Board resolutions defining “Compensation Earnable” and “Pensionable Compensation” and the statutes cited in this policy, and any amendments thereto, and other applicable statutory or case law.
2. Whether the item of compensation was earned or received within the period during which final compensation is to be calculated.
3. Whether the item of compensation was earned or received at any other time during the member’s employment outside of the final compensation period and, if so, how frequently;
4. Whether similarly situated members received the same element of compensation for the same period(s) of time.
5. Whether the member was entitled to receive the item of compensation pursuant to a collective bargaining agreement that was subsequently deferred or otherwise modified as a result of a negotiated amendment of that agreement. *(If so, the pay item shall not be deemed to have been paid to enhance a member’s retirement benefit pursuant to Government code section 31542(c).)*
6. The percentage increase to the member’s pension due to the inclusion of the pay item.
7. Information and any explanation(s) provided by the member and the employer in response to SamCERA’s request as to the facts and circumstances concerning an item of compensation that staff believes may have been paid to enhance the member’s retirement benefit.
8. Any other factors that cause staff to believe that an item of compensation included in final compensation was paid to enhance a member’s retirement benefit.

### III. PROCESS

#### A. Initial Staff Review.

After the member has elected the year or years, if applicable, to be used to determine such member’s final compensation; Staff shall make an initial assessment of whether any item of compensation included in final compensation period was paid to enhance at the member’s retirement benefit.

#### B. Staff Decision.

1. Initial Determination and Processing of Benefit. If Staff initially determines that the item of compensation was paid to enhance a member’s benefit and payment of the member’s benefit would be delayed by seeking resolution through the administrative processes set forth below, Staff may process the benefit excluding the compensation in question. If it is later determined

the compensation should be included, Staff will adjust the benefit retroactive to the effective retirement date.

2. Notice of Initial Staff Determination. Staff shall notify the member and the employer (if the employer is the County, then the member's department head will be notified) of its initial determination to exclude an item of compensation on the basis that it was paid to enhance a member's retirement benefit. The notification shall be sent via regular mail and electronic mail and shall set forth the reasons for the determination.

3. Written Response to Staff Determination. ~~The member and the employer shall have 15 days to respond to staff regarding its initial determination.~~ If the member and/or employer disagree with the determination, either or both shall submit a written response to the Chief Executive Officer setting forth the reasons why the item of compensation was not paid to enhance the member's retirement benefit. The member and the employer shall have 20 days from the date of mailing to respond to staff regarding its initial determination.

#### **C. Response to Staff Decision by Member and/or Employer.**

1. No Response Submitted. If no response ~~by the member or the employer to Staff~~ to Staff's initial determination is received from the member or the employer within the 20 day period set forth in Section B.3. above, Staff shall present a report with a recommendation to the Board for its approval to exclude the item on the basis that it was to enhance the member's benefit. The report shall contain a description of the reasons for Staff's recommendation, including the specific facts and circumstances supporting Staff's recommendation. The report shall also set forth information, if any, received from the member and/or employer.

2. Response Submitted. If a response is received, and after a review by the Chief Executive Officer, or the Chief Executive Officer's designee, it is ~~determined~~ Staff's final determination that the pay item should be excluded on the basis that it was to enhance the member's benefit, Staff shall prepare a report to be presented to the Board for its approval to exclude the item on the basis that it was to enhance the member's benefit. The report shall contain a description of the reasons for Staff's recommendation, including the specific facts and circumstances supporting Staff's recommendation. It shall also set forth the response received by the member and or employer as well as any information received from the member and/or employer.

3. Notice of Recommendation to the Board. For any matter that is to be presented to the Board, Staff shall provide written notice of the Board meeting and a copy of Staff's report to the member and the employer, no later than 10 days before the recommendation is presented to the Board for action.

#### **D. Decision by the Board of Retirement.**

1. Opportunity to be Heard. Before the Board ~~acts~~ makes a final decision regarding whether an item of compensation should be excluded from a member's pension, Staff, the member, and the employer shall be given an opportunity to be heard by the Board.

2. Finding that a Compensation Item Should be Included. If the Board finds that the item of compensation should be included, staff will adjust the member's benefit to include said item retroactive to the effective date of retirement.




3. Finding that a Compensation Item Should Not be Included. If the Board finds that the item of compensation was paid to enhance a member's retirement benefit, Staff shall provide written notice of that determination to the member and employer. The member or the employer may obtain judicial review of the Board's action by filing a petition for writ of mandate within 30 days of the mailing of the notice. If a writ of mandate is not sought and/or obtained, the Board's decision shall become final and binding.

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

December 5, 2023

Agenda Item 4.11

**TO:** Board of Retirement

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

**SUBJECT:** Procedures for Auditing of Employer Data and Information Regarding Member Data

**Recommendation**

Reaffirm the “Board of Retirement Procedures for Auditing of Employer Data and Information to Determine Correctness of Member’s Retirement Benefits, Reportable Compensation, Enrollment in and Reinstatement to, the Retirement System.”

**Background**

In order to ensure that SamCERA’s participating employers provide accurate data to SamCERA, the Board is authorized by statute to audit the “books, papers, data or records, including, but not limited to, personnel and payroll records” of SamCERA employers for the purpose of determining “the correctness of retirement benefits, reportable compensation, and enrollment in, and reinstatement to, the system.” In addition, the Board may assess the employer costs of the audit, as well as the costs of any adjustment or correction, if the Board determines that the employer “knowingly failed” to comply with its legal responsibilities by (a) reporting compensation to SamCERA that the employer knew or should have known was not pensionable under statute, or (b) failed to identify the pay period in which compensation earnable was earned.

**Discussion:**

The Board’s procedure to audit of employer data and information provides several alternative methods to accomplish the audit. These approaches include:

- **Informal Requests.** Staff may make informal requests of the employer so as to resolve any issues related to individual or multiple member records, retirement benefits, reportable compensation, and enrollment in, and reinstatement to, the retirement system and/or compliance with applicable state or federal law.
- **Request for Special Audit Report.** If Staff believes that a reason exists, in addition to or as a follow up to the audit activities, to have a Special Audit of information, it may request the Board to authorize a Special Audit.
- **Annual Audit Approach.** Staff may, from time to time, request SamCERA’s independent auditor as part of, or in addition to its annual financial audit activities, to review employer data and reporting that may impact member’s

eligibility, contributions, membership, records, benefits, and/or compliance with applicable state or federal law.

Staff has always taken a proactive and ongoing cooperative approach with each of our employers to validate all member data. Staff participates in the County's HR/Payroll Solution Committee meetings regarding any new pay items and contribution amounts and meets with the employers regarding any factors that may affect membership eligibility. Additionally, if an issue arises, staff works with the employers to correct it.

In addition, our V3 pension administration software system automatically verifies member data as against the County and Court's payroll systems. Staff interfaces separately with the District's staff on any issues that may arise.

Staff is of the opinion that no amendments to the policy are necessary.

**Attachment**

Board of Retirement Procedure for Auditing of Employer Data and Information to Determine Correctness of Members' Retirement Benefits, Reportable Compensation, Enrollment in, and Reinstatement to, the Retirement System

**SAN MATEO COUNTY EMPLOYEES RETIREMENT ASSOCIATION  
BOARD OF RETIREMENT PROCEDURES FOR AUDITING OF EMPLOYER DATA AND INFORMATION TO  
DETERMINE CORRECTNESS OF MEMBERS' RETIREMENT BENEFITS, REPORTABLE COMPENSATION,  
ENROLLMENT IN, AND REINSTATEMENT TO, THE RETIREMENT SYSTEM**

**I. Purpose.**

By statute, the Board of Retirement is authorized to audit SamCERA employers to determine the correctness of member's retirement benefits, reportable compensation, enrollment in, and reinstatement to, the retirement system. (Government Code Sections 31542.5, 31543, 7522.72 and 7522.74.)

**II. Procedures.**

- A. Alternative Audit Approaches.** Staff may utilize one or more of the following approaches, as it deems appropriate, in order to determine the correctness of members' records, retirement benefits, reportable compensation, and enrollment in, and reinstatement to, the retirement system and/or compliance with applicable state or federal law. Verification of employer information and data may be periodically checked or performed on an as need basis. Similarly, issues concerning a specific member's compensation or specific compensation issues that may arise from time to time, Staff may conduct or cause to be conducted by an independent auditor, a specific audit of that issue. Issues regarding whether an element of compensation was paid to enhance a member's benefit will be handled in accordance with the "Board of Retirement Procedure for Assessment and Determination of Whether an Element of Compensation Was Paid to Enhance a Member's Benefit."
- B. Confidentiality.** To the extent that any confidential member or employer personnel information is presented, appropriate steps, in accordance with applicable law, will be taken by staff and the Board and the employer throughout the process to protect the confidentiality of information produced in any audit, staff reports, and discussion by or with the Board.
- C. Annual Audit Approach.** SamCERA may, from time to time, request SamCERA's independent auditor as part of, or in addition to its annual financial audit activities, to review employer data and reporting that may impact a member's eligibility, contributions, membership, records, benefits, and and/or compliance with applicable state or federal law.
- D. Informal Requests.** Staff may make informal requests of the employer so as to resolve any issues related to individual or multiple member records, retirement benefits, reportable compensation, and enrollment in, and reinstatement to, the retirement system and/or compliance with applicable state or federal law.
- E. Request For Special Audit Report.** If staff believes that reason exists, in addition to or as a follow up to the annual audit activities described in paragraph B, to have a Special

Audit of information, it may request that the Board authorize a Special Audit in accordance with Section III.

**III. Special Audit Procedure.**

- A. Request to the Board.** If Staff believes that a Special Audit is needed regarding information submitted by the employer with respect to member records, retirement benefits, reportable compensation, or enrollment in, and reinstatement to, the retirement system and/or compliance with applicable state or federal law, staff shall submit a written report to the Board setting forth the:
- (1) Reasons for the Special Audit, including a report as to prior informal requests of the employer so as to resolve any issues without a Special Audit.
  - (2) Books, papers, data, or records that should be provided by the employer in connection with the Special Audit, including but not limited to personnel and payroll records.
  - (3) Protocol that staff wishes to follow in conducting the Special Audit, including but not limited to who will conduct the audit and a proposed time and place.
  - (4) Estimated cost of the Special Audit, adjustment, and correction.
  - (5) Requested action by the Board in authorizing a Special Audit
  - (6) Any planned or potential follow on requests relating to adjustments or corrections by the employer that may be required as a result of such audit.
- B. Copy of Special Audit Request and Employer Response.** Staff shall send a copy of its Special Audit request to the employer at least 15 days prior to the Board meeting. Any response to the report should be submitted by the employer at least 5 days prior to the meeting.
- C. Opportunity to address the Board.** Staff and the employer will both be given an opportunity at the meeting to address the Board with respect to Staff's request.
- D. Approval of Special Audit Request.** If the Board approves staff's request for an audit, the employer will be informed of the Board's decision. The audit will then be conducted in accordance with the parameters established by the Board.
- E. Written Report of Special Audit Result.** Upon completion of the audit, staff will provide to the Board a written report of the audit results and the conclusions of the auditor and staff. A copy of the report will be provided to the employer at least 15 days prior to any Board discussion or action. Any response to the report should be submitted by the employer at least 5 days prior to the meeting.
- F. Cost of Special Audit and Corrective Action.** The Board may assess the employer costs of the audit, as well as the costs of any adjustment or correction, if the Board determines that the employer knowingly failed to comply with its legal responsibilities under the new law by (a) reporting compensation to SamCERA that the employer knew or should have known was not compensation earnable as defined in the 1937 Act, or (b) failed to identify to SamCERA the pay period in which compensation earnable was earned. The Board may further determine if other Board action should be taken as a result of the audit.

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

December 5, 2023

Agenda Item 5.2

**TO:** Board of Retirement

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



**SUBJECT:** Report on Quarterly Funding Progress for the Period Ended September 30, 2023

**Recommendation**

Accept the quarterly funding update report for the period ended September 30, 2023.

**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 Q1 FY 23-24 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 quarter, the funded status is projected to drop by 1.2%. This is due largely to the portfolio return being less than assumed for the first quarter and recognizing previous losses. The employer contribution rate is projected to remain steady due to the adoption of the minimum contribution rate policy. The factor that impacts the funding ratio the most is the investment return for the first quarter being lower than expected and recognizing losses from the previous period. Two other factors impacting the projected funded status are inflation and salary increases being higher than expected.

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

**Attachment**

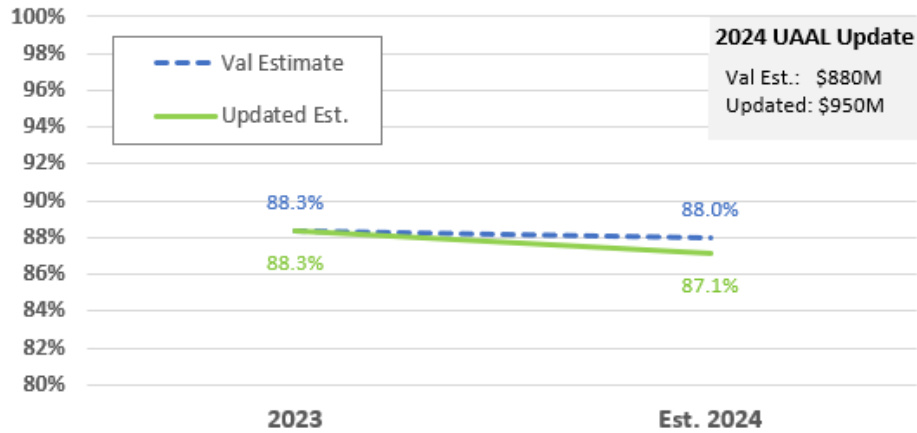
Funding Dashboard

# SamCERA Funding Dashboard

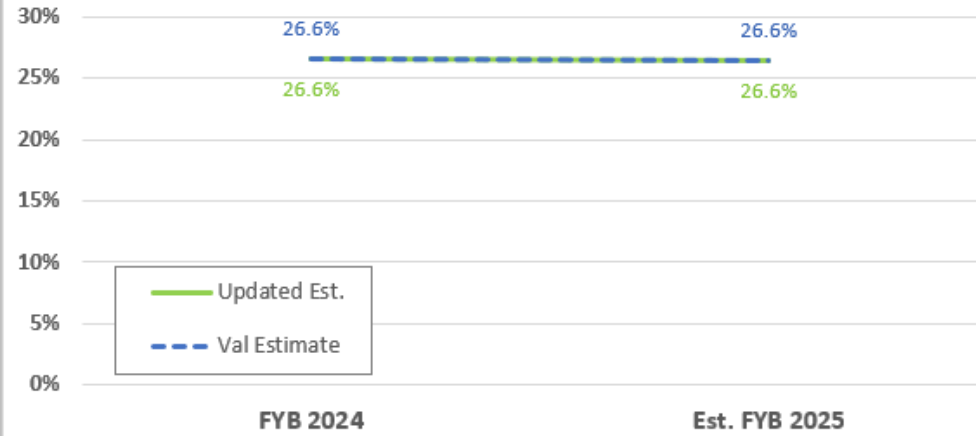
Update Graph Formats

SamCERA Projected Funding for June 30, 2024 Valuation (based on Information as of September 30, 2023)

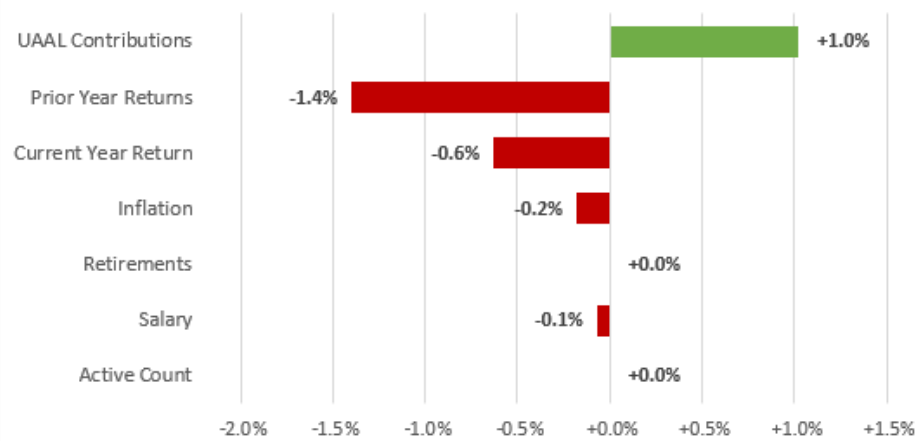
Projected Funded Ratio



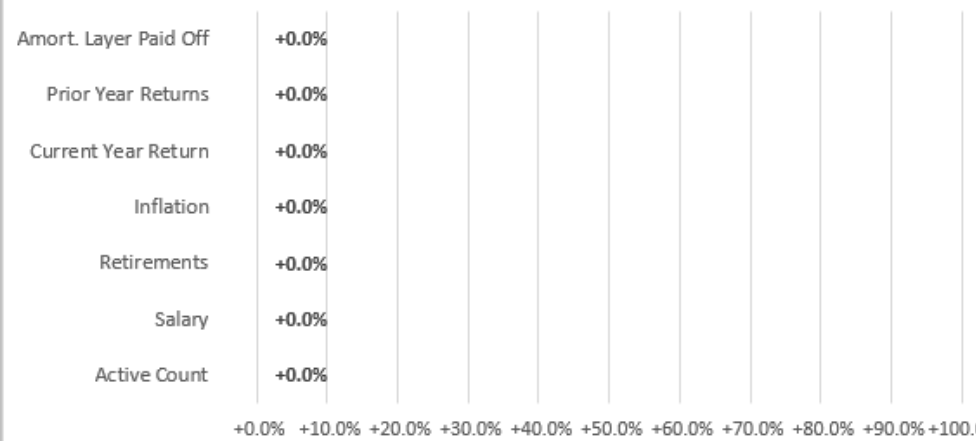
Projected Employer Contribution Rate



Factors Expected to Affect Funded Ratio



Factors Expected to Affect Employer Rate



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	9/30
Est. Return FYTD	-1.90%
Est. Return (1st Quarter)	-1.90%
Serve Retirements to Date	46
Active Member Count	5,334

CPI 2023			
Aug	Oct	Dec	Annual
340.094	341.129	N/A	N/A

Investment Return Assuption	6.25%
Supplemental Contrib (\$mil.)	-

Post-Valuation Data

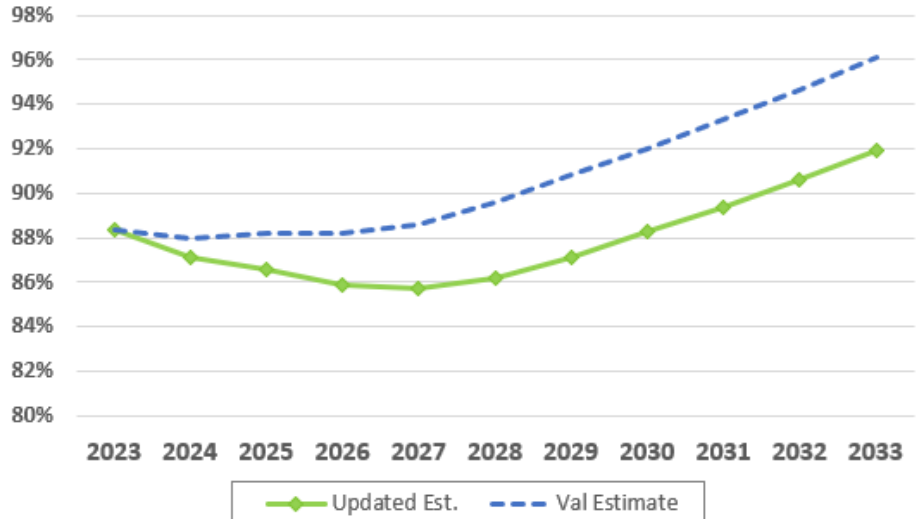
<b>Return</b>	
Fiscal Year - First Quarter	-1.90%
Fiscal Year- Full Year (Est.)	2.65%
<b>Inflation for 2023</b>	
Assumed	2.50%
Est.	3.63%
<b>Service Retirements in Fiscal Year</b>	
Assumed	265
Est.	265
<b>Salary Increase</b>	
Assumed	3.25%
Est.	3.43%
<b>Active Members</b>	
Assumed	5,334
Est.	5,334

# SamCERA Funding Dashboard, cont

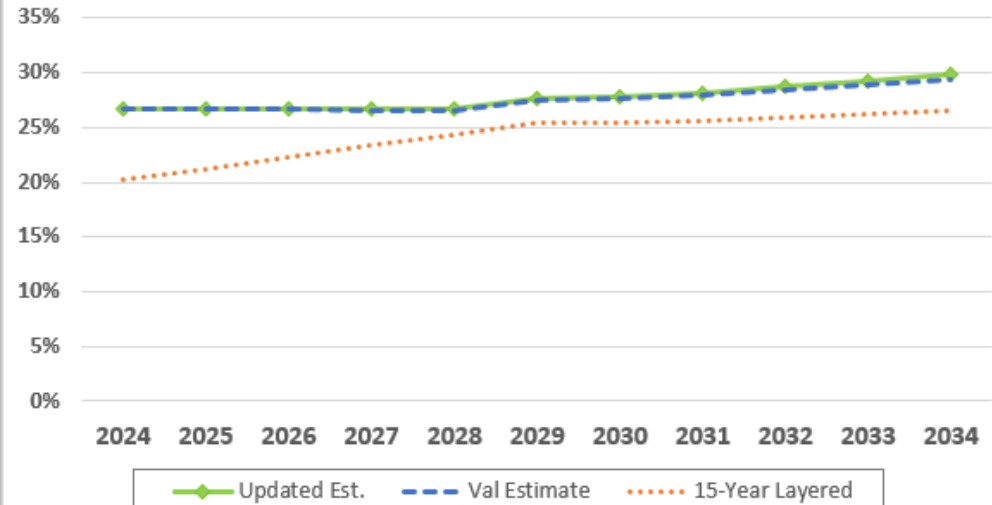
## 10-Year Projection

Show/Hide 15-Year Layered Line

### Projected Funded Ratio



### Projected Employer Contribution Rate



## 10-Year Projection Input

	Return	Ann. CPI
FYE2024	2.65%	3.63%
FYE2025	6.25%	2.75%
FYE2026	6.25%	2.75%
FYE2027	6.25%	2.75%
FYE2028	6.25%	2.75%

All estimates shown are based on the June 30, 2023 actuarial valuation and the post-valuation data shown below. Please see Milliman's June 30, 2023 actuarial valuation for SamCERA for additional caveats and limitations.

These estimates are subject to the variance of a regular projection and actual results will vary from those shown.

Year UAAL is projected to be fully paid off:

Valuation Estimate: **2036**

Updated Estimate: **2039**



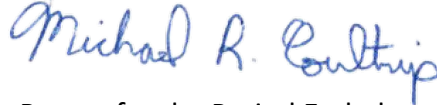
**SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**  
**Board of Retirement**

December 5, 2023

Agenda Item 6.1

**TO:** Board of Retirement

**FROM:** Michael Coultrip, Chief Investment Officer



**SUBJECT:** Preliminary Monthly Portfolio Performance Report for the Period Ended October 31, 2023

**Recommendation**

Accept the preliminary performance report dated October 31, 2023.

**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 net preliminary return for October was -1.8%, bringing the preliminary trailing twelve-month net return ending October 2023 to 3.7%, which is below both our benchmark return of 5.4% and our assumed earnings rate of 6.25%.

SamCERA's estimated market value as of October was \$5.81 billion, while the actuarial funded ratio as of June 30, 2023 was 88.3%.

**Discussion**

Most assets generally were lower in October (similar to September) as investor sentiment waned amid higher interest rates and a realization that the 'higher for longer' interest rate scenario seems to be the predominant theme going forward.

The U.S. equity market (as measured by the S&P 500 Index) was down 2.1%, while small-capitalization stocks were down 6.8%. Developed international equity (as measured by MSCI EAFE) was down 4.1% while emerging markets were down 3.9%.

U.S. economic activity was mixed in October. Third quarter real Gross Domestic Product rose 4.9% at an annualized rate, which was higher than both expectations and last quarter's 2.1% gain. Conversely manufacturing weakened and it continues to be in contraction territory. The labor market slowed a bit and added 150,000 jobs in October, after adding over 300,000 jobs in September. The headline unemployment rate increased to 3.9%. Inflation (as measured by the Consumer Price Index - All Urban Consumers) increased 3.2% for the 12-months ending October.

The general U.S. fixed income market was down 1.6% in October as interest rates rose. The 10-year U.S. Treasury yield was higher by 36 basis points during the month and ended at 4.93% by month-end. High Yield returns were down 1.2% and the Bloomberg Commodity Index was up 0.3%.

**Attachments**

Verus Capital Market Update

Northern Trust Monthly Preliminary Performance Report

A decorative geometric pattern of overlapping triangles in shades of blue and green is overlaid on the left side of the image. A large white triangle is positioned to the left of the main title text.

**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

OCTOBER 2023  
Capital Markets Update

# Market commentary

## U.S. ECONOMICS

- The labor market cooled off slightly as job adds were lower than expected and the unemployment rate ticked higher. The Bureau of Labor Statistics reported a 3.9% unemployment rate, a minor increase in the number of unemployed Americans. However, since the April lows, U.S. unemployment rate has increased by 0.5% and total unemployment has risen by 849,000, suggesting further gradual slowing in the job market in the months ahead.
- The ISM Manufacturing PMI Index reversed course and fell -2.3 to 46.7, once again becoming a concern for market participants. While all components of index fell, the New Orders and Employment sub-indexes fell most, off by -3.7 and -4.4, respectively.
- While leading indicators like consumer sentiment and manufacturing demand are slowing on the margins, a combination of strong September retail sales and Q3 GDP growth reinforced the narrative of a resilient U.S. economy. Annualized third quarter GDP came in at 4.9% and month-over-month September retail sales (+0.7%) continued to beat expectations.

## U.S. EQUITIES

- As third quarter earnings season kicked off, investors have had mixed reactions to reporting. From one angle, the economy continues to show strength and S&P 500 Q3 earnings beat expectations, growing 4.1% year-over-year despite expectations for slightly negative growth (FactSet). However, some companies gave cautious forward guidance, which has tempered expectations.
- The Dow Jones Industrial Average (DJIA) outperformed the S&P 500, falling -1.3% vs. -2.1%, but trails the S&P 500 on a year-to-date basis by -9.3%. DJIA constituents generally fared better than S&P companies as they reported better than expected earnings and outlook.

## U.S. FIXED INCOME

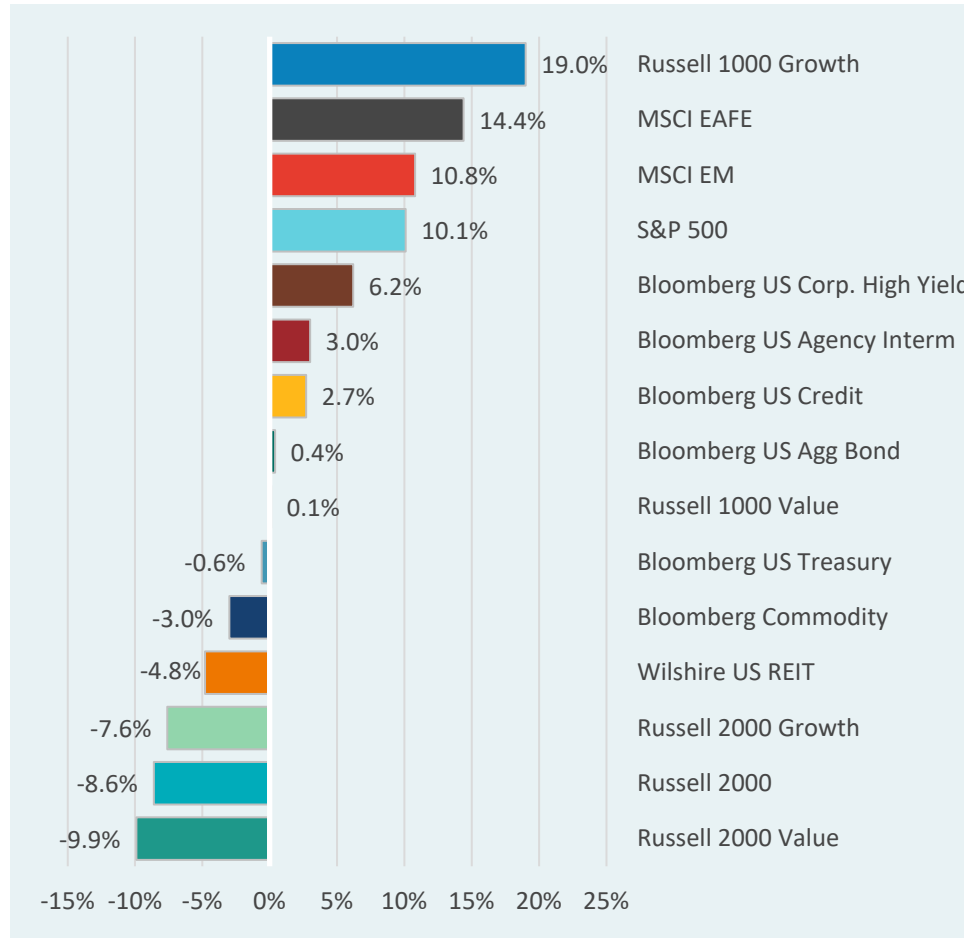
- Volatility in fixed income markets continued due in part to a combination of higher for longer investor sentiment and anticipation of the November 1st FOMC meeting. As narratives shifted in the month, U.S. Treasury yields rose to their highest levels in 15 years. Yields then dropped again following the November 1st message that the Federal Funds rate would remain unchanged, long tenor yields fell sharply.
- Shorter duration bonds were a bright spot amid a slew of negative performance. Yields on the short end of the curve were mostly unchanged as the Bloomberg 1-3 Year U.S. Treasury Index posted a positive return of +0.3%.
- A relatively stagnant short end of the yield curve coupled with a sharply higher long end resulted in a noticeably flatter curve. The 10yr/2yr Treasury yield curve inversion decreased to as little as -13 bps and settled at -19 bps to end the month. Inverted spreads this narrow had not been seen since the yield curve first inverted in July 2022.

## INTERNATIONAL MARKETS

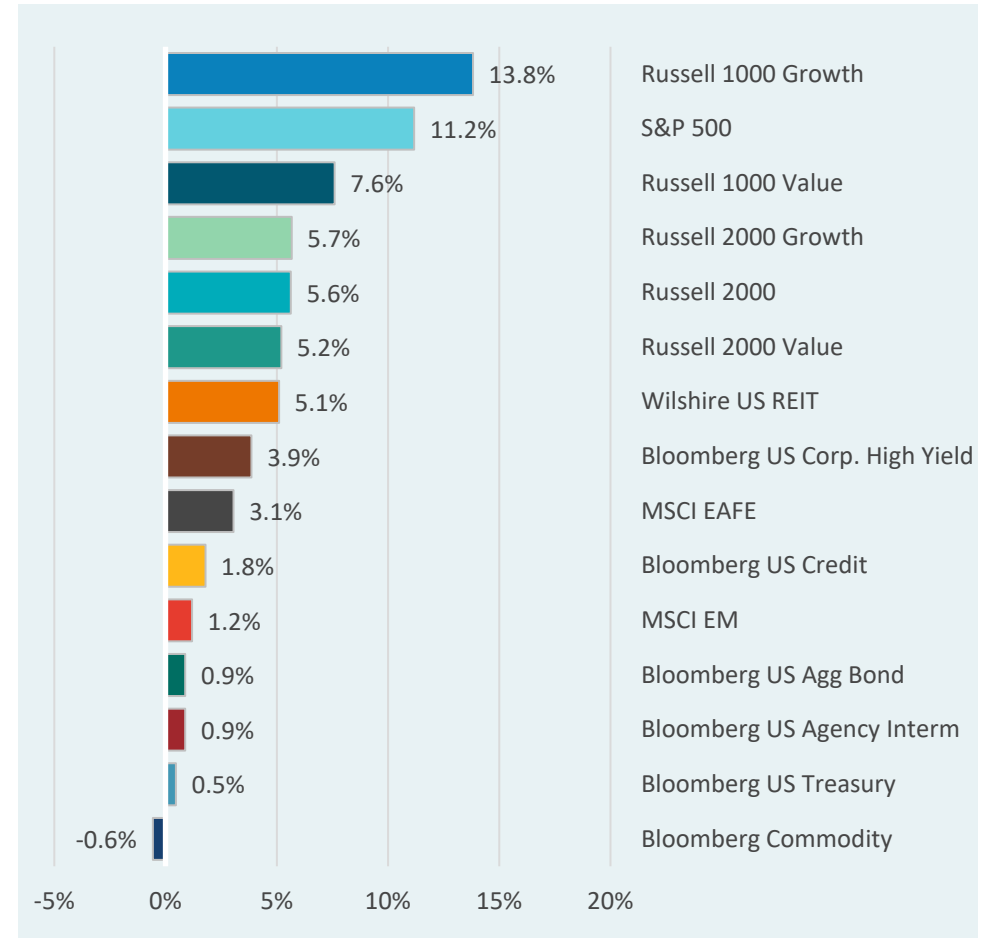
- The China consumer price index print came in at -0.2%, slightly worse than the expected -0.1%. The print is indicative of a deflationary environment, which signals that domestic demand might be struggling to recover. Investors await sales figures from the Singles Day Shopping Festival – a multi-week period of promotions and sales across online platforms – for additional insight into the strength of the Chinese consumer.
- The Bank of Japan left short term rates unchanged at -0.1% but announced a more flexible yield curve control policy. This means the yield on 10-year Japanese government bonds (JGB) will have room to rise as high as 1% without intervention. Following the announcement, 10-Year JGB yields rose to 0.9%.

# Major asset class returns

ONE YEAR ENDING OCTOBER



TEN YEARS ENDING OCTOBER



\*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 10/31/23

Source: Morningstar, as of 10/31/23

# U.S. large cap equities

- A -2.1% return in October marked three consecutive months of decline for the S&P 500 index, down -8.3% since July 31<sup>st</sup>. Timid forward guidance from companies combined with a growing *higher for longer* interest rate narrative contributed to the losses.
- Despite 81% of companies reporting a positive earnings per share surprise, the market reaction to earnings appeared unusually pessimistic (FactSet). Earnings growth year-over-year was 4.1%, with almost all constituents done reporting.
- 10 out of 11 S&P 500 sectors declined in September. Utilities (+1.3%) outperformed while a sharp decline in oil prices contributed to Energy (-6.0%) being the worst performing sector, followed by Consumer Discretionary (-4.5%) and Health Care (-3.2%).
- U.S. equity volatility reached its highest intramonth level since March, peaking at 23.1, alongside climbing U.S. Treasury yields and the kickoff of earnings season. Despite the intramonth move, the VIX Index ended October relatively flat at 18.1.

**S&P 500 PRICE INDEX**



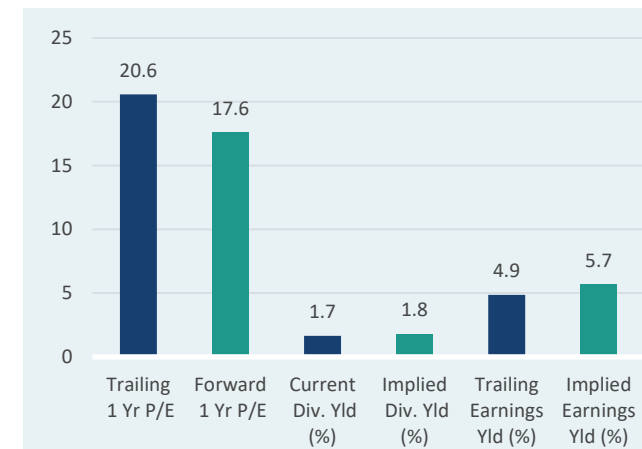
Source: Bloomberg, as of 10/31/23

**IMPLIED VOLATILITY (VIX INDEX)**



Source: Cboe, as 10/31/23

**S&P 500 VALUATION SNAPSHOT**

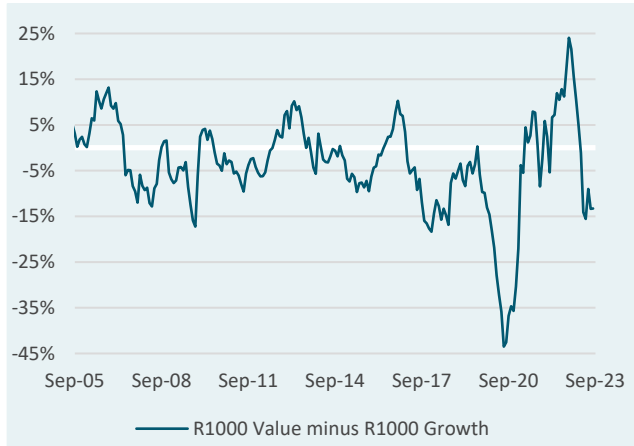


Source: Bloomberg, as of 10/31/23

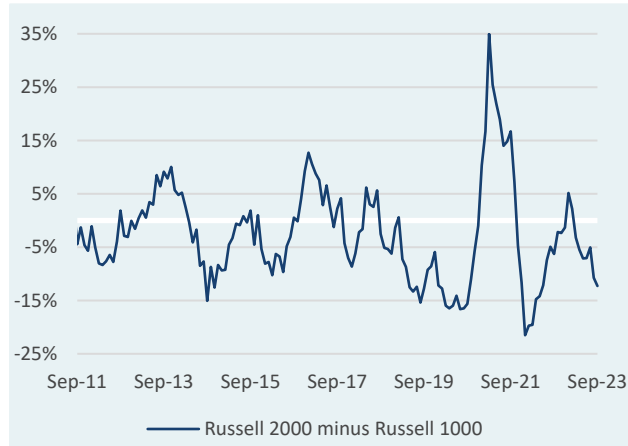
# Domestic equity size and style

- Although all size and style categories posted declines, small-cap equities (Russell 2000 -6.8%) were hit the hardest, underperforming large-cap by 4.4% (Russell 1000 -2.4%). Higher rates are expected to have a greater impact on small-cap companies, which have an outsized portion of debt maturing sooner.
- Large-cap growth (Russell 1000 Growth -1.4%) outperformed large-cap value (Russell 1000 Value -3.5%). Performance was driven in part by mega-cap companies such as Amazon and Microsoft beating on revenue and earnings, as well as providing stronger forward guidance.
- Performance between value and growth saw an opposite trend in the small-cap space, where riskier small-cap growth stocks (Russell 2000 Growth -7.7%) underperformed small-cap value (Russell 2000 Value -6.0%).
- Following the sharp declines in small-cap amid debt maturity concerns, the Russell 2000 is trading at 17.7x forward earnings, a -25.3% discount to the 10-year average. In comparison, the S&P 500 is trading at 17.3x earnings, just a -1.1% discount to the 10-year average.

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



**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**



**1-YEAR SIZE & STYLE PERFORMANCE**

	Value	Core	Growth
Large Cap	0.1%	9.5%	19.0%
Mid Cap	-3.6%	-1.0%	3.3%
Small Cap	-9.9%	-8.6%	-7.6%

Source: FTSE, Bloomberg, as of 10/31/23

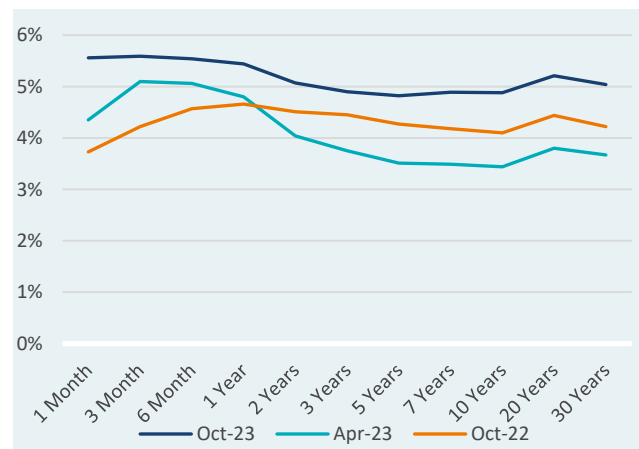
Source: FTSE, Bloomberg, as of 10/31/23

Source: FTSE, Bloomberg, as of 10/31/23

# Fixed income

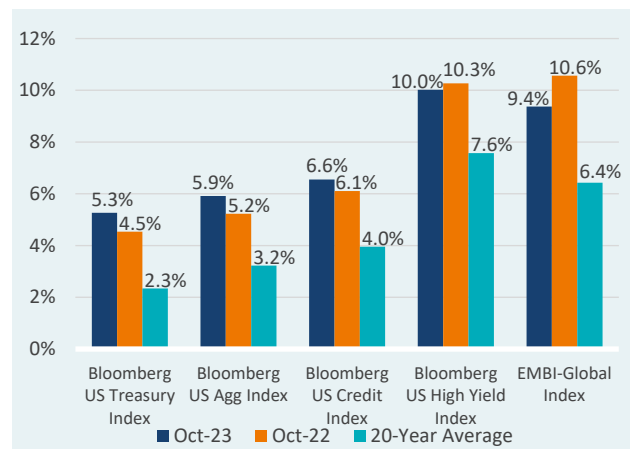
- Higher for longer rate expectations continued to influence Treasury yield movements – which were most volatile on the long end. 10- and 30-year Treasury yields rose +29 and +31 bps to end the month at 4.88% and 5.06%, respectively.
- The sharp rise in yields translated to long-dated Treasuries being the worst performers of the fixed income complex (Bloomberg U.S. Treasury Long -4.9%), amidst higher government borrowing and continued *quantitative tightening* as the Federal Reserve continues to shrink the size of its balance sheet.
- High Yield and Bank Loan spreads increased 39 bps and 30 bps to 442 bps and 544 bps, respectively. Despite this move, the Bloomberg U.S. Corporate High Yield Index (-1.2%) and CS Leveraged Loan Index (+0.0%) outperformed the Bloomberg U.S. Aggregate Index (-1.6%).
- Mortgage-Backed Securities (Bloomberg U.S. MBS Index -2.7%) also underperformed the Bloomberg U.S. Aggregate Index in October. Underperformance comes as 30-year Mortgage rates surged to 7.8%. This has been partly driven by high treasury rates, as well as the fed reducing their portfolio of Mortgage-Backed Securities.

U.S. TREASURY YIELD CURVE



Source: Bloomberg, as of 10/31/23

NOMINAL YIELDS



Source: Morningstar, as of 10/31/2023

U.S. TREASURY IMPLIED VOL (“MOVE” INDEX)



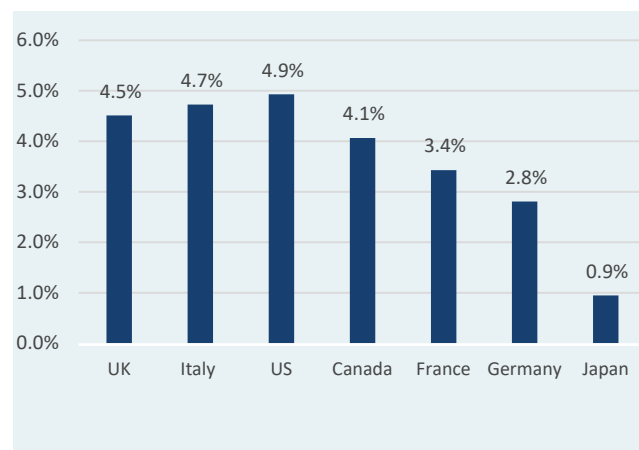
Source: Bloomberg, as of 10/31/23



# Global markets

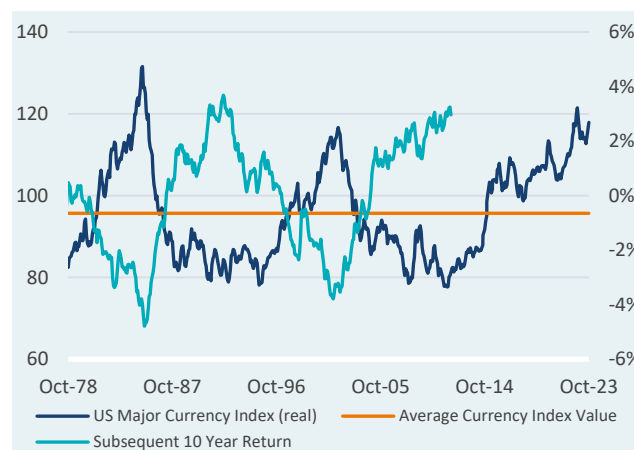
- International equities (MSCI ACWI ex-US -4.1%) underperformed U.S. equities. While performance was negative across all regions, the losses were primarily driven by the MSCI Japan Index (-4.5%) and the MSCI EM Latin America Index (-4.8%).
- Japanese equities posted a difficult month amid uncertainty surrounding potential changes in the Bank of Japan (BOJ) monetary policy. Late in the month, the BOJ announced it would allow long-term interest rates to rise above 1%. This could help reverse the weakening Yen, as Japanese and American interest rates have continued to diverge over the last year.
- European equities (MSCI Euro -3.0%) fell with a poor economic outlook in focus. While inflation persists, the ECB opted not to raise rates in October. Rates are now expected to hold steady through the first half of 2024. At the same time, Eurozone GDP decreased 0.1% in Q3. PMI also fell deeper into contractionary territory (46.5), its lowest level since November 2020.
- Chinese stocks also fell (MSCI China -4.3%) as the U.S. announced a ban on some AI chip exports. While Q3 GDP came in at 4.9% YoY, the outlook is poor with an ongoing real estate crisis and slowing manufacturing.

## GLOBAL SOVEREIGN 10-YEAR YIELDS



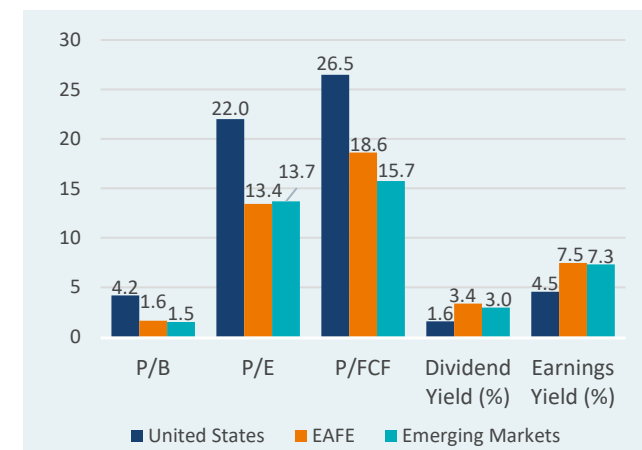
Source: Bloomberg, as of 10/31/23

## U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 10/31/23

## MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 10/31/23

# Commodities

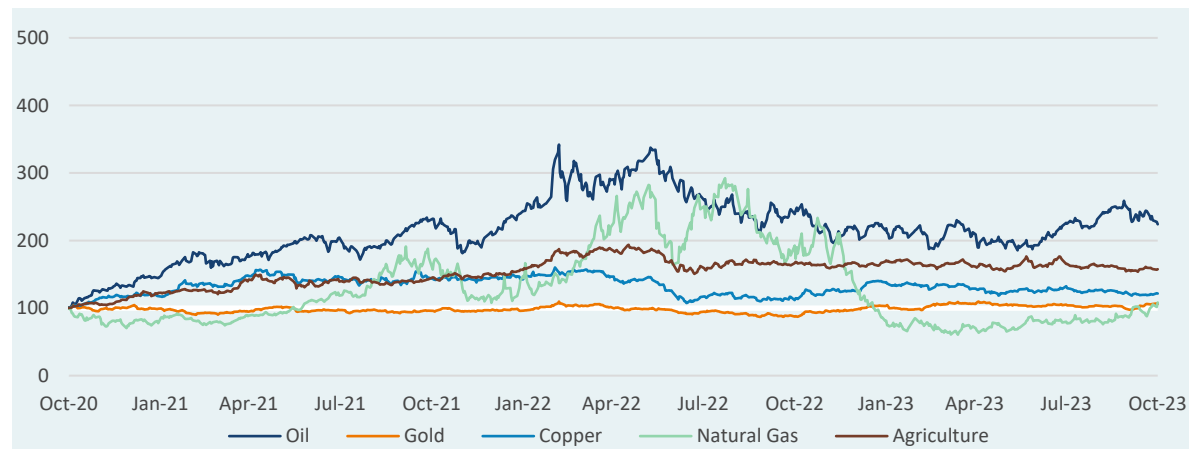
- The Bloomberg Commodity Index (+0.3%) fared better than equities and fixed income indexes. Commodity sub-indexes posted mixed results, but strong performance from precious metals and softs helped mitigate the steeper losses seen in the petroleum (-7.0%) and energy (-2.7%) sub-indexes.
- The Bloomberg Precious Metals sub-index gained +6.3%. Performance was largely driven by a rally in gold (+6.9%), which finished on a high note after a bleak start to the month. Silver (+2.2%) also posted modest gains as investors moved away from higher risk assets.
- Although energy and petroleum faced headwinds, natural gas prices soared +22.1%. Prices rallied on updated expectations for colder fall and winter weather while increased overseas demand pushed exports higher throughout the month. The rally helped pull back year to date losses to -20.1%.
- WTI Crude (-10.8%) sharply reversed course, erasing September’s gains and falling to its lowest in two months. Investors now anticipate weaker demand than was previously expected which lessened the impact of Russia and Saudi Arabia’s extension of supply cuts through year end.

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	0.3	0.3	(3.2)	(3.0)	15.8	6.7	(0.6)
Bloomberg Agriculture	2.3	2.3	(1.9)	(0.6)	18.8	10.8	0.3
Bloomberg Energy	(2.7)	(2.7)	(6.9)	(18.9)	25.6	(0.6)	(7.1)
Bloomberg Grains	1.0	1.0	(12.9)	(14.1)	13.4	8.1	(2.0)
Bloomberg Industrial Metals	(4.1)	(4.1)	(13.0)	1.9	7.1	5.9	1.6
Bloomberg Livestock	(1.2)	(1.2)	6.5	8.7	8.8	(1.9)	(2.5)
Bloomberg Petroleum	(7.0)	(7.0)	9.8	4.5	51.8	8.4	(2.7)
Bloomberg Precious Metals	6.3	6.3	5.6	20.9	0.7	9.1	2.3
Bloomberg Softs	5.1	5.1	25.0	34.6	25.0	11.0	1.0

Source: Morningstar, as of 10/31/23

## COMMODITY PERFORMANCE



Source: Bloomberg, as of 10/31/23

# Appendix

# Periodic table of returns

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	5-Year	10-Year
Large Cap Growth	56.3	26.0	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	23.2	14.2	13.8
Large Cap Equity	48.5	22.2	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	10.3	10.7	10.9
International Equity	47.3	20.7	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	4.1	6.7	7.6
Small Cap Growth	46.0	18.3	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	2.7	6.6	7.4
60/40 Global Portfolio	39.2	16.5	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	2.7	5.3	5.7
Cash	30.0	14.5	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	1.8	4.1	5.6
Hedge Funds of Funds	29.9	14.3	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	-1.8	4.0	5.2
Small Cap Equity	29.7	12.9	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	-2.1	3.8	4.0
Emerging Markets Equity	25.2	11.4	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	-2.8	3.3	3.1
Large Cap Value	23.9	9.1	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	-2.9	3.3	3.0
Small Cap Value	11.6	6.9	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	-3.2	2.7	1.2
US Bonds	9.0	6.3	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	-4.5	1.7	1.1
Commodities	4.1	4.3	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	-5.1	1.6	0.9
Real Estate	1.0	1.4	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	-6.5	-0.1	-0.6

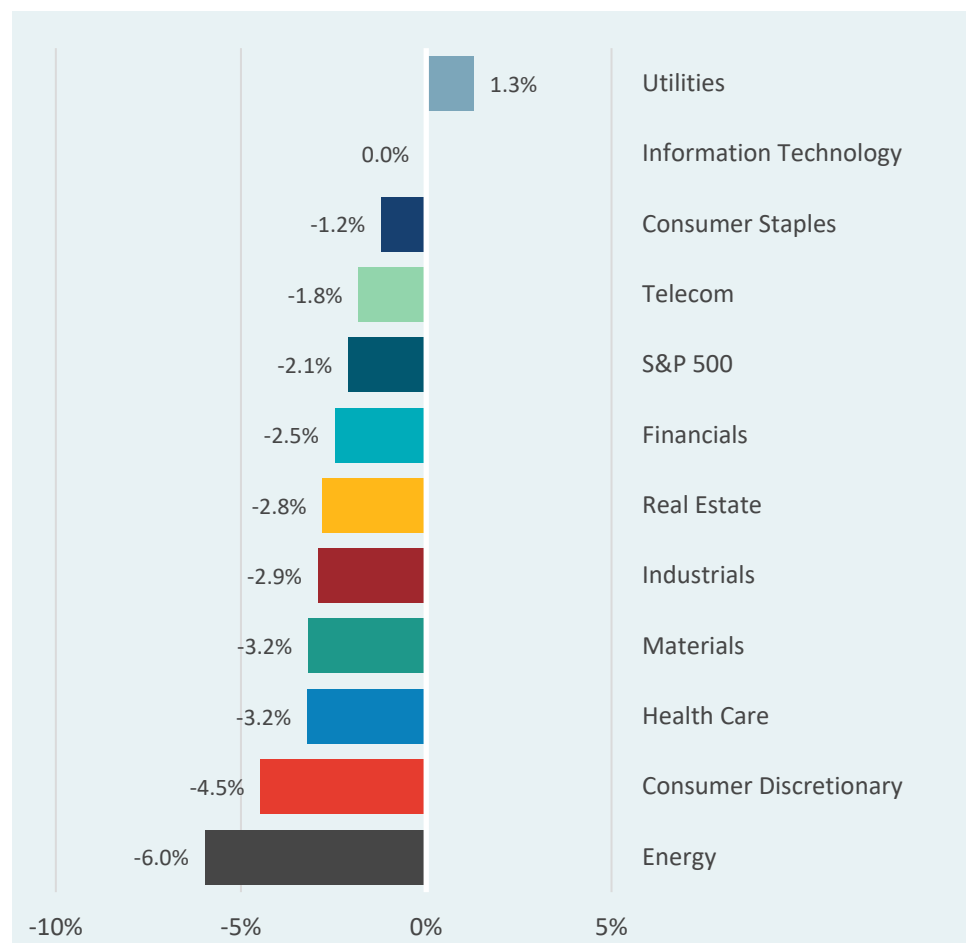
BEST  
↑  
↓  
WORST

 Large Cap Equity	 Small Cap Growth	 Commodities
 Large Cap Value	 International Equity	 Real Estate
 Large Cap Growth	 Emerging Markets Equity	 Hedge Funds of Funds
 Small Cap Equity	 US Bonds	 60% MSCI ACWI/40% Bloomberg Global Bond
 Small Cap Value	 Cash	

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, Russell 2000, Russell 2000 Value, Russell 2000 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 9/30/23.

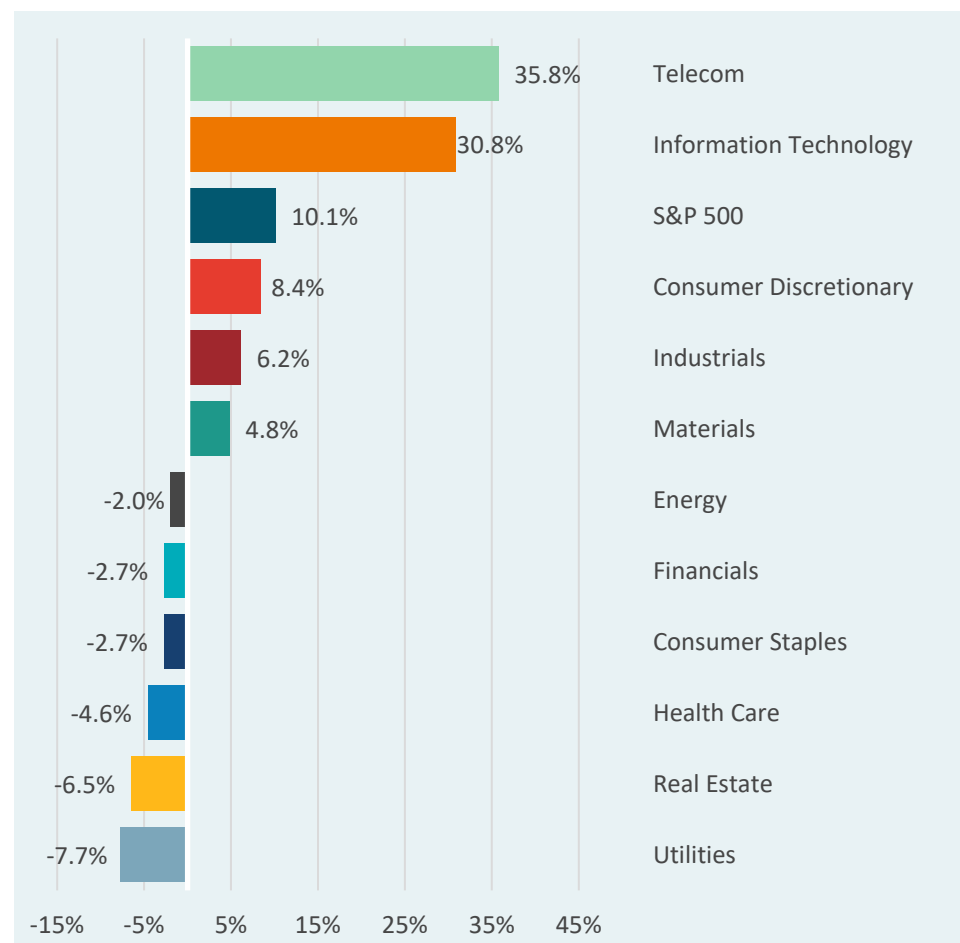
# S&P 500 sector returns

QTD



Source: Morningstar, as of 10/31/23

ONE YEAR ENDING OCTOBER



Source: Morningstar, as of 10/31/23

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(2.1)	(2.1)	10.7	10.1	10.4	11.0	11.2
S&P 500 Equal Weighted	(4.1)	(4.1)	(2.4)	(0.7)	10.1	8.7	9.3
DJ Industrial Average	(1.3)	(1.3)	1.4	3.2	9.8	8.0	10.3
Russell Top 200	(1.6)	(1.6)	14.4	13.2	10.7	12.0	11.9
Russell 1000	(2.4)	(2.4)	10.3	9.5	9.5	10.7	10.9
Russell 2000	(6.8)	(6.8)	(4.5)	(8.6)	3.9	3.3	5.6
Russell 3000	(2.7)	(2.7)	9.4	8.4	9.2	10.2	10.5
Russell Mid Cap	(5.0)	(5.0)	(1.3)	(1.0)	6.0	7.1	8.1
<b>Style Index</b>							
Russell 1000 Growth	(1.4)	(1.4)	23.2	19.0	8.7	14.2	13.8
Russell 1000 Value	(3.5)	(3.5)	(1.8)	0.1	10.2	6.6	7.6
Russell 2000 Growth	(7.7)	(7.7)	(2.9)	(7.6)	(1.8)	2.7	5.7
Russell 2000 Value	(6.0)	(6.0)	(6.5)	(9.9)	9.7	3.3	5.2

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI ACWI	(3.0)	(3.0)	6.7	10.5	6.7	7.5	6.8
MSCI ACWI ex US	(4.1)	(4.1)	1.0	12.1	3.0	3.5	2.5
MSCI EAFE	(4.1)	(4.1)	2.7	14.4	5.7	4.1	3.1
MSCI EM	(3.9)	(3.9)	(2.1)	10.8	(3.7)	1.6	1.2
MSCI EAFE Small Cap	(5.9)	(5.9)	(4.2)	6.5	0.3	1.6	3.4
<b>Style Index</b>							
MSCI EAFE Growth	(3.7)	(3.7)	0.5	10.8	0.5	4.5	3.8
MSCI EAFE Value	(4.4)	(4.4)	5.1	18.1	11.0	3.3	2.1
<b>Regional Index</b>							
MSCI UK	(4.2)	(4.2)	2.3	12.9	12.4	3.4	1.8
MSCI Japan	(4.5)	(4.5)	6.2	16.8	1.8	2.9	3.9
MSCI Euro	(3.0)	(3.0)	7.6	21.6	8.7	4.9	2.9
MSCI EM Asia	(4.0)	(4.0)	(3.0)	14.2	(5.8)	2.5	2.9
MSCI EM Latin American	(4.8)	(4.8)	7.5	3.7	13.6	1.1	(0.7)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
Bloomberg US TIPS	(0.7)	(0.7)	(1.5)	(0.7)	(2.0)	2.3	1.6
Bloomberg US Treasury Bills	0.5	0.5	4.1	4.9	1.8	1.8	1.2
Bloomberg US Agg Bond	(1.6)	(1.6)	(2.8)	0.4	(5.6)	(0.1)	0.9
Bloomberg US Universal	(1.5)	(1.5)	(2.1)	1.2	(5.0)	0.2	1.2
<b>Duration</b>							
Bloomberg US Treasury 1-3 Yr	0.3	0.3	2.0	2.9	(0.8)	1.1	0.8
Bloomberg US Treasury Long	(4.9)	(4.9)	(13.1)	(8.5)	(16.3)	(3.2)	0.1
Bloomberg US Treasury	(1.2)	(1.2)	(2.7)	(0.6)	(5.9)	(0.2)	0.5
<b>Issuer</b>							
Bloomberg US MBS	(2.1)	(2.1)	(4.3)	(0.8)	(5.7)	(1.1)	0.3
Bloomberg US Corp. High Yield	(1.2)	(1.2)	4.6	6.2	1.2	3.1	3.9
Bloomberg US Agency Interm	0.0	0.0	1.7	3.0	(2.0)	0.7	0.9
Bloomberg US Credit	(1.8)	(1.8)	(1.7)	2.7	(5.3)	0.8	1.8

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Commodity	0.3	0.3	(3.2)	(3.0)	15.8	6.7	(0.6)
Wilshire US REIT	(4.5)	(4.5)	(4.7)	(4.8)	5.0	2.5	5.1
CS Leveraged Loans	0.0	0.0	9.9	11.6	5.9	4.3	4.3
S&P Global Infrastructure	(3.0)	(3.0)	(6.6)	(1.3)	6.6	4.3	4.4
Alerian MLP	(0.3)	(0.3)	19.8	15.7	41.2	8.1	1.4
<b>Regional Index</b>							
JPM EMBI Global Div	(1.4)	(1.4)	0.4	8.4	(5.0)	(0.2)	2.1
JPM GBI-EM Global Div	(0.5)	(0.5)	3.7	13.5	(3.0)	0.3	(1.2)
<b>Hedge Funds</b>							
HFRI Composite	(1.4)	(1.4)	2.4	3.3	6.2	5.3	4.2
HFRI FOF Composite	(1.0)	(1.0)	1.8	3.1	3.3	3.8	3.0
<b>Currency (Spot)</b>							
Euro	(0.6)	(0.6)	0.9	5.4	(2.1)	(1.0)	(2.8)
Pound Sterling	(0.2)	(0.2)	(1.0)	7.0	(3.2)	(1.4)	(2.5)
Yen	(1.5)	(1.5)	(12.9)	(1.9)	(11.6)	(5.7)	(4.3)

Source: Morningstar, HFRI, as of 10/31/23.

# 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	(6.4)	22.9	16.0	13.9
<i>MSCI World Index (PME)</i>	(6.7)	17.5	8.3	9.2
Global Private Equity Direct Funds <sup>1</sup>	(5.6)	23.6	17.1	15.9
<i>MSCI World Index (PME)</i>	(6.1)	15.6	8.0	9.0
U.S. Private Equity Direct Funds <sup>1</sup>	(6.1)	25.9	19.2	17.3
<i>Russell 3000 Index (PME)</i>	(7.7)	17.9	10.4	12.0
Europe Private Equity Direct Funds <sup>1</sup>	(2.4)	22.7	15.7	14.7
<i>MSCI Europe Index (PME)</i>	2.7	13.8	5.0	5.9
Asia Private Equity Direct Funds <sup>1,4</sup>	(4.2)	14.1	10.1	12.7
<i>MSCI AC Asia Pacific Index (PME)</i>	(7.3)	7.4	1.2	4.0

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt <sup>2,4</sup>	4.9	20.0	12.6	11.5
<i>Morningstar LSTA U.S. Leveraged Loan 100 Index (PME)</i>	2.6	6.2	3.5	3.5

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	(0.7)	14.6	10.3	12.4
<i>FTSE NAREIT Equity REIT Index (PME)</i>	(18.4)	13.6	6.9	6.8

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources <sup>3,4</sup>	8.5	21.6	4.9	3.5
<i>S&amp;P Global Natural Resources Index (PME)</i>	(7.0)	28.9	7.1	5.7
Global Infrastructure <sup>4</sup>	6.7	13.4	10.3	11.1
<i>S&amp;P Global Infrastructure Index (PME)</i>	(2.8)	14.6	6.0	6.3

Source: Pooled IRRs are from Thompson Reuters CJA and Time-weighted Returns are from Investment Metrics, as of March 31<sup>st</sup>, 2023. All returns in U.S. dollars.

\* Includes Buyout, Growth Equity and Venture Capital.

\*\* Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

\*\*\* Includes Private Equity Energy, Timber and Upstream Energy & Royalties.

# Notices & disclosures

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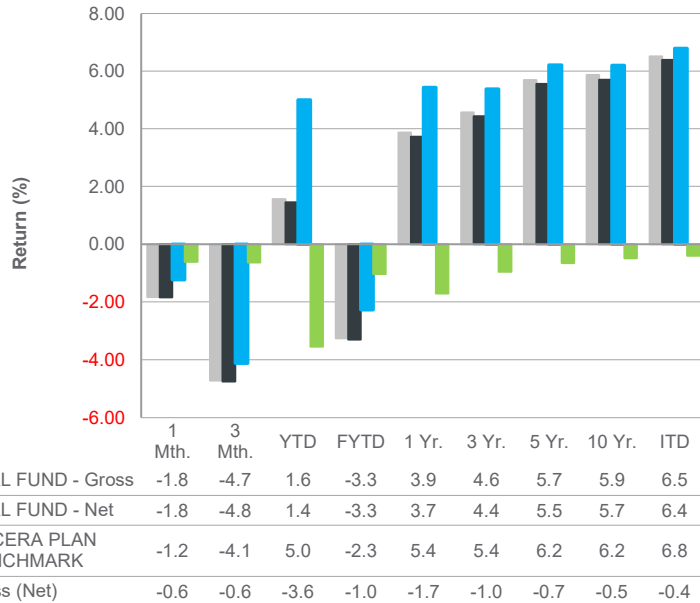


# San Mateo County Composite Return Summary

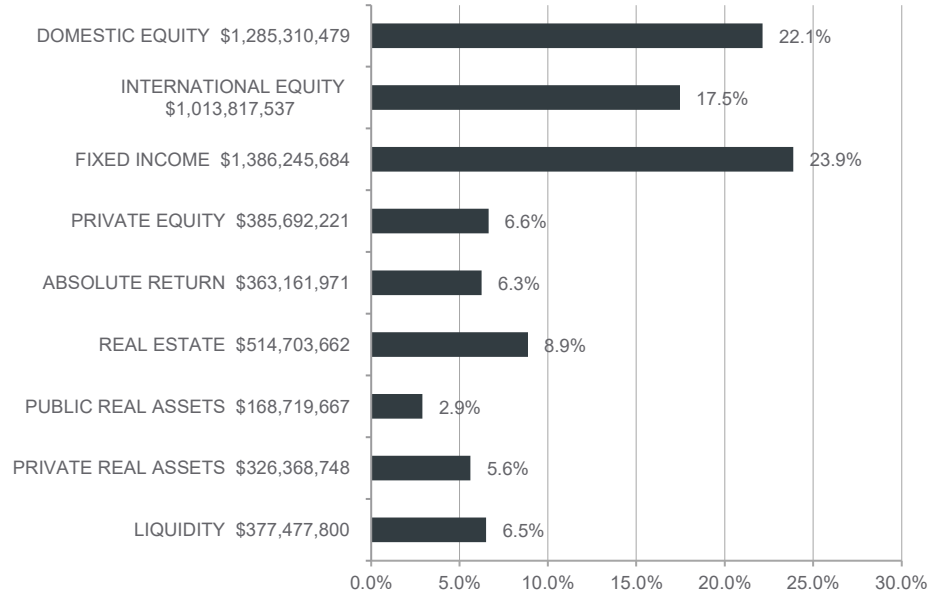
October 31, 2023



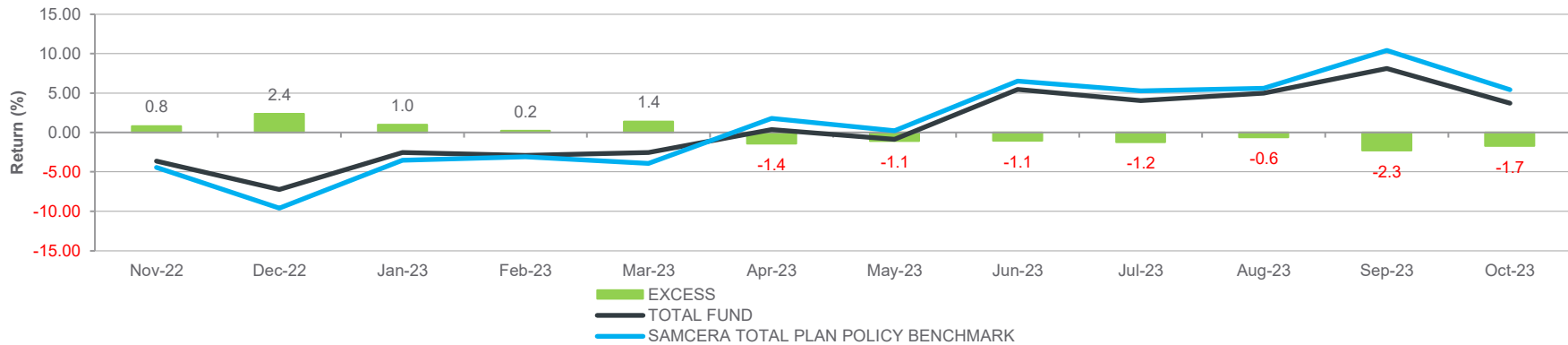
**Total Fund Performance**



**Asset Allocation**

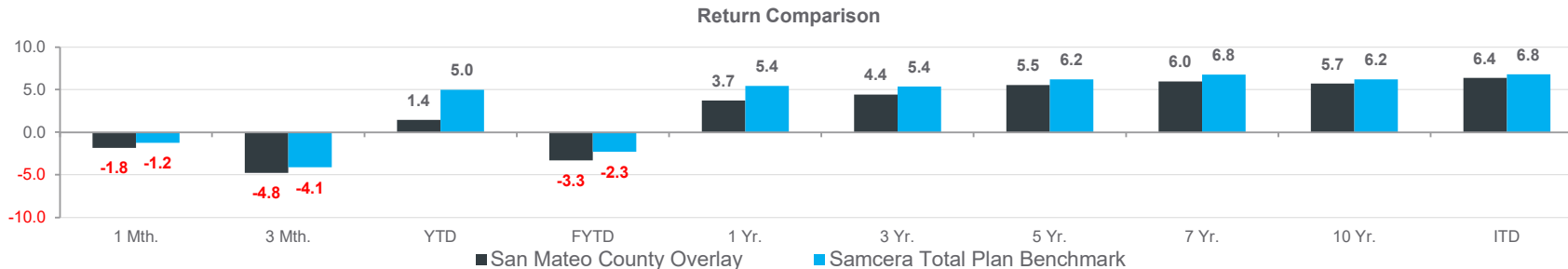


**Rolling Month End Annual Returns**



# San Mateo County Composite Return Summary

October 31, 2023



Composite Returns (Net of Manager Fees)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
San Mateo County Overlay	5,804,929,454	-1.8	-4.8	1.4	-3.3	3.7	4.4	5.5	6.0	5.7	6.4
Samcera Total Plan Benchmark		-1.2	-4.1	5.0	-2.3	5.4	5.4	6.2	6.8	6.2	6.8
Excess		-0.6	-0.6	-3.6	-1.0	-1.7	-1.0	-0.7	-0.8	-0.5	-0.4
San Mateo Ex-Clifton Overlay	5,796,973,197	-1.8	-4.7	1.5	-3.3	3.6	4.4	5.5	5.9	5.6	6.3
Samcera Total Plan Benchmark		-1.2	-4.1	5.0	-2.3	5.4	5.4	6.2	6.8	6.2	6.8
Excess		-0.6	-0.6	-3.5	-1.0	-1.9	-0.9	-0.7	-0.9	-0.6	-0.5
Total Equity	2,299,128,016	-3.3	-9.9	3.8	-6.8	8.3	6.4	7.1	8.2	7.0	7.5
Samcera Total Equity Benchmark		-3.2	-9.1	6.7	-5.8	9.9	7.7	8.0	9.2	8.1	8.1
Excess		-0.1	-0.8	-2.9	-1.0	-1.6	-1.3	-0.9	-1.0	-1.1	-0.7
Fixed Income	1,386,245,684	-1.4	-3.3	-0.1	-3.0	2.5	-2.4	1.1	1.6	2.2	4.6
Samcera Fixed Income Benchmark		-1.5	-4.1	-0.9	-3.8	1.7	-3.4	1.1	0.9	1.7	4.1
Excess		0.1	0.8	0.7	0.8	0.7	1.0	0.0	0.7	0.6	0.5
Alternatives	748,854,192	-0.5	2.6	3.9	2.2	1.1	6.1	11.0	9.6	8.1	1.0
Samcera Alternatives Benchmark		2.4	7.2	19.7	8.3	13.3	11.1	10.4	11.3	9.2	8.5
Excess		-2.8	-4.6	-15.8	-6.2	-12.2	-5.0	0.6	-1.6	-1.1	-7.5
Inflation Hedge	1,009,792,077	-1.1	-1.8	-4.1	-1.4	-2.8	8.9	4.1	4.3	--	5.2
SamCERA Inflation Hedge Index		0.6	-2.0	-0.6	-0.7	-5.1	10.1	6.7	6.5	--	--
Excess		-1.6	0.2	-3.5	-0.6	2.3	-1.2	-2.6	-2.2	--	--
Liquidity	377,477,800	0.5	1.2	3.7	1.7	4.7	--	--	--	--	3.6
Liquidity Composite Benchmark		0.3	0.8	2.5	1.2	3.5	--	--	--	--	2.0
Excess		0.1	0.4	1.2	0.5	1.2	--	--	--	--	1.5



**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Total Equity	2,299,128,016	-3.3	-9.9	3.8	-6.8	8.3	6.4	7.1	8.2	7.0	7.5
Samcera Total Equity Benchmark		-3.2	-9.1	6.7	-5.8	9.9	7.7	8.0	9.2	8.1	8.1
Excess		-0.1	-0.8	-2.9	-1.0	-1.6	-1.3	-0.9	-1.0	-1.1	-0.7
Domestic Equity	1,285,310,479	-2.8	-9.0	4.7	-6.0	4.7	9.3	9.1	10.8	9.6	8.7
Samcera Dom. Equity Benchmark		-2.7	-9.1	9.4	-5.8	8.4	9.2	10.2	11.6	10.4	9.2
Excess		-0.1	0.1	-4.7	-0.1	-3.7	0.1	-1.1	-0.8	-0.7	-0.5
Large Cap Equity	1,169,731,514	-2.4	-8.5	5.0	-5.7	5.5	8.9	9.4	11.1	10.3	9.3
Russell 1000		-2.4	-8.6	10.3	-5.5	9.5	9.5	10.7	11.9	10.9	9.8
Excess		-0.0	0.1	-5.3	-0.2	-4.0	-0.6	-1.3	-0.8	-0.6	-0.5
Blackrock Russell 1000	777,926,480	-2.4	-8.6	10.3	-5.5	9.5	9.6	10.8	--	--	11.2
Russell 1000		-2.4	-8.6	10.3	-5.5	9.5	9.5	10.7	--	--	11.1
Excess		0.0	-0.0	0.0	-0.0	0.0	0.0	0.1	--	--	0.1
DE Shaw Commingled Fund	177,573,169	-3.0	-7.5	6.8	-4.9	5.0	9.0	9.2	10.8	--	9.9
Russell 1000		-2.4	-8.6	10.3	-5.5	9.5	9.5	10.7	11.9	--	10.2
Excess		-0.6	1.2	-3.5	0.5	-4.5	-0.5	-1.5	-1.2	--	-0.2
Panagora Defuseq -SL	214,231,865	-2.1	-8.9	-5.7	-7.1	-3.1	7.2	--	--	--	9.3
Russell 1000		-2.4	-8.6	10.3	-5.5	9.5	9.5	--	--	--	13.0
Excess		0.4	-0.3	-16.0	-1.6	-12.6	-2.3	--	--	--	-3.7
Small Cap Equity	105,986,585	-6.7	-13.9	0.6	-8.7	-3.8	11.3	4.1	6.6	4.7	5.9
Russell 2000		-6.8	-16.7	-4.5	-11.6	-8.6	3.9	3.3	6.3	5.6	6.9
Excess		0.1	2.8	5.0	2.9	4.8	7.4	0.8	0.4	-0.9	-1.0
QMA US Small Cap	105,986,585	-6.7	-13.9	0.6	-8.7	-3.8	11.3	4.1	6.6	--	6.2
Russell 2000		-6.8	-16.7	-4.5	-11.6	-8.6	3.9	3.3	6.3	--	5.6
Excess		0.1	2.8	5.0	2.9	4.8	7.4	0.8	0.4	--	0.6
Domestic Equity Overlay	9,592,380	0.8	-14.5	3.4	-12.7	2.4	97.2	--	--	--	91.0
ICE BofAML US 3-Month Treasury Bill		0.4	1.4	4.1	1.8	4.8	1.8	--	--	--	1.6
Excess		0.4	-15.8	-0.7	-14.5	-2.4	95.4	--	--	--	89.4
International Equity	1,013,817,537	-3.9	-10.9	2.7	-7.8	13.2	3.3	4.7	5.1	3.5	5.0
SamCERA Custom Hedge Intl		-3.9	-9.1	3.5	-5.8	11.6	5.8	5.2	5.6	3.5	4.8
Excess		-0.1	-1.8	-0.7	-2.0	1.6	-2.5	-0.5	-0.5	-0.1	0.2



**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



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	1,007,472,937	-4.0	-10.9	2.9	-7.7	14.9	1.6	4.3	4.9	3.4	4.1
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excess		-4.0	-10.9	2.9	-7.7	14.9	1.6	4.3	4.9	3.4	4.1
Dev Mrkts Equity Curr Hedge	17,422,966	--	--	--	--	--	--	--	--	--	--
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Excess		--	--	--	--	--	--	--	--	--	--
Dev Mrkts Equity Ex Curr Hedge	990,049,971	-4.4	-12.5	0.4	-9.1	12.2	0.8	3.8	4.5	3.2	4.0
MS AC WldxUS IMI Nt		-4.3	-11.4	0.7	-7.7	11.6	3.0	3.5	4.3	2.7	4.3
Excess		-0.1	-1.2	-0.3	-1.4	0.6	-2.2	0.4	0.2	0.5	-0.3
Baillie Gifford	229,512,312	-5.5	-18.3	-6.6	-15.0	4.7	-7.6	2.8	3.4	2.9	4.7
MSCI ACWI ex USA Growth		-3.9	-13.6	-1.1	-10.9	9.5	-2.3	4.1	4.9	3.5	--
Excess		-1.6	-4.7	-5.5	-4.1	-4.8	-5.4	-1.3	-1.5	-0.6	--
Blackrock MSCI ACWI ex US IMI	505,961,657	-4.3	-11.4	1.0	-7.7	11.9	3.3	--	--	--	3.2
MS AC WldxUS IMI Nt		-4.3	-11.4	0.7	-7.7	11.6	3.0	--	--	--	3.0
Excess		0.0	0.0	0.2	-0.0	0.3	0.3	--	--	--	0.1
Mondrian Investment Partners	254,576,003	-3.7	-9.2	4.9	-6.0	17.8	6.1	2.5	3.6	2.2	4.3
MSCI ACWI xUSA Value		-4.3	-8.9	4.1	-4.3	15.9	9.6	3.5	4.5	2.3	4.5
Excess		0.6	-0.3	0.8	-1.7	1.9	-3.6	-1.0	-0.9	-0.2	-0.2
International Equity Overlay	6,344,600	1.8	--	--	--	--	--	--	--	--	1.8
ICE BofAML US 3-Month Treasury Bill		0.4	--	--	--	--	--	--	--	--	0.4
Excess		1.4	--	--	--	--	--	--	--	--	1.4



**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Fixed Income	1,386,245,684	-1.4	-3.3	-0.1	-3.0	2.5	-2.4	1.1	1.6	2.2	4.6
Samcera Fixed Income Benchmark		-1.5	-4.1	-0.9	-3.8	1.7	-3.4	1.1	0.9	1.7	4.1
Excess		0.1	0.8	0.7	0.8	0.7	1.0	0.0	0.7	0.6	0.5
Core Fixed Income	732,543,247	-2.2	-5.9	-3.8	-6.1	-0.7	-5.7	-0.4	-0.2	1.1	3.9
Samcera Core Fixed Income		-2.4	-7.1	-5.7	-7.6	-2.6	-6.5	-0.7	-0.6	0.6	3.5
Excess		0.2	1.2	1.8	1.5	1.9	0.8	0.2	0.4	0.5	0.4
FIAM B Core Bond	134,079,507	-1.7	-4.8	-2.8	-4.8	0.4	-5.0	0.7	0.4	--	1.1
BBG US Aggregate		-1.6	-4.7	-2.8	-4.8	0.4	-5.6	-0.1	-0.2	--	0.3
Excess		-0.1	-0.2	-0.1	-0.1	0.0	0.5	0.7	0.6	--	0.9
DoubleLine	220,034,993	-1.7	-4.5	-1.6	-4.8	1.3	-5.4	--	--	--	-3.4
BBG US Aggregate		-1.6	-4.7	-2.8	-4.8	0.4	-5.6	--	--	--	-3.9
Excess		-0.1	0.2	1.1	-0.1	0.9	0.2	--	--	--	0.6
NISA Long Treasury	164,326,826	-4.9	-14.3	--	-16.1	--	--	--	--	--	-16.3
Bloomberg US Long Tsy		-4.9	-14.3	--	-16.2	--	--	--	--	--	-16.3
Excess		0.1	0.0	--	0.1	--	--	--	--	--	0.0
NISA Core Bond	213,470,586	-1.6	-4.7	-2.6	-4.7	0.7	-5.3	--	--	--	-4.0
BBG US Aggregate		-1.6	-4.7	-2.8	-4.8	0.4	-5.6	--	--	--	-4.4
Excess		0.0	0.0	0.2	0.1	0.3	0.3	--	--	--	0.4
Core Fixed Income Overlay	631,336	-1.8	-5.6	--	-7.0	--	--	--	--	--	--
ICE BofAML US 3-Month Treasury Bill		0.4	1.4	4.1	1.8	4.8	1.8	--	--	--	1.6
Excess		-2.2	-7.0	--	-8.7	--	--	--	--	--	--
Opportunistic Credit	653,702,438	-0.6	-0.5	4.1	0.5	6.1	3.0	3.4	4.6	4.8	7.1
Samcera Opp Credit Bench		-0.5	-0.6	5.0	0.7	6.9	1.1	3.8	3.6	4.0	5.8
Excess		-0.1	0.1	-0.9	-0.2	-0.8	1.9	-0.4	1.0	0.8	1.3



# San Mateo County Composite Return Summary

October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Public Credit	492,431,205	-1.0	-1.4	--	-0.0	--	--	--	--	--	-0.0
BBG US Corp High Yield		-1.2	-2.1	--	-0.7	--	--	--	--	--	-0.7
Excess		0.2	0.7	--	0.7	--	--	--	--	--	0.7
AG CREDIT SOL FU LP	8,983,053	0.1	3.3	5.4	3.4	3.7	13.2	--	--	--	13.8
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	1.2	--	--	--	1.2
Excess		1.3	5.3	0.8	4.1	-2.5	12.0	--	--	--	12.6
AG CSF ADF II	7,206,589	0.0	5.4	9.2	5.4	9.2	--	--	--	--	--
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	--	--	--	--	1.8
Excess		1.2	7.5	4.5	6.1	2.9	--	--	--	--	--
AG CSF II	20,267,775	0.1	8.1	10.3	8.2	8.3	--	--	--	--	2.4
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	--	--	--	--	-2.6
Excess		1.2	10.1	5.6	8.9	2.1	--	--	--	--	5.0
AG Opportunistic Whole Loan	33,574	0.0	-3.4	-17.5	-3.4	-1.9	26.7	15.4	18.3	--	13.1
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	1.2	3.1	3.6	--	3.6
Excess		1.2	-1.3	-22.1	-2.7	-8.1	25.5	12.3	14.7	--	9.6
Beach Point Select Fund	114,043,969	-0.9	0.3	7.1	1.5	8.2	7.4	6.8	7.3	--	7.5
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	1.2	3.1	3.6	--	3.9
Excess		0.2	2.3	2.5	2.2	2.0	6.2	3.8	3.8	--	3.6
Brigade Cap Mngmt	111,240,997	-1.4	-1.3	6.8	0.6	5.7	5.3	3.3	4.2	4.0	5.4
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	1.2	3.1	3.6	3.9	5.4
Excess		-0.2	0.8	2.2	1.3	-0.5	4.1	0.2	0.6	0.1	0.0



**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Franklin Templeton	51,365,691	-1.9	-8.0	-4.0	-5.8	6.2	-6.1	-5.0	-2.7	-1.6	0.3
Bloomberg Multiverse Index		-1.2	-5.3	-3.1	-4.6	2.1	-7.0	-1.5	-1.1	-0.5	0.3
Excess		-0.7	-2.6	-0.9	-1.2	4.2	0.9	-3.5	-1.6	-1.1	-0.0
One William Street	61,592,508	0.2	1.5	--	2.7	--	--	--	--	--	--
BBG US Corp High Yield		-1.2	-2.1	--	-0.7	--	--	--	--	--	0.0
Excess		1.4	3.6	--	3.4	--	--	--	--	--	--
PIMCO Div. Income Fund	117,697,049	-1.2	-3.4	1.2	-2.3	5.1	-2.9	0.9	--	--	0.9
BBG US Corp High Yield		-1.2	-2.1	4.6	-0.7	6.2	1.2	3.1	--	--	2.8
Excess		-0.0	-1.3	-3.4	-1.5	-1.2	-4.1	-2.1	--	--	-1.9
Private Credit	161,271,233	0.7	2.6	--	2.0	--	--	--	--	--	2.0
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	4.5
Excess		-0.6	-0.9	--	-2.4	--	--	--	--	--	-2.4
Blackrock Direct Lending Feede	40,279,601	2.8	5.6	8.6	2.7	10.2	7.3	--	--	--	4.3
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	--
Excess		1.5	2.2	--	-1.8	--	--	--	--	--	--
Pimco Private Income	50,305,725	0.0	1.9	3.5	1.9	3.1	6.8	--	--	--	6.8
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	--
Excess		-1.3	-1.6	--	-2.6	--	--	--	--	--	--
TCP Direct Lending VIII	13,204,047	0.6	0.8	4.8	2.6	7.4	6.0	5.6	5.9	--	--
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	--
Excess		-0.7	-2.7	--	-1.9	--	--	--	--	--	--
White Oak Yield Spec	29,067,217	0.0	1.7	1.9	1.7	3.0	5.1	5.2	--	--	--
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	--
Excess		-1.3	-1.8	--	-2.8	--	--	--	--	--	--
White Oak YSF V	28,414,643	0.0	1.4	-0.5	1.4	-0.0	--	--	--	--	1.0
Credit Suisse Lev Loan 1 QTR L		1.3	3.5	--	4.5	--	--	--	--	--	--
Excess		-1.3	-2.1	--	-3.1	--	--	--	--	--	--
Alternatives	748,854,192	-0.5	2.6	3.9	2.2	1.1	6.1	11.0	9.6	8.1	1.0
Samcera Alternatives Benchmark		2.4	7.2	19.7	8.3	13.3	11.1	10.4	11.3	9.2	8.5
Excess		-2.8	-4.6	-15.8	-6.2	-12.2	-5.0	0.6	-1.6	-1.1	-7.5



# San Mateo County Composite Return Summary

October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Private Equity	385,692,221	-0.4	0.8	4.1	0.3	6.0	6.4	19.6	18.6	17.3	-5.4
Samcera PE Benchmark		3.7	11.6	31.5	13.0	15.9	16.2	14.5	16.1	14.7	16.0
Excess		-4.1	-10.8	-27.4	-12.7	-10.0	-9.8	5.1	2.4	2.7	-21.4
Absolute Return	363,161,971	-0.6	4.7	3.6	4.2	-3.4	5.4	0.2	-0.8	1.6	1.8
Samcera SOFR + 4%		0.8	2.3	7.6	3.1	9.0	6.0	5.9	5.7	5.3	5.1
Excess		-1.3	2.4	-4.0	1.2	-12.4	-0.6	-5.6	-6.5	-3.7	-3.3
Graham Global Investment	97,282,594	-2.6	3.2	8.4	5.4	-0.9	8.3	--	--	--	6.6
Samcera SOFR +4%		0.7	2.2	7.3	3.0	8.7	5.9	--	--	--	5.6
Excess		-3.3	1.0	1.1	2.4	-9.6	2.4	--	--	--	1.0
PIMCO MAARS Fund L.P.	99,028,265	0.5	8.5	9.2	7.0	-1.0	11.5	--	--	--	9.7
Samcera SOFR +4%		0.8	2.4	7.7	3.1	9.1	6.1	--	--	--	5.8
Excess		-0.2	6.1	1.5	3.9	-10.1	5.5	--	--	--	3.9
Acadian MAAR Fund LLC	81,647,217	-0.5	2.8	-0.6	1.5	-2.7	1.3	--	--	--	0.9
Samcera SOFR +4%		0.8	2.4	7.7	3.1	9.1	6.1	--	--	--	6.0
Excess		-1.2	0.5	-8.3	-1.6	-11.9	-4.7	--	--	--	-5.1
CFM SYS Global Macro Fund	85,203,895	0.4	3.9	-2.9	2.6	-9.5	7.7	--	--	--	7.5
Samcera SOFR +4%		0.8	2.4	7.7	3.1	9.1	6.1	--	--	--	6.0
Excess		-0.3	1.5	-10.6	-0.6	-18.6	1.7	--	--	--	1.5
Inflation Hedge	1,009,792,077	-1.1	-1.8	-4.1	-1.4	-2.8	8.9	4.1	4.3	--	5.2
SamCERA Inflation Hedge Index		0.6	-2.0	-0.6	-0.7	-5.1	10.1	6.7	6.5	--	--
Excess		-1.6	0.2	-3.5	-0.6	2.3	-1.2	-2.6	-2.2	--	--
Real Estate	514,703,662	-1.4	-1.2	-7.6	-1.2	-7.2	6.8	5.5	6.2	--	6.6
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	5.7	6.4	--	6.4
Excess		-1.4	0.7	-0.0	0.7	4.9	-0.4	-0.2	-0.1	--	0.2
Invesco Core Real Estate	260,847,501	-1.7	-1.7	-12.8	-1.7	-12.8	6.5	4.8	5.9	7.8	7.1
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	5.7	6.4	8.2	7.4
Excess		-1.7	0.2	-5.3	0.2	-0.7	-0.6	-0.8	-0.5	-0.4	-0.2
Invesco US Val IV	695,918	16.0	16.0	-22.6	14.3	-22.6	-18.0	-8.4	-3.6	--	-1.4
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	5.7	6.4	--	6.9
Excess		16.0	17.9	-15.0	16.2	-10.4	-25.2	-14.1	-10.0	--	-8.3





**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Invesco Value-Add Fund	25,429,279	0.0	-0.8	-6.0	-0.8	-2.3	--	--	--	--	-2.0
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	--	--	--	--	-10.1
Excess		0.0	1.1	1.6	1.1	9.9	--	--	--	--	8.1
PGIM Real Estate US Debt Fund	74,102,309	-0.1	1.3	5.6	1.8	6.7	5.9	5.8	--	--	5.3
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	5.7	--	--	6.1
Excess		-0.1	3.3	13.1	3.7	18.9	-1.2	0.1	--	--	-0.8
Invesco US VAL V	31,113,700	-3.8	-3.8	-9.3	-4.4	-9.3	9.1	--	--	--	6.3
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	--	--	--	--
Excess		-3.8	-1.9	-1.7	-2.5	2.9	2.0	--	--	--	--
Harrison Street Core Property	94,968,225	-1.5	-1.5	-3.1	-1.5	-3.1	5.9	--	--	--	5.1
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	7.1	--	--	--	5.5
Excess		-1.5	0.4	4.4	0.4	9.0	-1.2	--	--	--	-0.4
Stockbridge Value IV	27,546,729	-0.0	0.1	3.0	0.1	6.2	--	--	--	--	9.1
Samcera NCREIF ODCE (gross)		0.0	-1.9	-7.6	-1.9	-12.1	--	--	--	--	7.2
Excess		-0.0	2.0	10.5	2.0	18.4	--	--	--	--	1.9
Public Real Assets	168,719,667	-2.2	-6.4	-5.0	-2.9	-2.5	9.6	1.2	2.0	--	--
SamCera Liquid Real Asset Inde		-2.3	-6.5	-5.1	-3.0	-2.5	9.5	4.1	4.3	--	5.1
Excess		0.0	0.1	0.1	0.1	-0.0	0.1	-2.9	-2.3	--	--
SSGA CST REAL ASSET NL	168,719,667	-2.2	-6.4	-5.0	-2.9	-2.5	9.6	4.2	4.3	--	--
SamCera Liquid Real Asset Inde		-2.3	-6.5	-5.1	-3.0	-2.5	9.5	4.1	4.3	--	4.3
Excess		0.0	0.1	0.1	0.1	-0.0	0.1	0.0	-0.0	--	--
Private Real Assets	326,368,748	0.1	-0.3	2.8	-0.8	4.6	14.5	6.0	4.9	--	9.3
SamCERA Private Real Asset Idx		3.3	0.2	18.2	2.5	5.5	14.1	7.3	8.5	--	10.7
Excess		-3.2	-0.5	-15.4	-3.3	-0.8	0.5	-1.3	-3.7	--	-1.3



**San Mateo County**  
**Composite Return Summary**  
 October 31, 2023



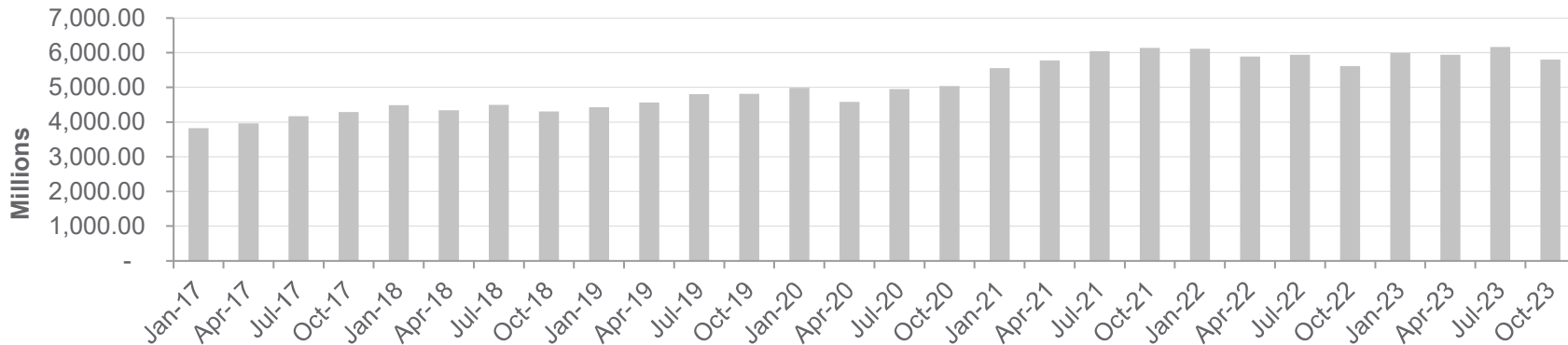
Composite Returns (NET)	Market Value (\$)	1 Mth.	3 Mth.	YTD	FYTD	1 Yr.	3 Yr.	5 Yr.	7 Yr.	10 Yr.	ITD
Liquidity	377,477,800	0.5	1.2	3.7	1.7	4.7	--	--	--	--	3.6
Liquidity Composite Benchmark		0.3	0.8	2.5	1.2	3.5	--	--	--	--	2.0
Excess		0.1	0.4	1.2	0.5	1.2	--	--	--	--	1.5
Cash Flow - Match Liquidity	306,710,151	0.5	1.0	3.2	1.6	4.3	--	--	--	--	2.9
BBG US Agg Govt Credit 1-3		0.3	0.6	2.2	1.0	3.2	--	--	--	--	1.2
Excess		0.1	0.4	1.0	0.5	1.1	--	--	--	--	1.7
Insight Investment	298,426,334	0.4	1.0	3.3	1.6	4.7	--	--	--	--	2.3
BBG US Credit 1-3 Yrs		0.2	0.4	2.5	1.0	4.0	--	--	--	--	1.8
Excess		0.2	0.6	0.8	0.6	0.8	--	--	--	--	0.5
County Treasury Pool	8,283,817	1.0	1.0	4.1	1.4	4.1	2.1	2.0	1.8	1.5	2.6
91 Day T-Bill		0.4	1.4	4.1	1.8	4.8	1.8	1.8	1.6	--	--
Excess		0.6	-0.4	0.1	-0.3	-0.6	0.2	0.2	0.2	--	--
Cash & Cash Overlay	70,767,649	0.5	1.4	4.2	1.8	4.9	--	--	--	--	--
ICE BofAML US 3-Month Treasury Bill		0.4	1.4	4.1	1.8	4.8	1.8	--	--	--	1.6
Excess		0.0	0.0	0.1	0.1	0.1	--	--	--	--	--
General Account	62,811,392	0.5	1.4	4.3	1.9	5.0	2.0	1.8	1.7	1.3	2.0
Transition Account	0	--	--	--	--	--	--	--	--	--	--
Cash Overlay	7,956,257	0.4	1.2	3.8	1.7	4.4	1.4	--	--	--	1.3
San Mateo County Overlay	5,804,929,454	-1.8	-4.8	1.4	-3.3	3.7	4.4	5.5	6.0	5.7	6.4
Samcera Total Plan Benchmark		-1.2	-4.1	5.0	-2.3	5.4	5.4	6.2	6.8	6.2	6.8
Excess		-0.6	-0.6	-3.6	-1.0	-1.7	-1.0	-0.7	-0.8	-0.5	-0.4



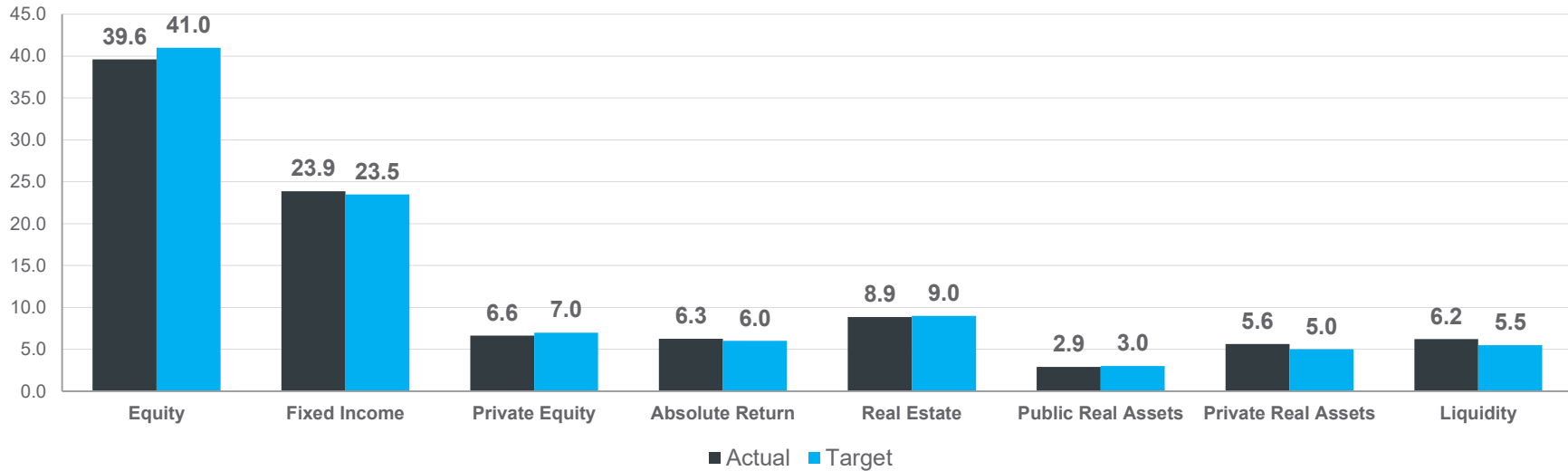
**Record of Asset Growth**

	Three Months	One Year
<b>TOTAL FUND</b>		
Beginning Market Value	6,160,862,792	5,615,050,832
Contributions	17,358,709	442,546,845
Withdrawals	-83,273,489	-469,601,764
Income Received	29,378,250	124,701,429
Gain/Loss	-319,283,122	94,121,699
Ending Market Value	5,804,929,454	5,804,929,454

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

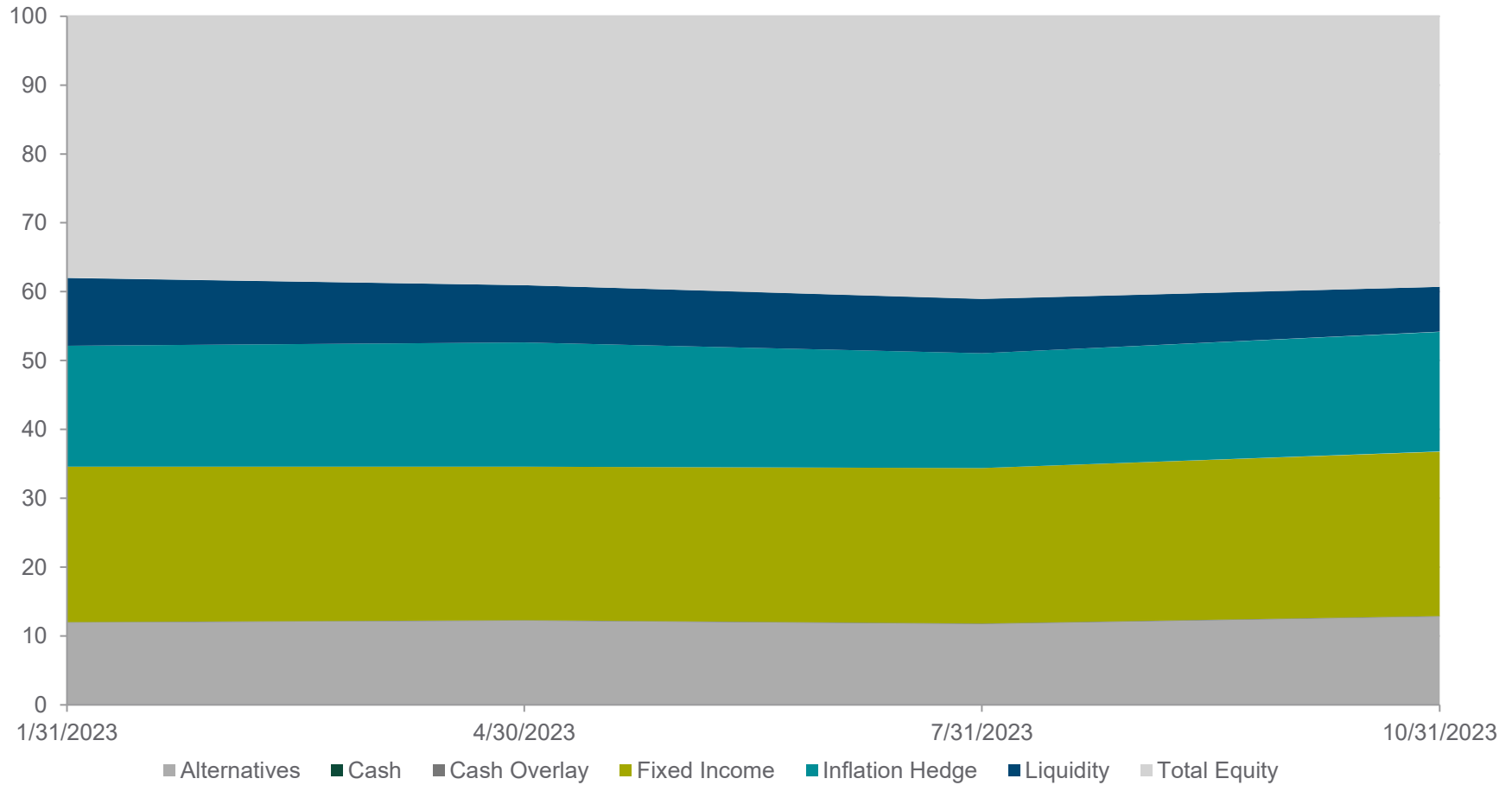


Actual vs Target Weights

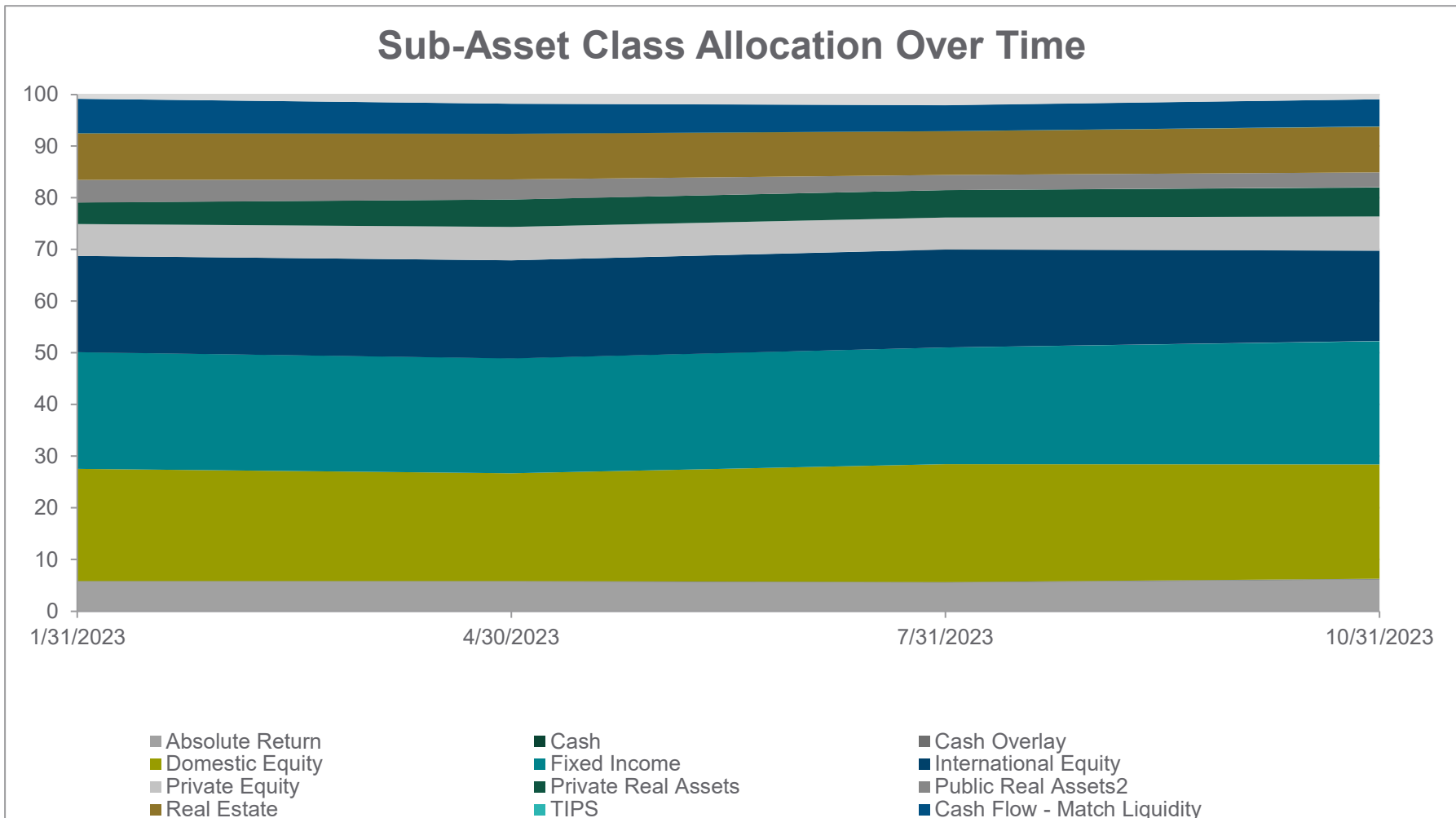


	Min	Actual	Target	Deviation	Max
Equity	38.0	39.6	41.0	-1.4	44.0
Fixed Income	21.5	23.9	23.5	0.4	25.5
Private Equity	5.0	6.6	7.0	-0.4	9.0
Absolute Return	4.0	6.3	6.0	0.3	8.0
Real Estate	7.0	8.9	9.0	-0.1	11.0
Public Real Assets	1.0	2.9	3.0	-0.1	5.0
Private Real Assets	3.0	5.6	5.0	0.6	7.0
Liquidity		6.2	5.5	0.7	

Asset Allocation over Time



### Sub-Asset Class Allocation Over Time



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

December 5, 2023

Agenda Item 6.2

**TO:** Board of Retirement

**FROM:** Michael Coultrip, Chief Investment Officer



**SUBJECT:** Report on Quarterly Investment Performance Report for the Period Ended September 30, 2023

**Recommendation**

Accept Verus Advisory's quarterly performance report for the period ended September 30, 2023.

**Discussion**

The 3rd quarter net total return for the SamCERA portfolio was -1.6%, which was 50 bps lower than the -1.1% policy benchmark return. As can be seen on pages 20 and 21, the growth category detracted from performance (private equity and international equity), while the diversifying category (core fixed income and absolute return) contributed to results.

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

**Attachment**

Verus Quarterly Performance Report Ending 9/30/2023





**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**PERIOD ENDING: September 30, 2023**

Investment Performance Review for

**San Mateo County Employees' Retirement Association**

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Market Environment

TAB I

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Diversifying

TAB IV

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Total Fund

TAB II

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Inflation Hedge

TAB V

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Growth

TAB III

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Appendix

TAB VI

# 3<sup>rd</sup> quarter summary

## THE ECONOMIC CLIMATE

- Real GDP increased at a 2.9% pace from a year ago in Q3 (4.9% QoQ annualized rate). The large uptick was driven by consumption, which continues to show resiliency. A combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown.
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.

## PORTFOLIO IMPACTS

- The U.S. consumer has shown resiliency, with ongoing moderate spending activity. However, personal savings rates are nearly the lowest on record. We believe depressed savings activity without a commensurate surge in spending, and very poor sentiment, suggests high inflation is squeezing household budgets.
- The Cboe VIX implied volatility index remained below-average for most of the third quarter, before rising to 17.5 to end September. Market risk has been falling fairly consistently throughout the year, which may be at least partly attributed to the perception that certain risks, such as regional bank contagion and near-term recession, have eased.

## THE INVESTMENT CLIMATE

- The 10-year U.S. Treasury yield increased during the quarter to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations. This led to a flattening of the yield curve.
- U.S. headline inflation ticked up from 3.1% to 3.7% year-over-year. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September showing the largest rise since May, and along with rising energy prices have generated concerns of renewed inflation. A material weakening of the job market and U.S. economy will likely be needed to bring inflation down to a 2% level.

## ASSET ALLOCATION ISSUES

- Nearly all asset classes produced materially negative performance during the quarter, including global equities (-3.4%), U.S. core fixed income (-3.2%) and U.S. Treasuries (-3.1%). Highly correlated markets created difficulties for investors, as diversification produced limited value.
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, outperforming growth stocks by 11.5%.

Nearly all asset classes produced materially negative performance during the quarter

A material weakening of the job market and/or U.S. economy will likely be needed to bring inflation down to a 2% level

# U.S. economics summary

- Real GDP increased at a 2.9% pace from a year ago in the third quarter (4.9% quarter-over-quarter annualized rate). The large uptick was driven by consumption, which continues to show resiliency. While many investors have expected high inflation and weaker wage growth to impact spending, a combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown.
- U.S. headline inflation ticked up during the quarter, from 3.1% to 3.7% year-over-year in September. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September, which along with rising energy prices have generated fresh concerns of renewed inflation.
- The U.S. consumer has shown resiliency, with continued moderate spending levels. However, personal savings rates are nearly the lowest on record. We believe depressed savings activity, along with mild household spending and very poor sentiment, suggests high inflation is squeezing household budgets.
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.
- Consumer sentiment readings were mixed during Q3 but remain poor. According to the Conference Board survey, the future outlook for income, business, and labor conditions fell very sharply and are now at levels that historically have signaled recession within a year.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.9% 9/30/23	1.7% 9/30/22
Inflation (CPI YoY, Core)	4.1% 9/30/23	8.2% 9/30/22
Expected Inflation (5yr-5yr forward)	2.4% 9/30/23	2.1% 9/30/22
Fed Funds Target Range	5.25–5.50% 9/30/23	3.00–3.25% 9/30/22
10-Year Rate	4.58% 9/30/23	3.83% 9/30/22
U-3 Unemployment	3.8% 9/30/23	3.5% 9/30/22
U-6 Unemployment	7.0% 9/30/23	6.7% 9/30/22

# International economics summary

- Countries struggling to control inflation—primarily advanced economies—face a challenging path. Many central banks are grappling with high prices and slow growth, and the balancing act of fighting inflation but also trying to avoid recession. In contrast, most emerging economies are exceeding growth expectations, outside of China. Some of this strength has come from trade rotation as tensions remain between the U.S. and China and businesses rethink their trade partners.
- The IMF’s October World Economic Outlook was little changed from July Projections, as global growth is still expected to slow in 2024. Regional divergences remained an emphasis, as emerging economies are projected to drive global output. India is expected to outpace all other countries with growth forecasts above 6% for both 2023 and 2024.
- Inflation in the Eurozone and United Kingdom has remained sticky, with inflation in September coming in at 4.3% and 6.7% year-over-year, respectively. Monetary policy is expected to be tighter for both the ECB and BOE, although rate decisions diverged at their respective September meetings, as the ECB raised rates by another 25 bps, while the BOE voted 5-4 to maintain their bank rate at 5.25%.
- Japan was a bright spot amongst developed economies, driven by strong exports in the second quarter. While growth was positive, the potential for an early end to ultra loose Bank of Japan (BOJ) monetary policy presents a potential headwind. A weak Japanese Yen adds to this story, as the currency has been greatly devalued, largely due to the BOJ’s contrarian monetary policy relative to other major central banks.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.9% 9/30/23	3.7% 9/30/23	3.8% 9/30/23
Eurozone	0.5% 6/30/23	4.3% 9/30/23	6.4% 8/31/23
Japan	1.6% 6/30/23	2.8% 9/30/23	2.7% 8/31/23
BRICS Nations	6.1% 6/30/23	1.7% 9/30/23	4.8% 12/31/22
Brazil	3.4% 6/30/23	5.2% 9/30/23	7.8% 8/31/23
Russia	4.9% 6/30/23	6.0% 9/30/23	3.0% 8/31/23
India	7.8% 6/30/23	5.0% 9/30/23	7.1% 9/30/23
China	4.9% 9/30/23	0.0% 9/30/23	5.0% 9/30/23

*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

- Global equities delivered negative performance during the quarter (MSCI ACWI -3.4%). Weakness in markets was broad-based, with international developed (MSCI EAFE -4.1%) slightly underperforming domestic and emerging market equities (S&P 500 -3.3%, MSCI EM -2.9%).
- Over the quarter, the valuation gap between domestic and international equities grew even larger. An analysis of international developed Price/Earnings ratios shows that all sectors currently hold a valuation discount relative to U.S. shares, and that those discounts are generally much wider than the historical average.
- Currency movements dragged portfolio performance lower for investors with unhedged foreign currency exposure. Investors with unhedged international developed equity exposure saw losses of -

3.6% due to currency volatility during the quarter.

- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, with value stocks outperforming growth by 11.5%.
- The Cboe VIX implied volatility index remained below-average for most of the third quarter, before rising to 17.5% to end September. Market risk has been falling fairly consistently throughout the year.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	(3.3%)		21.6%	
U.S. Small Cap (Russell 2000)	(5.1%)		8.9%	
U.S. Equity (Russell 3000)	(3.3%)		20.5%	
U.S. Large Value (Russell 1000 Value)	(3.2%)		14.4%	
US Large Growth (Russell 1000 Growth)	(3.1%)		27.7%	
Global Equity (MSCI ACWI)	(3.4%)	(2.3%)	20.8%	20.4%
International Large (MSCI EAFE)	(4.1%)	(0.5%)	25.6%	24.1%
Eurozone (EURO STOXX 50)	(7.7%)	(4.3%)	39.4%	33.0%
U.K. (FTSE 100)	(1.9%)	2.2%	25.3%	16.0%
Japan (TOPIX)	(1.0%)	4.0%	25.7%	36.6%
Emerging Markets (MSCI Emerging Markets)	(2.9%)	(1.3%)	11.7%	11.1%

Source: Russell Investments, MSCI, STOXX, FTSE, JPX, as of 9/30/23

# Domestic equity

Domestic equities finished lower to end the quarter, breaking the previous three consecutive quarters of gains. The S&P 500 Index ended September down -3.3%, alongside losses across all other regional equity groups. Strong gains in July—influenced by better-than-expected earnings—were pared by losses in August and September as the *higher for longer* narrative raised recession fears while also helping to push Treasury yields significantly higher.

Early Q3 gains were driven by a continued rally across mega-cap technology names and better-than-expected earnings. Second quarter earnings marked the third straight quarter of year-over-year declines, yet the -4.1% fall was much better than the initially feared -7.0% projection

by FactSet. From a sector perspective, equity movements were less concentrated relative to the prior quarter. Energy was an outlier, where the sector’s +12.2% gain was a function of higher oil prices due primarily to supply related issues.

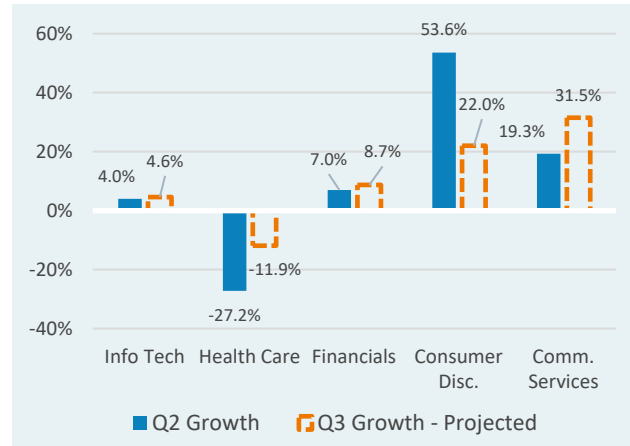
Going forward, domestic equities remain challenged on both the earnings and valuations front. Earnings growth is expected to decline for the fourth straight quarter, although stable expectations amongst the S&P 500’s largest sectors could provide an anchor. Earnings stability of some of the largest index names may also be contributing to higher valuations, which remain expensive relative to international developed and emerging market equities.

**S&P 500 PRICE INDEX**



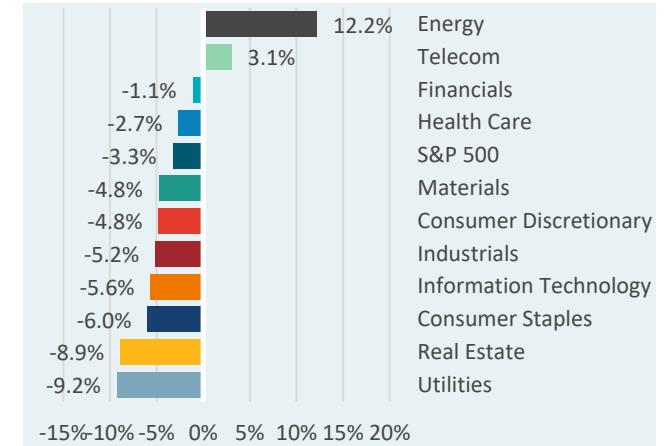
Source: Bloomberg, as of 9/30/23

**FIVE LARGEST SECTORS EPS GROWTH YOY**



Source: FactSet, as of 9/30/23

**Q3 2023 SECTOR PERFORMANCE**



Source: Morningstar, as of 9/30/23

# Domestic equity size & style

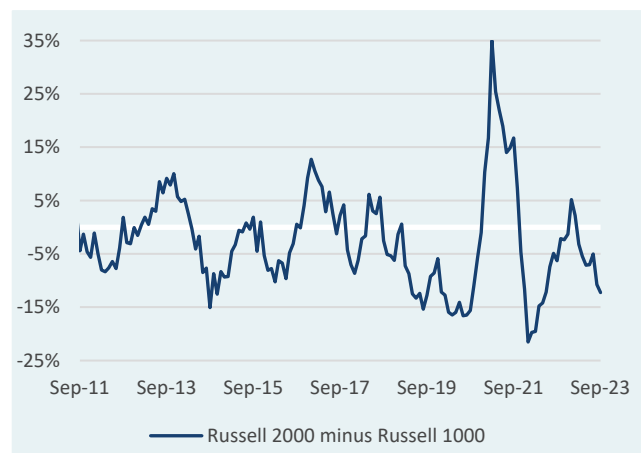
Investors continue to face a difficult environment for style factor investing. Value underperformed growth mildly during the quarter (-3.2% vs. -3.1%), with sector trends appearing to have had less of an impact on value vs. growth stocks during Q2. Small cap equities materially lagged large caps (-5.1% vs -3.3%). *Higher for longer* rate expectations likely contributed to a repricing of growth-focused assets that are more sensitive to interest rate fluctuations.

Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance

of growth stocks and large cap stocks. Many of these market-leading stocks are concentrated in the Information Technology and Telecom sectors, which have outperformed the overall index (+41.1% and 38.5%, respectively).

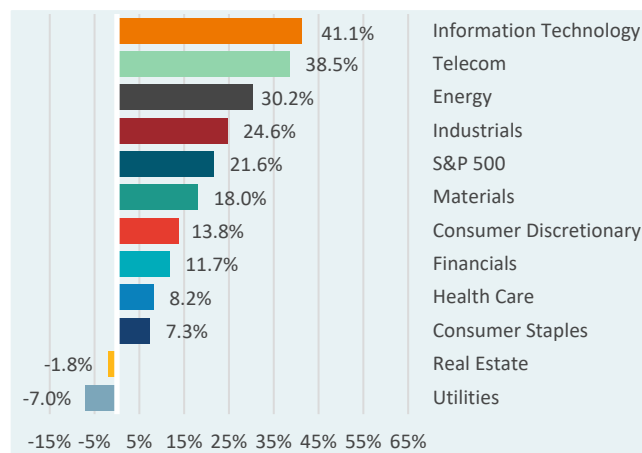
In recent years value stocks have been extremely cheap. Value has rarely been this discounted relative to growth, and during the few historical periods when this was the case, value outperformed significantly. However, value has failed to deliver similar outperformance during the current period.

**SMALL CAP VS LARGE CAP (YOY)**



Source: FTSE, as of 9/30/23

**VALUE VS GROWTH (YOY)**



Source: Morningstar, as of 9/30/23

**1-YEAR SIZE & STYLE PERFORMANCE**

	Value	Core	Growth
<b>Large Cap</b>	14.4%	21.2%	27.7%
<b>Mid Cap</b>	11.0%	13.4%	17.5%
<b>Small Cap</b>	7.8%	8.9%	9.6%

Source: FTSE, as of 9/30/23



# International developed equity

International developed shares fell -4.1% during Q3 in unhedged currency terms, underperforming U.S. and emerging markets. However, international developed equities in hedged currency terms were the best performing markets (returning -0.5%), as currency hedging would have avoided the U.S. dollar surge fueled by a *higher for longer* interest rate narrative.

Underperformance within the Eurozone dragged the overall index lower, with the STOXX 50 Index falling -7.7% over the quarter in unhedged terms—the worst performer across regional indices. The broader bloc continues to struggle to bring down inflation, while policymakers also deal with stagnant economic growth. In contrast to weakness seen from European

shares, Japanese equities delivered another quarter of positive performance in unhedged terms (TOPIX -1.0%), and significant outperformance in currency hedged terms (+4.0%). While a weaker Japanese Yen (JPY) hurt performance in U.S. dollar terms, the weak JPY has boosted local corporate earnings. These currency movements combined with meaningful inflation and equity reforms—meant to spark investment in wages, higher growth, and therefore shareholder value—have been a tailwind to strong year-over-year Japanese equity performance.

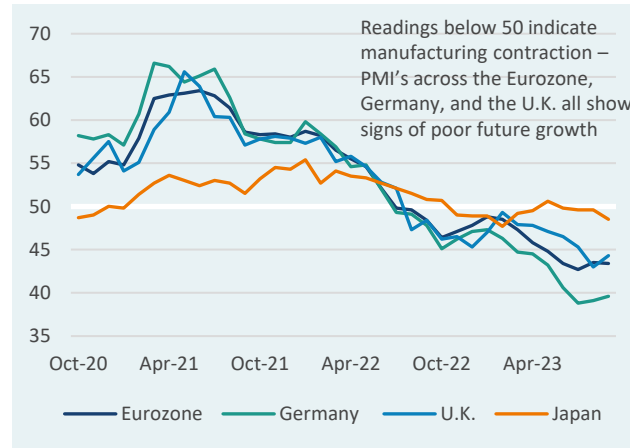
Overall, we believe international developed equities are less attractive in the near-term, specifically due to the economic headwinds facing the U.K. and broader Eurozone.

## INTERNATIONAL DEVELOPED EQUITY



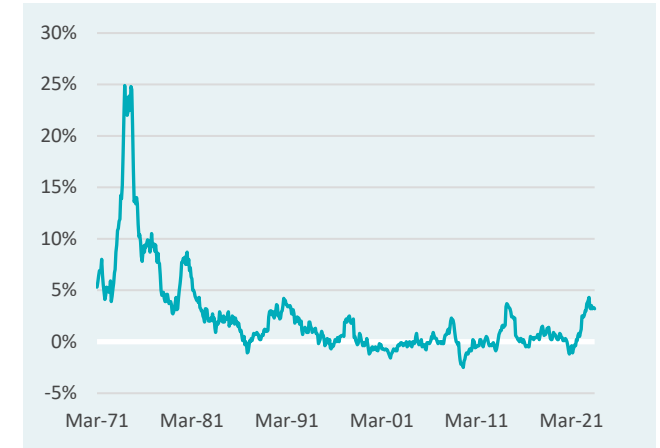
Source: MSCI, as of 9/30/23

## MANUFACTURING PMI



Source: S&P Global, as of 9/30/23

## JAPANESE CPI



Source: Japan MIC, as of 8/31/23

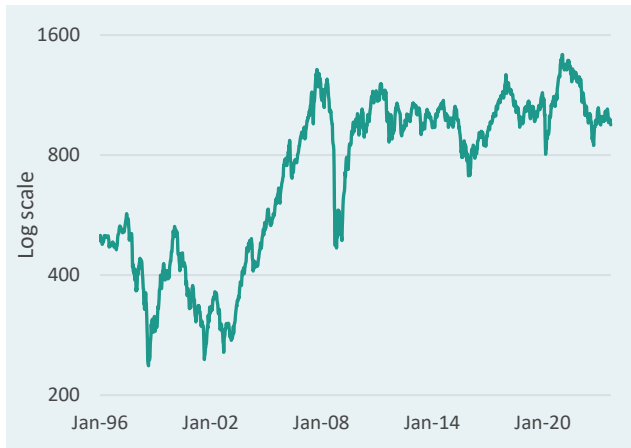
# Emerging market equity

Emerging market equities outperformed domestic equities and international developed equities in Q3. The MSCI EM Index fell -2.9%, while the S&P 500 was -3.3% lower and the MSCI EAFE Index dropped -4.1%. Emerging markets have provided only a 2.1% annualized return over the past decade.

From an individual country perspective, the two largest weights in the index—China and India—outperformed, although Chinese equities were still -1.9% lower. This impact counterbalanced losses across other markets, since the combined weight of both countries makes up approximately 45% of the MSCI Emerging Markets Index.

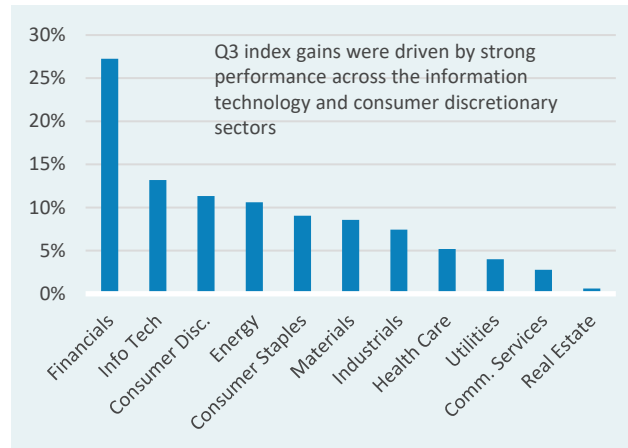
Emerging market equities continue to offer fairly cheap valuations, yet sentiment has grown negative, especially as concerns around China are now mainstream. Outside of geopolitical tensions, the Chinese economy continues to show signs of struggle despite some small government stimulus efforts. The property market remains a large pain point, evidenced by credit stress and falling contracted sales amongst large property developers such as Country Garden and Evergrande.

## EMERGING MARKET EQUITY



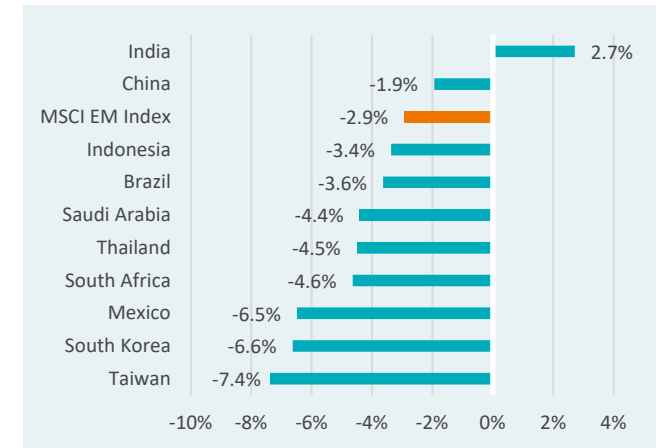
Source: MSCI, as of 9/30/23

## MSCI INDIA SECTOR WEIGHTS



Source: MSCI, as of 9/30/23

## Q3 2023 MSCI EM COUNTRY RETURNS (USD)



Source: Bloomberg, MSCI, as of 9/30/23

# Fixed income environment

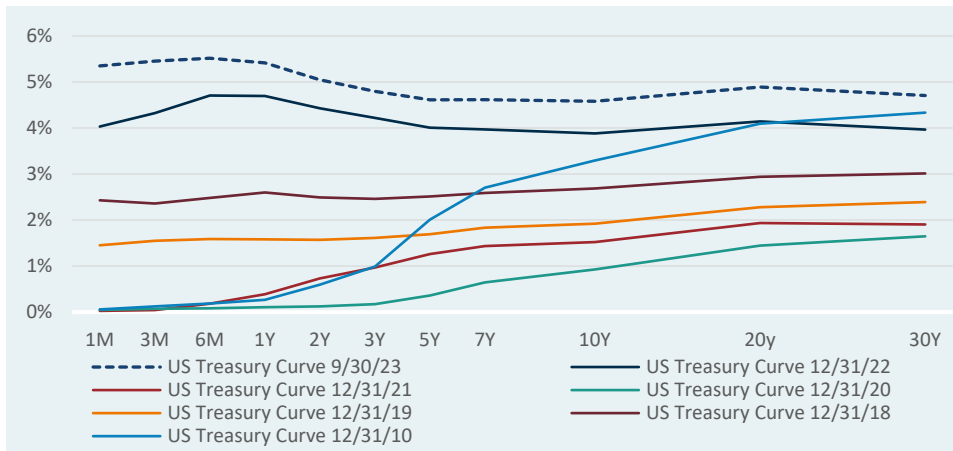
- The 10-year U.S. Treasury yield increased during the quarter from 3.81% to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations. This has led to a flattening of the yield curve, though the curve remains inverted at -0.5% (defined as the 10-year Treasury yield minus 2-year Treasury yield).
- Rising interest rates combined with lower inflation have brought real (inflation-adjusted, based on the U.S. TIPS Inflation Breakeven Rate) 10- and 30-year Treasury yields to the highest levels in over a decade. Real yields for 10- and 30-year Treasuries finished the month at 2.24% and 2.33%, respectively. In March of 2022 these rates were negative.
- The Federal Reserve hiked interest rates by 0.25% in July but held rates steady at the September meeting as inflation moderated. Importantly, Chairman Powell signaled that additional rate hikes may be warranted if the economy remains strong and inflation above target.
- During Q3, higher quality bonds and U.S. Treasuries saw mild losses due primarily to their longer duration profile. Riskier credit performed well, with larger coupons and shorter duration contributing to positive performance.
- Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) performed very poorly, falling by -7.3% during the quarter as rising interest rates acted as a headwind.
- With inflation moderating during the quarter, investors expressed optimism that the Federal Reserve would soon pause interest rate hikes. However, interest rate volatility increased during the period as concerns related to the U.S. government's budget deficit and the amount of expected issuance contributed to higher long-term bond yields.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(3.2%)	0.6%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(2.9%)	1.6%
U.S. Treasuries (Bloomberg U.S. Treasury)	(3.1%)	(0.8%)
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(13.0%)	(10.7%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.5%	10.3%
Bank Loans (S&P/LSTA Leveraged Loan)	3.4%	13.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(3.3%)	13.1%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(2.2%)	10.0%
Mortgage-Backed Securities (Bloomberg MBS)	(4.1%)	(0.2%)

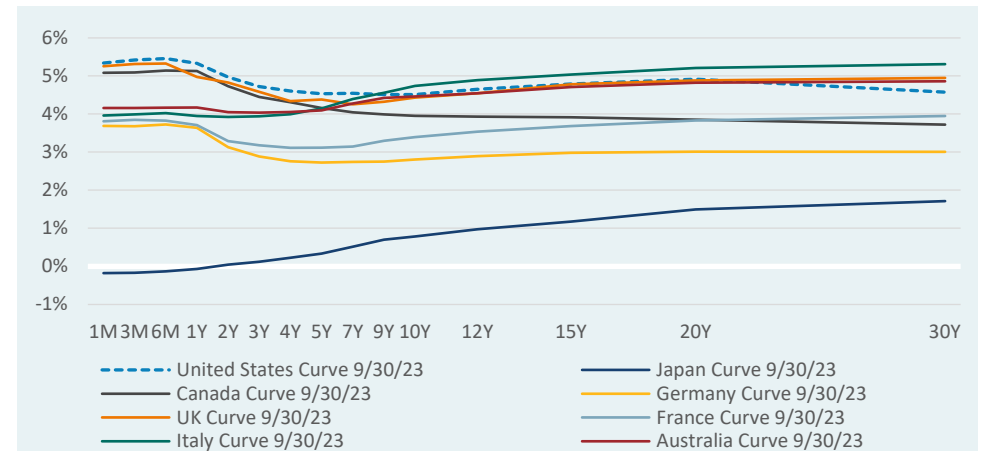
Source: Bloomberg, as of 9/30/23

# Yield environment

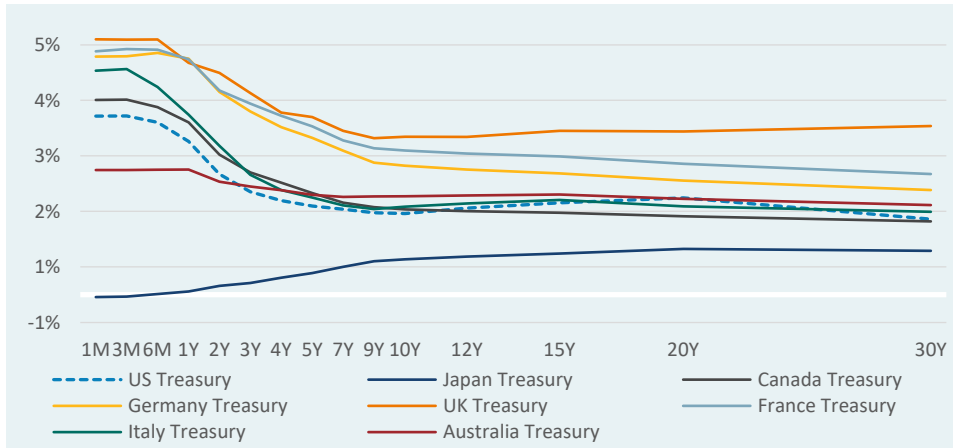
## U.S. YIELD CURVE



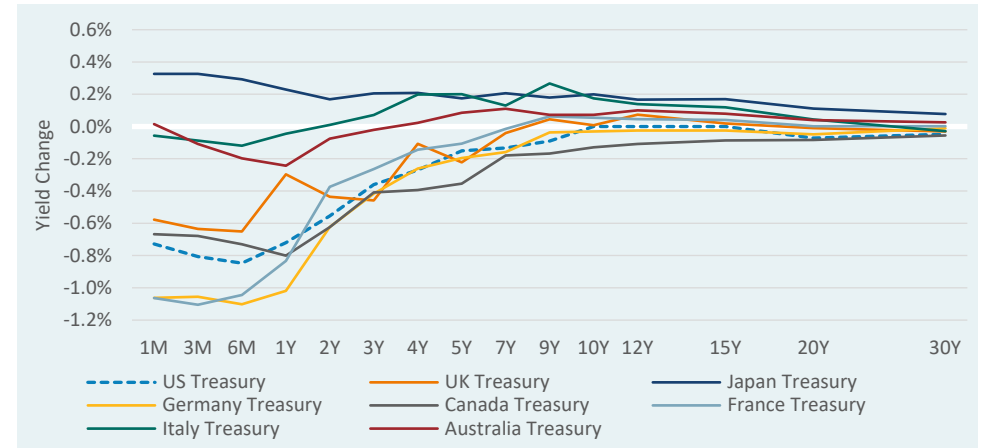
## GLOBAL GOVERNMENT YIELD CURVES



## YIELD CURVE CHANGES OVER LAST FIVE YEARS



## IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/23

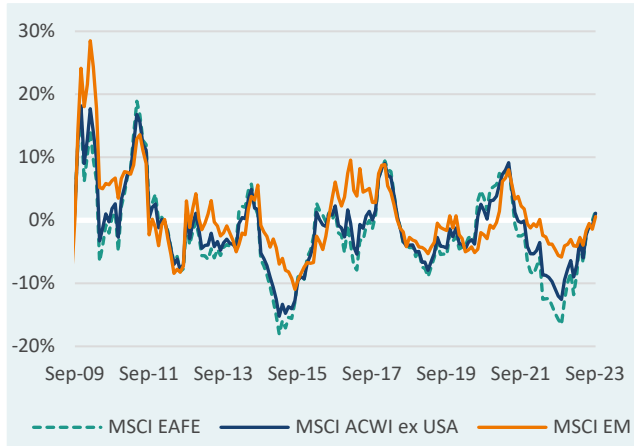
# Currency

Currency movements dragged portfolio performance lower for investors with unhedged foreign exposure. On a trade-weighted basis, the value of the U.S. dollar shot higher as investors questioned the falling inflation story and bond yields rose on the *higher for longer* interest rate narrative.

Investors with unhedged international developed equity exposure saw losses of -3.6% due to currency movements in Q3. After recently experiencing deep losses over multiple years from unhedged foreign currency exposure, along with ongoing volatility, many investors may be interested in exploring more thoughtful approaches to currency. A currency hedging program can reduce the uncompensated risk of unhedged foreign

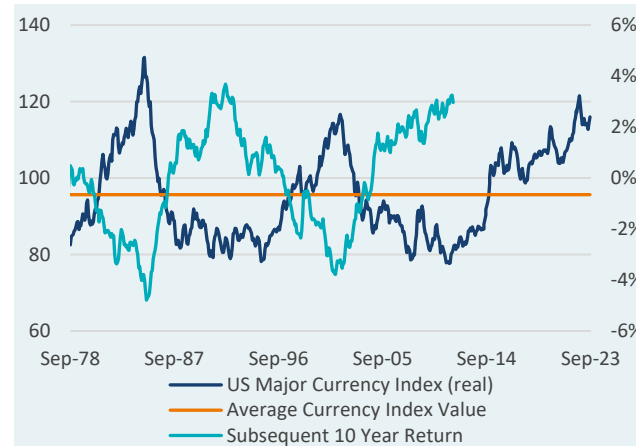
currency exposure (what we call “embedded currency” risk). Additionally, the MSCI Currency Factor Mix Index—a representation of a passive investment in the currency market, by investing in currencies with higher interest rates, currencies that are undervalued, and currencies that are showing positive price momentum—has shown a positive one-year rolling return over most periods with low volatility. This is an approach to thoughtfully gain exposure to the currency market with the objective of generating a moderate positive return. A currency hedging program along with a passive investment in the currency market may allow investors to reduce overall portfolio risk while moderately increasing total portfolio expected returns.

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



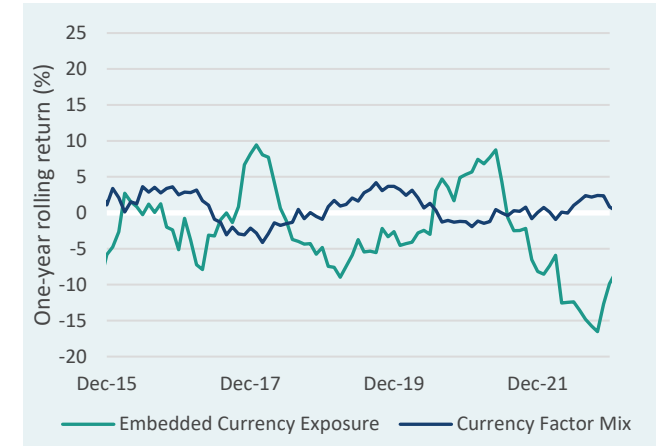
Source: MSCI, as of 9/30/23

**BLOOMBERG DOLLAR SPOT INDEX**



Source: Bloomberg, as of 9/30/23

**EMBEDDED CURRENCY VS CURRENCY FACTORS**



Source: Bloomberg, MSCI, as of 9/30/23

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(4.8)	(3.3)	13.1	21.6	10.2	9.9	11.9
S&P 500 Equal Weighted	(5.1)	(4.9)	1.8	13.6	11.4	8.0	10.2
DJ Industrial Average	(3.4)	(2.1)	2.7	19.2	8.6	7.1	10.8
Russell Top 200	(4.6)	(2.7)	16.3	23.9	10.0	10.8	12.6
Russell 1000	(4.7)	(3.1)	13.0	21.2	9.5	9.6	11.6
Russell 2000	(5.9)	(5.1)	2.5	8.9	7.2	2.4	6.6
Russell 3000	(4.8)	(3.3)	12.4	20.5	9.4	9.1	11.3
Russell Mid Cap	(5.0)	(4.7)	3.9	13.4	8.1	6.4	9.0
<b>Style Index</b>							
Russell 1000 Growth	(5.4)	(3.1)	25.0	27.7	8.0	12.4	14.5
Russell 1000 Value	(3.9)	(3.2)	1.8	14.4	11.1	6.2	8.4
Russell 2000 Growth	(6.6)	(7.3)	5.2	9.6	1.1	1.6	6.7
Russell 2000 Value	(5.2)	(3.0)	(0.5)	7.8	13.3	2.6	6.2

## INTERNATIONAL EQUITY

<b>Broad Index</b>							
MSCI ACWI	(4.1)	(3.4)	10.1	20.8	6.9	6.5	7.6
MSCI ACWI ex US	(3.2)	(3.8)	5.3	20.4	3.7	2.6	3.3
MSCI EAFE	(3.4)	(4.1)	7.1	25.6	5.8	3.2	3.8
MSCI EM	(2.6)	(2.9)	1.8	11.7	(1.7)	0.6	2.1
MSCI EAFE Small Cap	(4.4)	(3.5)	1.8	17.9	1.1	0.8	4.3
<b>Style Index</b>							
MSCI EAFE Growth	(6.0)	(8.6)	4.3	20.0	0.4	3.2	4.4
MSCI EAFE Value	(0.8)	0.6	9.9	31.5	11.1	2.8	3.0
<b>Regional Index</b>							
MSCI UK	(0.8)	(1.5)	6.8	24.9	12.1	2.9	2.5
MSCI Japan	(2.1)	(1.6)	11.2	25.9	2.8	2.1	4.4
MSCI Euro	(5.4)	(7.5)	10.9	36.4	7.3	3.7	3.8
MSCI EM Asia	(2.6)	(2.9)	1.0	11.9	(3.5)	1.0	3.8
MSCI EM Latin American	(2.3)	(4.7)	12.9	19.4	15.1	2.8	0.2

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
Bloomberg US TIPS	(1.8)	(2.6)	(0.8)	1.2	(2.0)	2.1	1.7
Bloomberg US Treasury Bills	0.4	1.3	3.6	4.6	1.7	1.7	1.1
Bloomberg US Agg Bond	(2.5)	(3.2)	(1.2)	0.6	(5.2)	0.1	1.1
Bloomberg US Universal	(2.4)	(2.9)	(0.6)	1.6	(4.7)	0.3	1.4
<b>Duration</b>							
Bloomberg US Treasury 1-3 Yr	(0.0)	0.7	1.7	2.4	(0.9)	1.0	0.8
Bloomberg US Treasury Long	(7.3)	(11.8)	(8.6)	(9.1)	(15.7)	(2.8)	0.8
Bloomberg US Treasury	(2.2)	(3.1)	(1.5)	(0.8)	(5.8)	(0.1)	0.6
<b>Issuer</b>							
Bloomberg US MBS	(3.2)	(4.1)	(2.3)	(0.2)	(5.1)	(0.8)	0.6
Bloomberg US Corp. High Yield	(1.2)	0.5	5.9	10.3	1.8	3.0	4.2
Bloomberg US Agency Interim	(0.3)	0.2	1.6	2.5	(2.0)	0.7	0.9
Bloomberg US Credit	(2.6)	(3.0)	0.0	3.5	(4.8)	0.9	2.1

## OTHER

<b>Index</b>							
Bloomberg Commodity	(0.7)	4.7	(3.4)	(1.3)	16.2	6.1	(0.7)
Wilshire US REIT	(6.5)	(6.4)	(0.2)	3.9	5.7	2.9	6.0
CS Leveraged Loans	0.9	3.4	9.9	12.5	5.9	4.3	4.3
S&P Global Infrastructure	(4.7)	(7.3)	(3.7)	6.9	7.3	4.1	5.1
Alerian MLP	2.4	9.4	20.2	32.7	43.5	6.4	1.7
<b>Regional Index</b>							
JPM EMBI Global Div	(2.6)	(2.2)	1.8	10.0	(4.6)	(0.4)	2.5
JPM GBI-EM Global Div	(3.4)	(3.3)	4.3	13.1	(2.7)	(0.0)	(0.8)
<b>Hedge Funds</b>							
HFRI Composite	(0.2)	0.8	4.3	6.7	6.9	5.0	4.6
HFRI FOF Composite	(0.2)	0.7	3.0	4.8	3.8	3.4	3.3
<b>Currency (Spot)</b>							
Euro	(2.5)	(3.0)	(0.8)	8.1	(3.4)	(1.8)	(2.4)
Pound Sterling	(3.7)	(4.0)	1.5	9.3	(1.9)	(1.3)	(2.8)
Yen	(2.4)	(3.1)	(11.6)	(3.0)	(10.9)	(5.3)	(4.1)

Source: Morningstar, HFRI, as of 9/30/23.

- The Total Fund, net of manager fees, returned -1.6% in the third quarter of 2023 and in the ranked 29<sup>th</sup> percentile among other public plans greater than \$1 billion (median of -1.9%). It lagged the policy index return of -0.9%. The Total Fund ex Overlay returned -1.6% for the quarter. The Total Fund one-year return of 7.7% lagged the policy index return of 10.6% and ranked in the 90<sup>th</sup> percentile of its peer universe. The three-year return of 5.3% (59<sup>th</sup> percentile) lagged the median large public plan (5.8%) and the policy index (5.7%).
  
- Third quarter results were enhanced by the following factors:
  1. PGIM Quant Solutions beat the Russell 2000 (-2.1% vs -5.1%) bringing the YTD outperformance to 5%. The Value and Qualities were the top performing factors, growth was also a positive contributor, but not to the same extent.
  
- Third quarter results were hindered by the following factors:
  1. PanAgora Defensive Equity lost -5.1% trailing the Russell 1000 which lost -3.1%. Year-to-date the lighter than benchmark weight to IT was a drag on relative performance.
  2. Baillie Gifford lost -10.1% and trailed the MSCI ACWI ex US Growth (-7.7%). Both Japanese holdings and exposure to China hurt relative performance for the quarter.

Total Fund  
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Total Fund**</b>	<b>5,925,126,884</b>	<b>100.0</b>	<b>-1.6 (29)</b>	<b>3.4 (80)</b>	<b>7.7 (90)</b>	<b>-1.1 (47)</b>	<b>5.3 (58)</b>	<b>4.9 (66)</b>	<b>6.1 (51)</b>
<i>Policy Index</i>			-1.1 (14)	6.3 (7)	10.4 (39)	-0.2 (26)	5.6 (55)	5.6 (35)	6.6 (43)
<i>Simple Benchmark</i>			-2.9 (84)	3.8 (68)	9.2 (69)	-2.0 (66)	4.4 (85)	5.2 (56)	6.3 (50)
InvMetrics Public DB > \$1B Median			-1.9	4.6	9.8	-1.2	5.8	5.3	6.2
<b>Total Fund ex Overlay</b>	<b>5,917,254,708</b>	<b>99.9</b>	<b>-1.6 (29)</b>	<b>3.3 (81)</b>	<b>7.3 (94)</b>	<b>-1.1 (48)</b>	<b>5.3 (58)</b>	<b>4.8 (68)</b>	<b>6.1 (54)</b>
<i>Policy Index</i>			-1.1 (14)	6.3 (7)	10.4 (39)	-0.2 (26)	5.6 (55)	5.6 (35)	6.6 (43)
<i>Simple Benchmark</i>			-2.9 (84)	3.8 (68)	9.2 (69)	-2.0 (66)	4.4 (85)	5.2 (56)	6.3 (50)
InvMetrics Public DB > \$1B Median			-1.9	4.6	9.8	-1.2	5.8	5.3	6.2
<b>Growth Portfolio</b>	<b>3,421,856,715</b>	<b>57.8</b>	<b>-2.2</b>	<b>6.4</b>	<b>14.8</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blended Growth Index</i>			-0.7	11.3	18.9	-0.3	8.2	7.6	-
<b>US Equity</b>	<b>1,315,019,186</b>	<b>22.2</b>	<b>-3.3 (37)</b>	<b>7.4 (89)</b>	<b>17.1 (82)</b>	<b>1.0 (10)</b>	<b>9.5 (48)</b>	<b>7.7 (79)</b>	<b>10.1 (73)</b>
<i>Blended US Equity Index</i>			-3.3 (34)	12.4 (19)	20.5 (29)	-0.4 (35)	9.4 (53)	9.1 (18)	11.1 (27)
<i>Russell 3000 Index</i>			-3.3 (34)	12.4 (19)	20.5 (29)	-0.4 (35)	9.4 (53)	9.1 (18)	11.3 (21)
BlackRock Russell 1000	797,183,836	13.5	-3.1 (51)	13.0 (24)	21.2 (32)	0.2 (60)	9.5 (45)	9.6 (28)	-
DE Shaw	183,140,645	3.1	-2.1 (20)	10.0 (47)	17.3 (61)	0.9 (47)	9.5 (45)	8.0 (65)	11.4 (31)
PanAgora Defuseq	218,737,593	3.7	-5.1 (92)	-3.8 (100)	7.7 (99)	1.2 (43)	7.6 (73)	-	-
<i>Russell 1000 Index</i>			-3.1 (51)	13.0 (25)	21.2 (32)	0.2 (60)	9.5 (45)	9.6 (28)	11.6 (22)
<i>eV US Large Cap Core Equity Median</i>			-3.1	9.2	18.9	0.7	9.2	8.7	10.8
PGIM Quant Solutions	113,614,502	1.9	-2.1	7.8	18.3	-0.8	14.8	3.4	-
<i>Russell 2000 Index</i>			-5.1	2.5	8.9	-8.7	7.2	2.4	6.6
<i>eV US Small Cap Core Equity Median</i>			-4.6	4.2	13.1	-4.4	10.8	4.7	7.9
<b>International Equity with Record</b>	<b>1,051,040,988</b>	<b>17.7</b>	<b>-4.0 (45)</b>	<b>6.9 (37)</b>	<b>21.1 (54)</b>	<b>-4.8 (39)</b>	<b>4.2 (48)</b>	<b>3.7 (27)</b>	<b>4.3 (23)</b>
<i>Blended International Equity Index</i>			-2.0 (8)	7.6 (22)	19.7 (79)	-2.0 (8)	6.4 (18)	4.2 (13)	4.5 (20)
Baillie Gifford	242,827,684	4.1	-10.1 (87)	-0.7 (85)	12.8 (76)	-16.9 (79)	-6.0 (84)	1.4 (75)	3.8 (82)
<i>MSCI ACWI ex US</i>			-3.7 (7)	5.8 (25)	21.0 (25)	-4.6 (10)	4.2 (8)	3.1 (49)	3.9 (80)
<i>MSCI ACWI ex US Growth</i>			-7.3 (40)	2.9 (56)	16.2 (58)	-9.8 (39)	-1.6 (51)	2.9 (55)	4.3 (68)
Mondrian	264,329,446	4.5	-2.4 (67)	9.2 (48)	26.5 (56)	-2.1 (60)	6.9 (81)	2.1 (73)	3.1 (77)
<i>MSCI AC World ex USA Value</i>			0.1 (19)	8.9 (52)	26.1 (58)	0.8 (29)	10.3 (40)	3.0 (60)	3.2 (75)
<i>MSCI AC World ex USA Index</i>			-3.7 (84)	5.8 (80)	21.0 (78)	-4.6 (88)	4.2 (94)	3.1 (55)	3.8 (50)
BlackRock MSCI ACWI EX-US IMI	528,820,717	8.9	-3.5 (31)	5.5 (57)	20.5 (47)	-5.2 (46)	4.0 (47)	-	-
<i>MSCI AC World ex USA IMI (Net)</i>			-3.5 (30)	5.3 (60)	20.2 (54)	-5.5 (48)	3.8 (48)	2.6 (67)	3.5 (84)
Record Dynamic Currency Hedge	15,063,142	0.3	297.6	-	-	-	-	-	-



Total Fund  
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Private Equity***</b>	<b>382,514,815</b>	<b>6.5</b>	<b>1.3 (44)</b>	<b>4.6 (41)</b>	<b>3.4 (51)</b>	<b>-4.8 (97)</b>	<b>15.1 (68)</b>	<b>19.7 (7)</b>	<b>18.7 (12)</b>
<i>Blended Private Equity Index</i>			8.2 (2)	26.1 (1)	22.0 (1)	4.3 (62)	17.0 (63)	14.4 (45)	14.6 (32)
<b>Opportunistic Credit</b>	<b>673,281,726</b>	<b>11.4</b>	<b>0.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Opportunistic Credit Index</i>			1.2	6.7	10.3	-1.0	3.0	3.4	4.3
<b>Public Credit</b>	<b>509,874,931</b>	<b>8.6</b>	<b>0.8</b>	<b>4.8</b>	<b>7.5</b>	<b>-0.4</b>	<b>3.3</b>	<b>3.5</b>	<b>5.0</b>
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5	5.9	10.3	-2.7	1.8	3.0	4.2
AG CSF ADF II	7,390,200	0.1	2.7	13.9	-	-	-	-	-
AG CSF II	20,675,200	0.3	3.5	14.1	13.9	-	-	-	-
Angelo Gordon Opportunistic	33,574	0.0	0.0	-8.9	-10.9	0.9	8.7	4.6	-
Angelo Gordon Credit Solutions	10,926,909	0.2	2.3 (3)	7.3 (7)	7.0 (93)	2.2 (4)	11.1 (1)	-	-
Beach Point Select	115,114,534	1.9	2.5 (3)	8.1 (4)	9.9 (40)	2.5 (3)	8.2 (1)	6.8 (1)	-
Brigade Capital	112,774,733	1.9	2.0 (5)	8.3 (4)	6.9 (93)	-1.2 (29)	6.0 (2)	3.3 (29)	4.1 (36)
One William Street	61,500,258	1.0	2.5 (2)	-	-	-	-	-	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5 (57)	5.9 (32)	10.3 (33)	-2.7 (67)	1.8 (55)	3.0 (45)	4.2 (26)
<i>eV US High Yield Fixed Inc Median</i>			0.6	5.4	9.5	-2.3	1.9	2.9	3.9
PIMCO Diversified	129,111,218	2.2	-1.1 (99)	2.4 (99)	7.2 (94)	-6.0 (100)	-2.6 (100)	1.0 (100)	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5 (68)	5.9 (49)	10.3 (48)	-2.7 (81)	1.8 (73)	3.0 (76)	4.2 (60)
Franklin Templeton	52,348,305	0.9	-4.0 (84)	-3.8 (92)	7.9 (35)	-7.0 (62)	-5.6 (76)	-4.0 (98)	-1.2 (86)
<i>Blmbg. Global Multiverse</i>			-3.5 (75)	-1.9 (81)	2.7 (78)	-9.6 (76)	-6.6 (83)	-1.5 (80)	-0.3 (74)
<i>eV All Global Fixed Inc Median</i>			-1.6	1.5	5.6	-6.1	-2.4	0.9	1.7
<b>Private Credit</b>	<b>163,406,796</b>	<b>2.8</b>	<b>1.3</b>	<b>3.9</b>	<b>5.7</b>	<b>4.5</b>	<b>5.9</b>	<b>6.2</b>	<b>-</b>
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			3.1	8.8	10.1	3.5	6.2	4.0	4.1
Blackrock DL Feeder IX-U	41,558,162	0.7	3.0	7.2	8.5	6.2	6.7	-	-
PIMCO Private Income	51,162,727	0.9	1.7	5.9	5.2	3.4	7.5	-	-
TCP Direct Lending VIII	13,204,047	0.2	0.8	5.3	6.8	4.5	5.5	5.8	-
White Oak Yield	29,067,217	0.5	0.0	2.8	1.8	3.9	4.4	5.0	-
White Oak YSF V	28,414,643	0.5	0.0 (84)	-9.7 (100)	-0.8 (100)	1.0 (10)	-	-	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			3.1 (1)	8.8 (3)	10.1 (37)	3.5 (1)	6.2 (1)	4.0 (9)	4.1 (33)
<i>eV US High Yield Fixed Inc Median</i>			0.6	5.4	9.5	-2.3	1.9	2.9	3.9

Total Fund  
Performance Summary (Net of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Diversifying Portfolio</b>	<b>1,057,449,317</b>	<b>17.8</b>	<b>-1.3</b>	<b>0.1</b>	<b>-1.2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blended Diversifying Index</i>			-2.9	-0.1	1.8	-3.4	-2.0	1.7	2.4
<b>Core Fixed</b>	<b>692,270,177</b>	<b>11.7</b>	<b>-4.2</b>	<b>-1.8</b>	<b>-0.3</b>	<b>-7.8</b>	<b>-5.2</b>	<b>-0.1</b>	<b>1.3</b>
<i>Blended Core Fixed Income Benchmark</i>			-5.3	-3.4	-1.5	-8.3	-5.9	-0.3	0.9
DoubleLine	223,887,031	3.8	-3.1 (61)	0.1 (51)	0.7 (47)	-7.5 (79)	-5.3 (93)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.2 (62)	-1.2 (60)	0.6 (50)	-7.3 (73)	-5.2 (89)	0.1 (51)	1.1 (56)
FIAM Bond	136,394,714	2.3	-3.0 (40)	-0.7 (40)	1.2 (29)	-6.9 (25)	-4.5 (24)	0.9 (9)	1.8 (10)
NISA Core Bond	216,839,155	3.7	-3.2 (56)	-1.0 (67)	0.9 (51)	-6.9 (27)	-5.0 (49)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.2 (67)	-1.2 (78)	0.6 (70)	-7.3 (57)	-5.2 (76)	0.1 (79)	1.1 (80)
<i>eV US Core Fixed Inc Median</i>			-3.1	-0.9	0.9	-7.2	-5.0	0.4	1.4
NISA Long Treasury	110,023,152	1.9	-11.8	-	-	-	-	-	-
<i>Blmbg. U.S. Treasury: Long</i>			-11.8	-8.6	-9.1	-18.3	-15.7	-2.8	0.8
<b>Absolute Return</b>	<b>365,179,140</b>	<b>6.2</b>	<b>4.8 (6)</b>	<b>4.2 (58)</b>	<b>-2.3 (95)</b>	<b>5.4 (13)</b>	<b>5.6 (39)</b>	<b>-0.1 (77)</b>	<b>2.0 (65)</b>
<i>Absolute Return Custom Index</i>			2.3 (20)	6.7 (23)	8.7 (23)	6.7 (5)	5.8 (38)	5.8 (14)	5.2 (5)
Acadian MAAR Fund LLC	82,016,408	1.4	2.0 (36)	-0.1 (74)	-3.7 (90)	-0.7 (61)	-	-	-
CFM Systematic Global Macro	84,822,193	1.4	2.1 (34)	-3.7 (85)	-11.0 (97)	2.9 (40)	-	-	-
Graham Quant Macro	99,863,746	1.7	8.2 (5)	11.3 (11)	4.6 (58)	12.3 (8)	9.6 (30)	-	-
PIMCO MAARS Fund LP	98,476,792	1.7	6.4 (9)	8.6 (17)	0.2 (75)	13.2 (6)	10.8 (25)	-	-
<i>Absolute Return Custom Index</i>			2.3 (32)	6.7 (25)	8.7 (32)	6.7 (20)	5.8 (52)	5.8 (40)	5.2 (54)
<i>eV Alt All Multi-Strategy Median</i>			0.7	3.3	6.1	0.9	6.1	4.9	5.6
<b>Inflation Hedge</b>	<b>1,007,402,740</b>	<b>17.0</b>	<b>-1.0</b>	<b>-2.9</b>	<b>-2.0</b>	<b>3.8</b>	<b>8.9</b>	<b>3.8</b>	<b>-</b>
<i>Blended Inflation Hedge Index</i>			-1.3	-1.1	-3.8	4.7	10.0	6.2	-
<b>Real Estate</b>	<b>514,594,961</b>	<b>8.7</b>	<b>-1.6 (28)</b>	<b>-4.7 (62)</b>	<b>-7.7 (72)</b>	<b>3.5 (20)</b>	<b>6.6 (31)</b>	<b>5.4 (4)</b>	<b>8.0 (1)</b>
<i>NCREIF ODCE</i>			-1.9 (41)	-7.6 (78)	-12.1 (87)	3.6 (19)	7.1 (28)	5.7 (1)	8.2 (1)
Harrison Street Core Property	94,968,225	1.6	-2.2	-2.5	-3.1	5.0	6.1	-	-
Invesco	264,899,443	4.5	-1.7	-8.1	-12.8	2.2	6.6	4.9	7.7
Invesco US Val IV	432,108	0.0	-28.0	-50.7	-51.6	-45.2	-30.4	-17.3	-
Invesco US Val V	31,113,700	0.5	-4.0	-3.6	-9.5	-0.7	9.1	-	-
Invesco US Val VI	21,355,451	0.4	0.0	1.7	-2.2	-	-	-	-
PGIM RE US Debt Fund	74,671,299	1.3	1.3	4.9	6.7	6.0	5.8	5.7	-
<i>NCREIF ODCE</i>			-1.9	-7.6	-12.1	3.6	7.1	5.7	8.2
Stockbridge Value IV	27,154,735	0.5	-5.1	-4.5	-2.2	14.1	-	-	-
<i>NCREIF ODCE</i>			-1.9	-7.6	-12.1	3.6	7.1	5.7	8.2

\*NISA Core Treasury funded 6/15/2023.  
See Appendix for Benchmark History

Total Fund  
Performance Summary (Net of Fees)

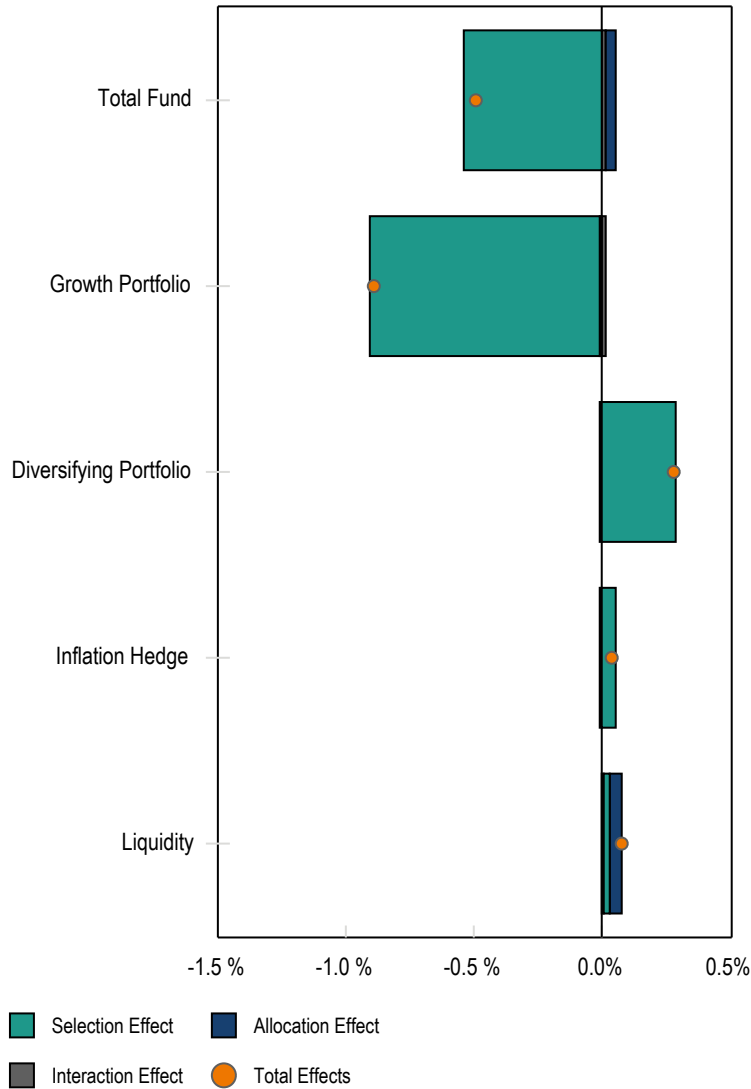
San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Private Real Asset***</b>	<b>320,233,648</b>	<b>5.4</b>	<b>-0.2</b>	<b>0.3</b>	<b>3.2</b>	<b>6.3</b>	<b>14.6</b>	<b>6.5</b>	<b>-</b>
<i>Blended Private Real Asset Index</i>			-0.9	14.4	6.1	7.1	14.3	6.8	-
<i>Blended Secondary CA Private RA Index</i>			1.3	6.1	6.9	13.2	16.4	7.6	-
<b>Public Real Assets</b>	<b>172,574,131</b>	<b>2.9</b>	<b>-0.7</b>	<b>-2.5</b>	<b>4.6</b>	<b>2.5</b>	<b>10.1</b>	<b>0.8</b>	<b>-</b>
<i>Blended Public Real Asset Index</i>			-0.8	-2.9	4.2	2.3	10.0	3.6	-
SSgA Custom Real Asset	172,574,131	2.9	-0.7	-2.5	4.6	2.5	10.1	3.7	-
<i>SSgA Custom Real Asset Index</i>			-0.8	-2.9	4.2	2.3	10.0	3.6	-
<b>Liquidity</b>	<b>438,418,112</b>	<b>7.4</b>	<b>1.2</b>	<b>3.3</b>	<b>4.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blended Liquidity Index</i>			0.8	2.2	3.1	-	-	-	-
<b>Cash Flow-Matched Liquidity</b>	<b>313,223,854</b>	<b>5.3</b>	<b>1.1</b>	<b>2.7</b>	<b>4.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blmbg. 1-3 Year Gov/Credit index</i>			0.7	1.9	2.8	-1.2	-0.7	1.2	1.0
<i>Blmbg. 1-3 Year Credit</i>			0.8	2.2	3.5	-0.9	-0.3	1.6	1.5
Insight Investment*	297,195,840	5.0	1.2	2.9	4.3	-	-	-	-
<i>Blmbg. 1-3 Year Credit</i>			0.8	2.2	3.5	-0.9	-0.3	1.6	1.5
County Treasury Pool**	16,028,014	0.3	0.4	3.4	3.9	2.4	2.0	2.2	1.9
<i>90 Day U.S. Treasury Bill</i>			1.3	3.6	4.5	2.5	1.7	1.7	1.1
<b>Cash &amp; Cash Overlay</b>	<b>132,662,993</b>	<b>2.2</b>	<b>1.4</b>	<b>4.2</b>	<b>5.2</b>	<b>3.0</b>	<b>2.1</b>	<b>1.7</b>	<b>1.3</b>
<i>90 Day U.S. Treasury Bill</i>			1.3	3.6	4.5	2.5	1.7	1.7	1.1
General Account	124,790,830	2.1	1.5	4.1	5.2	3.1	2.2	2.6	2.1
<i>90 Day U.S. Treasury Bill</i>			1.3	3.6	4.5	2.5	1.7	1.7	1.1

\*\*\*Returns are one-quarter lag, excludes EnCap Energy Capital Fund and Sheridan Production Partners  
See Appendix for Benchmark History

Total Fund  
Performance Attribution

Attribution Effects  
Last Three Months



Performance Attribution

	3 Mo
Wtd. Actual Return	-1.6
Wtd. Index Return	-1.1
<b>Excess Return</b>	<b>-0.5</b>
Selection Effect	-0.5
Allocation Effect	0.0
Interaction Effect	0.0

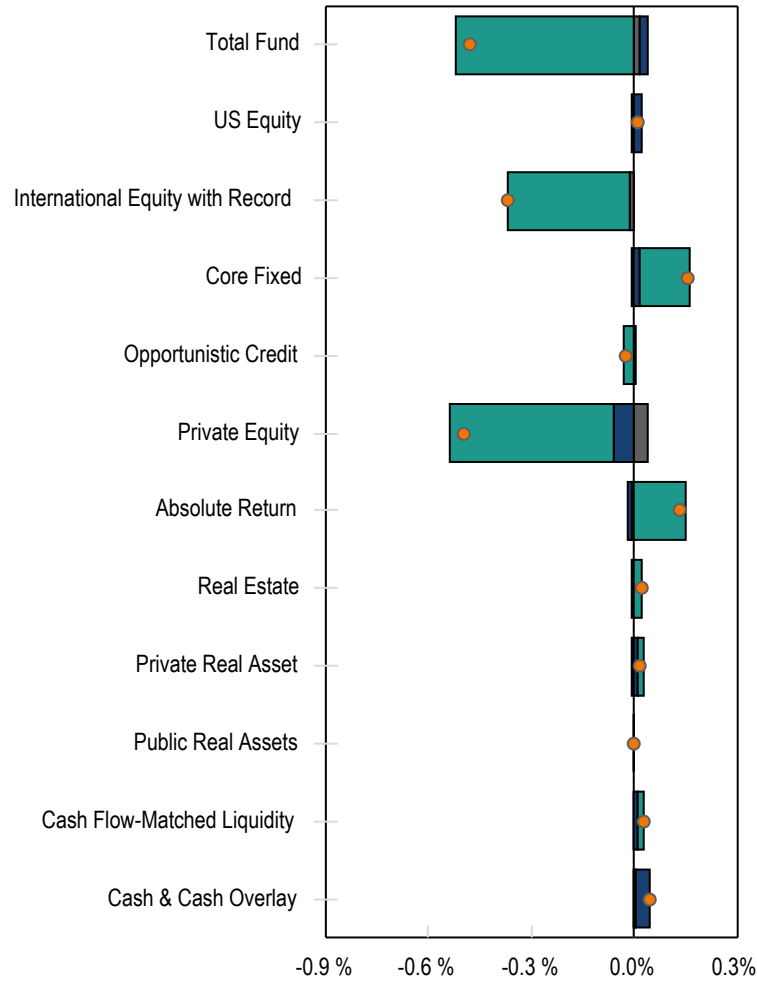
Attribution Summary  
Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	-2.2	-0.7	-1.5	-0.9	0.0	0.0	-0.9
Diversifying Portfolio	-1.3	-2.9	1.6	0.3	0.0	0.0	0.3
Inflation Hedge	-1.0	-1.3	0.3	0.0	0.0	0.0	0.0
Liquidity	1.2	0.8	0.4	0.0	0.0	0.0	0.1
<b>Total Fund</b>	<b>-1.6</b>	<b>-1.1</b>	<b>-0.5</b>	<b>-0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.5</b>

Total Fund  
Performance Attribution

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Attribution Effects  
Last Three Months



■ Selection Effect    ■ Allocation Effect  
■ Interaction Effect    ● Total Effects

Performance Attribution

	3 Mo
Wtd. Actual Return	-1.6
Wtd. Index Return	-1.1
<b>Excess Return</b>	<b>-0.5</b>
Selection Effect	-0.5
Allocation Effect	0.0
Interaction Effect	0.0

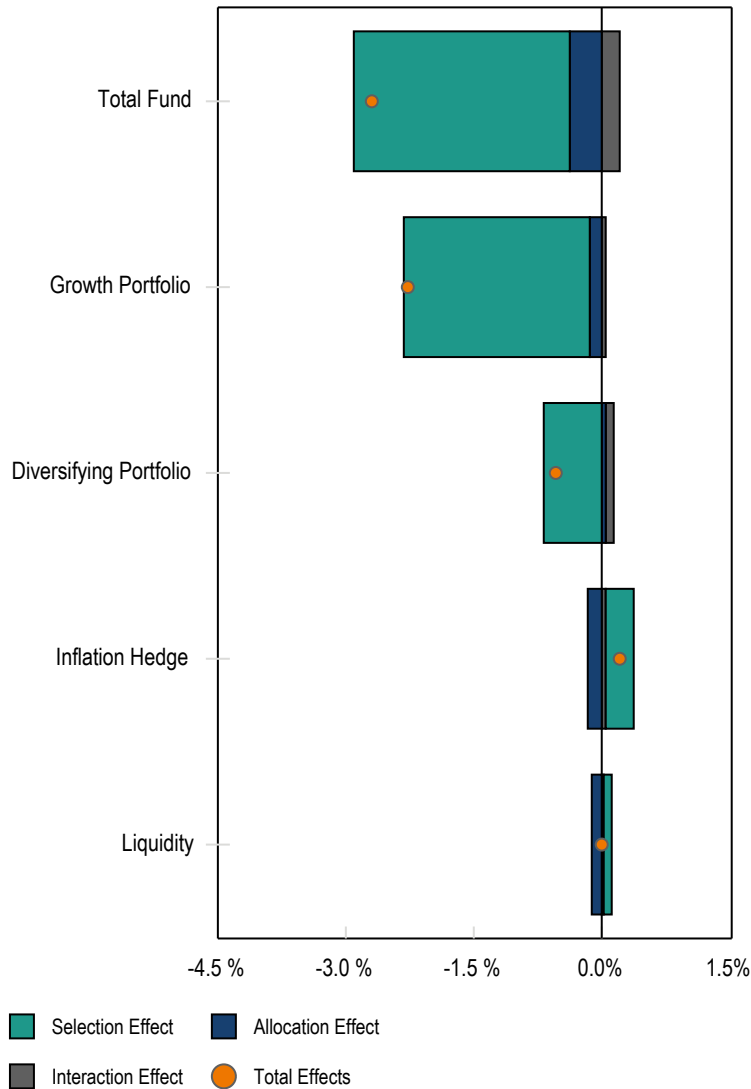
Attribution Summary  
Last Three Months

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	-3.3	-3.3	0.0	0.0	0.0	0.0	0.0
International Equity with Record	-4.0	-2.0	-2.0	-0.4	0.0	0.0	-0.4
Core Fixed	-4.2	-5.3	1.2	0.1	0.0	0.0	0.2
Opportunistic Credit	0.9	1.2	-0.3	0.0	0.0	0.0	0.0
Private Equity	1.3	8.2	-6.9	-0.5	-0.1	0.0	-0.5
Absolute Return	4.8	2.3	2.5	0.1	0.0	0.0	0.1
Real Estate	-1.6	-1.9	0.3	0.0	0.0	0.0	0.0
Private Real Asset	-0.2	-0.9	0.6	0.0	0.0	0.0	0.0
Public Real Assets	-0.7	-0.8	0.1	0.0	0.0	0.0	0.0
Cash Flow-Matched Liquidity	1.1	0.7	0.4	0.0	0.0	0.0	0.0
Cash & Cash Overlay	1.4	1.3	0.1	0.0	0.0	0.0	0.0
<b>Total Fund</b>	<b>-1.6</b>	<b>-1.1</b>	<b>-0.5</b>	<b>-0.5</b>	<b>0.0</b>	<b>0.0</b>	<b>-0.5</b>

Total Fund  
Performance Attribution (1 Year)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Attribution Effects  
One Year



Performance Attribution

	1 Yr
Wtd. Actual Return	7.7
Wtd. Index Return	10.4
<b>Excess Return</b>	<b>-2.7</b>
Selection Effect	-2.5
Allocation Effect	-0.4
Interaction Effect	0.2

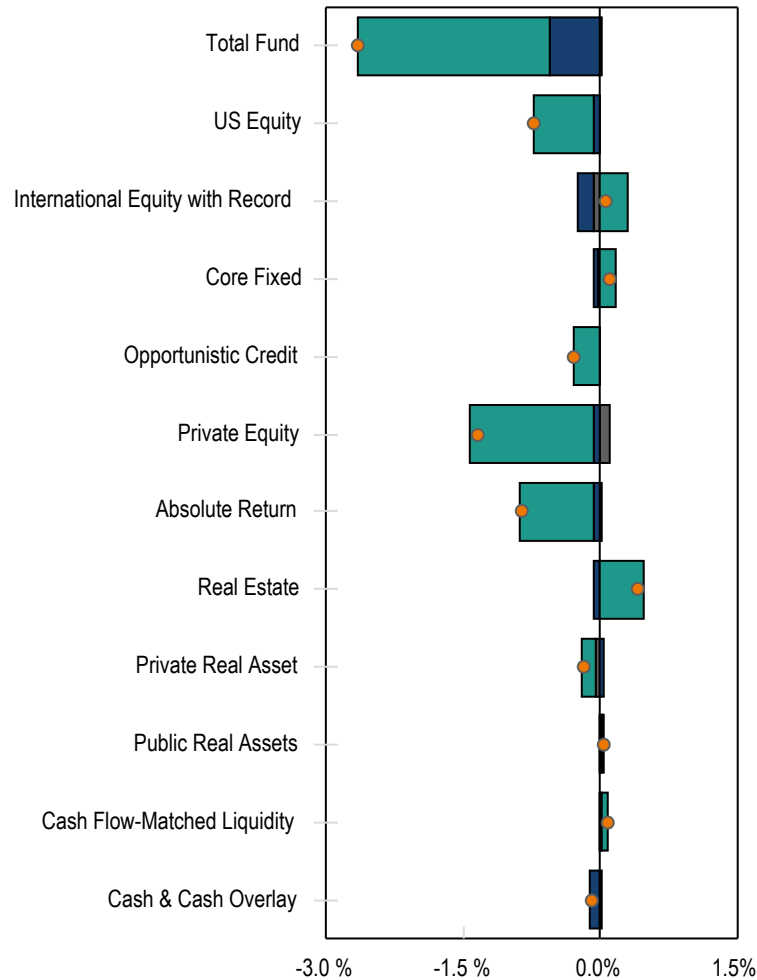
Attribution Summary  
One Year

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Growth Portfolio	14.8	18.9	-4.0	-2.2	-0.1	0.1	-2.3
Diversifying Portfolio	-1.2	1.8	-3.0	-0.7	0.1	0.1	-0.5
Inflation Hedge	-2.0	-3.8	1.8	0.3	-0.2	0.0	0.2
Liquidity	4.5	3.1	1.4	0.1	-0.1	0.0	0.0
<b>Total Fund</b>	<b>7.7</b>	<b>10.4</b>	<b>-2.7</b>	<b>-2.5</b>	<b>-0.4</b>	<b>0.2</b>	<b>-2.7</b>

Total Fund  
Performance Attribution (1 Year)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Attribution Effects  
One Year



■ Selection Effect    ■ Allocation Effect  
■ Interaction Effect    ● Total Effects

Performance Attribution

	1 Yr
Wtd. Actual Return	7.7
Wtd. Index Return	10.4
<b>Excess Return</b>	<b>-2.6</b>
Selection Effect	-2.1
Allocation Effect	-0.5
Interaction Effect	0.0

Attribution Summary  
One Year

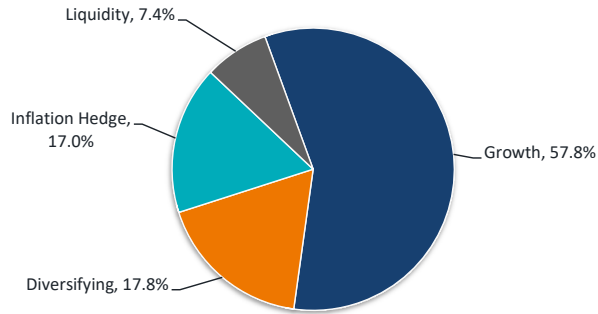
	Actual Weight (%)	Policy Weight (%)	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
US Equity	21.2	21.5	17.1	20.5	-3.3	-0.6	-0.1	0.0	-0.7
International Equity with Record	18.2	18.8	21.1	19.7	1.4	0.3	-0.2	-0.1	0.1
Core Fixed	12.3	12.9	-0.3	-1.5	1.3	0.2	0.0	0.0	0.1
Opportunistic Credit	10.0	10.3	7.3	10.3	-2.9	-0.3	0.0	0.0	-0.3
Private Equity	6.4	7.0	3.4	22.0	-18.6	-1.4	-0.1	0.1	-1.3
Absolute Return	6.2	6.8	-2.3	8.7	-11.0	-0.8	-0.1	0.0	-0.8
Real Estate	9.0	9.0	-7.7	-12.1	4.5	0.5	-0.1	0.0	0.4
Private Real Asset	4.6	4.6	3.2	6.1	-2.9	-0.2	0.0	0.0	-0.2
Public Real Assets	4.0	3.8	4.6	4.2	0.3	0.0	0.0	0.0	0.0
Cash Flow-Matched Liquidity	5.3	4.5	4.0	2.8	1.2	0.1	0.0	0.0	0.1
Cash & Cash Overlay	2.8	1.0	5.2	4.5	0.8	0.0	-0.1	0.0	-0.1
<b>Total Fund</b>	<b>100.0</b>	<b>100.0</b>	<b>7.7</b>	<b>10.4</b>	<b>-2.6</b>	<b>-2.1</b>	<b>-0.5</b>	<b>0.0</b>	<b>-2.6</b>

\* Interaction Effects include Residual Effects

Total Fund  
Asset Allocation Analysis

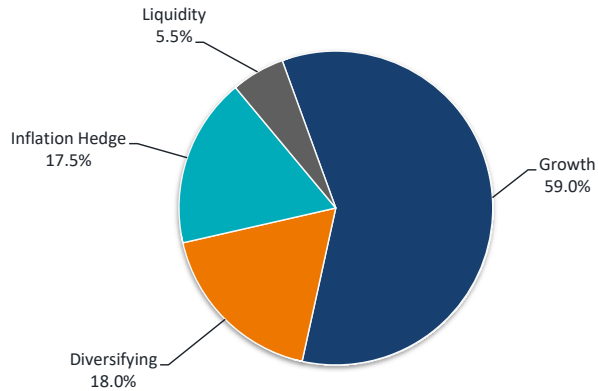
San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Current w/ Overlay



ASSET ALLOCATION	MARKET VALUE W/	W/ OVERLAY	W/O OVERLAY
Growth	3,421,856,715	57.8%	57.7%
Diversifying	1,057,449,317	17.8%	17.8%
Inflation Hedge	1,007,402,740	17.0%	17.0%
Liquidity	438,418,112	7.4%	7.5%
<b>TOTAL</b>	<b>5,925,126,884</b>	<b>100.0%</b>	<b>100.0%</b>

Target

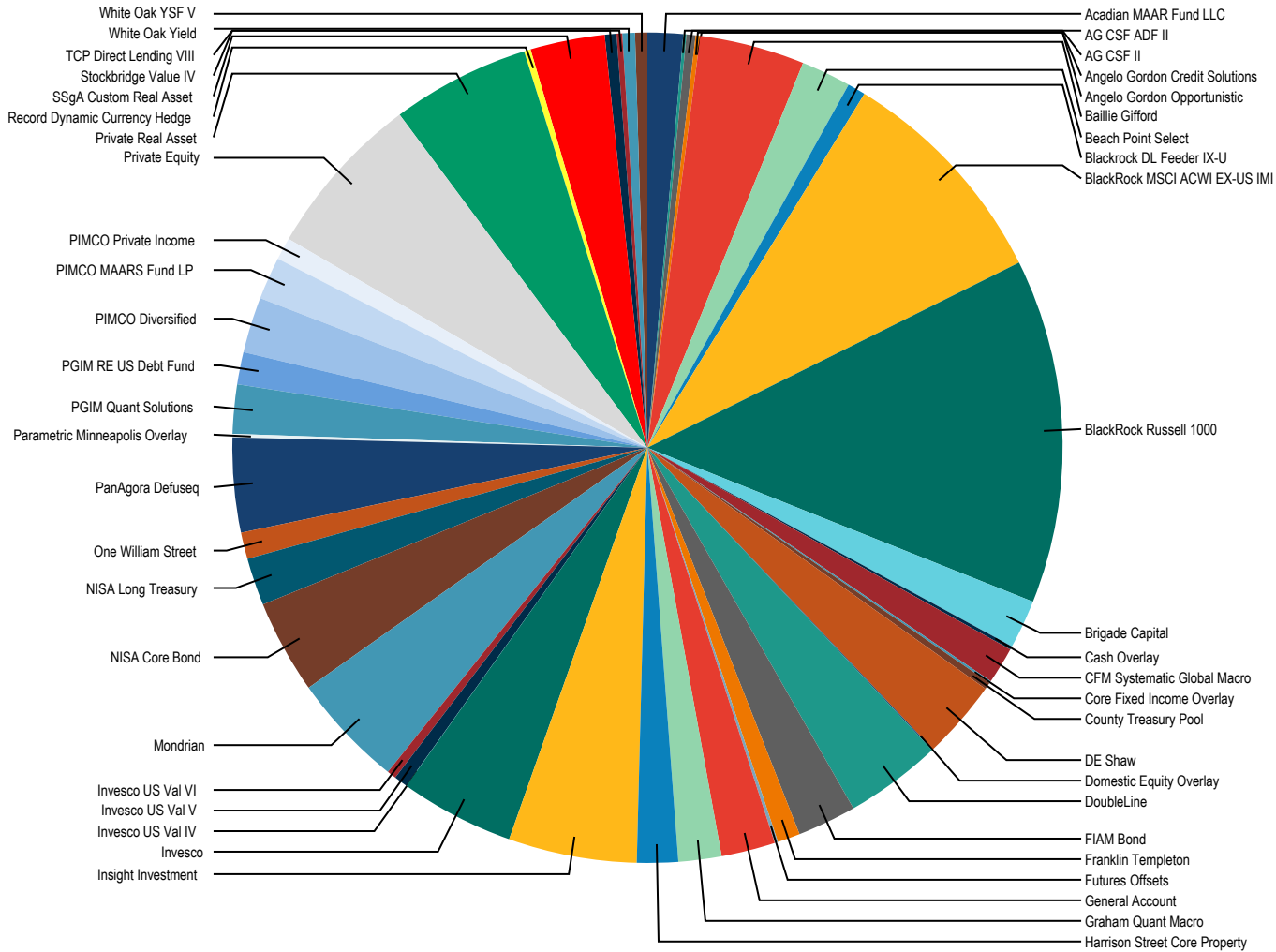


ASSET ALLOCATION	W/ OVERLAY	TARGET	DIFF
Growth	57.8%	59.0%	-1.2%
Diversifying	17.8%	18.0%	-0.2%
Inflation Hedge	17.0%	17.5%	-0.5%
Liquidity	7.4%	5.5%	1.9%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>



Total Fund  
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association  
 Period Ending: September 30, 2023



Total Fund  
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association  
 Period Ending: September 30, 2023

Name	Market Value	% of Portfolio
BlackRock Russell 1000	\$797,183,836	13.5
DE Shaw	\$183,140,645	3.1
PanAgora Defuseq	\$218,737,593	3.7
PGIM Quant Solutions	\$113,614,502	1.9
Domestic Equity Overlay	\$2,342,610	0.0
Baillie Gifford	\$242,827,684	4.1
Mondrian	\$264,329,446	4.5
BlackRock MSCI ACWI EX-US IMI	\$528,820,717	8.9
International Equity Overlay	-	0.0
DoubleLine	\$223,887,031	3.8
FIAM Bond	\$136,394,714	2.3
NISA Core Bond	\$216,839,155	3.7
NISA Long Treasury	\$110,023,152	1.9
Core Fixed Income Overlay	\$5,126,125	0.1
AG CSF ADF II	\$7,390,200	0.1
AG CSF II	\$20,675,200	0.3
Angelo Gordon Opportunistic	\$33,574	0.0
Angelo Gordon Credit Solutions	\$10,926,909	0.2
Beach Point Select	\$115,114,534	1.9
Brigade Capital	\$112,774,733	1.9
PIMCO Diversified	\$129,111,218	2.2
Franklin Templeton	\$52,348,305	0.9
Blackrock DL Feeder IX-U	\$41,558,162	0.7
PIMCO Private Income	\$51,162,727	0.9
TCP Direct Lending VIII	\$13,204,047	0.2
White Oak Yield	\$29,067,217	0.5
White Oak YSF V	\$28,414,643	0.5
Private Equity	\$382,514,815	6.5

Total Fund  
 Manager Allocation Analysis

San Mateo County Employees' Retirement Association  
 Period Ending: September 30, 2023

Name	Market Value	% of Portfolio
Acadian MAAR Fund LLC	\$82,016,408	1.4
CFM Systematic Global Macro	\$84,822,193	1.4
Graham Quant Macro	\$99,863,746	1.7
PIMCO MAARS Fund LP	\$98,476,792	1.7
Harrison Street Core Property	\$94,968,225	1.6
Invesco	\$264,899,443	4.5
Invesco US Val IV	\$432,108	0.0
Invesco US Val V	\$31,113,700	0.5
Invesco US Val VI	\$21,355,451	0.4
PGIM RE US Debt Fund	\$74,671,299	1.3
Stockbridge Value IV	\$27,154,735	0.5
Private Real Asset	\$320,233,648	5.4
SSgA Custom Real Asset	\$172,574,131	2.9
Insight Investment	\$297,195,840	5.0
County Treasury Pool	\$16,028,014	0.3
General Account	\$124,790,830	2.1
Cash Overlay	\$7,872,176	0.1
Transition Account	-	0.0
Futures Offsets	-\$7,468,735	-0.1
<b>Total Fund</b>	<b>\$5,925,126,884</b>	<b>100.0</b>

Total Fund  
Risk vs. Return

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Statistics Summary  
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	5.3 (58)	7.6 (9)	0.5 (39)	-0.2 (73)	2.4 (9)
Policy Index	5.6 (55)	8.7 (27)	0.5 (44)	-	0.0
Policy Index II	5.2 (61)	9.0 (36)	0.4 (60)	-0.6 (98)	0.6 (1)
InvMetrics Public DB > \$1B Median	5.8	9.6	0.5	0.1	3.1

Statistics Summary  
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	4.9 (66)	8.9 (20)	0.4 (44)	-0.3 (83)	2.2 (1)
Policy Index	5.6 (35)	9.3 (24)	0.5 (30)	-	0.0
Policy Index II	5.4 (47)	9.6 (33)	0.4 (37)	-0.4 (92)	0.5 (1)
InvMetrics Public DB > \$1B Median	5.3	10.7	0.4	-0.1	3.0

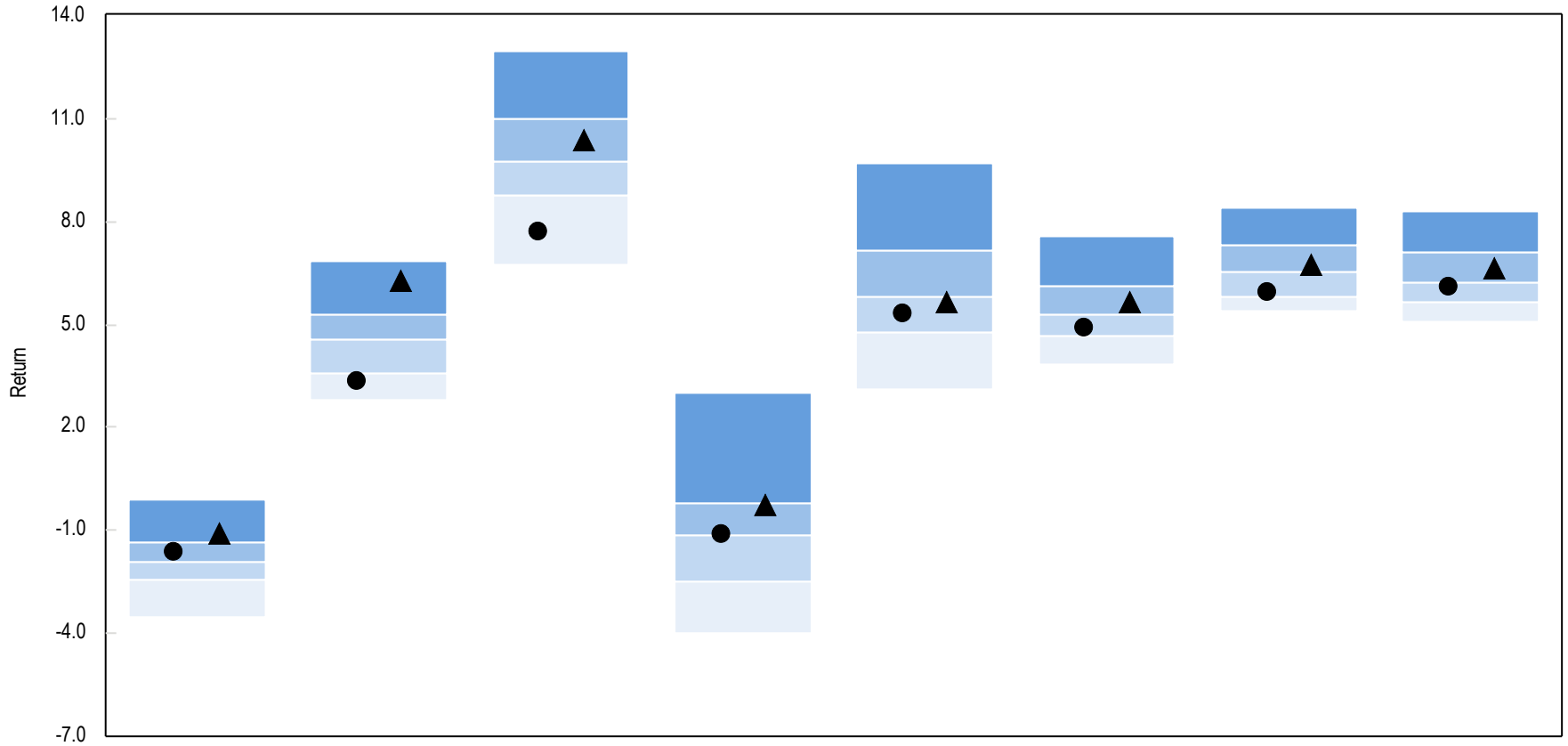
Statistics Summary  
10 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	6.1 (51)	7.5 (21)	0.7 (37)	-0.3 (66)	1.7 (1)
Policy Index	6.6 (43)	7.8 (33)	0.7 (33)	-	0.0
Policy Index II	-	-	-	-	-
InvMetrics Public DB > \$1B Median	6.2	8.6	0.6	-0.1	2.4

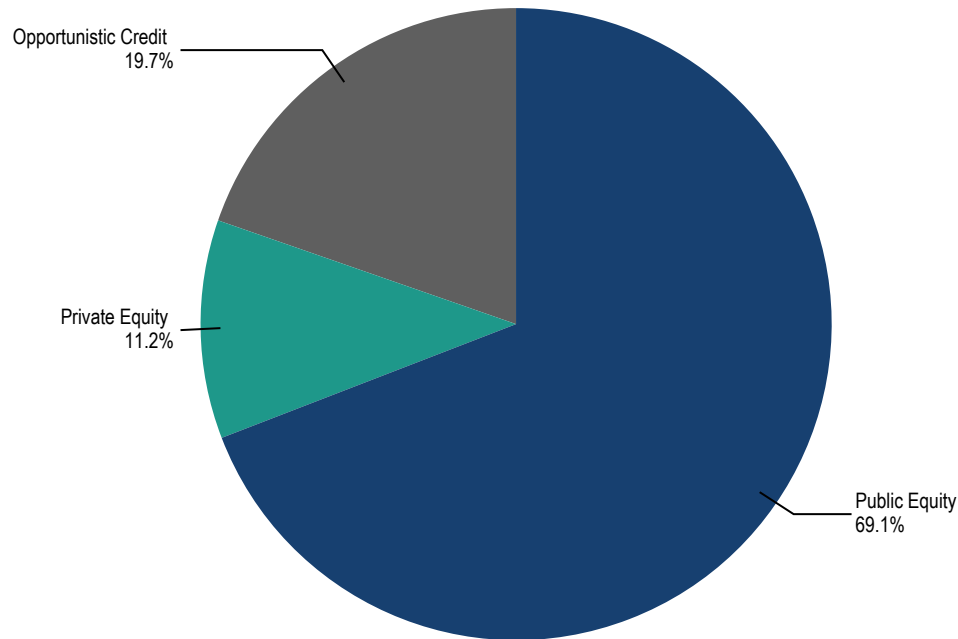
Total Fund  
Peer Universe Comparison

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

InvMetrics Public DB >\$1B Net Return Comparison



	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Total Fund	-1.6 (29)	3.4 (80)	7.7 (90)	-1.1 (47)	5.3 (58)	4.9 (66)	6.0 (71)	6.1 (51)
▲ Policy Index	-1.1 (14)	6.3 (7)	10.4 (39)	-0.2 (26)	5.6 (55)	5.6 (35)	6.7 (48)	6.6 (43)
5th Percentile	-0.1	6.8	13.0	3.0	9.7	7.6	8.4	8.3
1st Quartile	-1.4	5.3	11.0	-0.2	7.2	6.1	7.3	7.1
Median	-1.9	4.6	9.8	-1.2	5.8	5.3	6.5	6.2
3rd Quartile	-2.5	3.6	8.8	-2.5	4.8	4.7	5.8	5.7
95th Percentile	-3.5	2.8	6.7	-4.0	3.1	3.8	5.4	5.1
Population	80	74	73	66	63	61	60	54

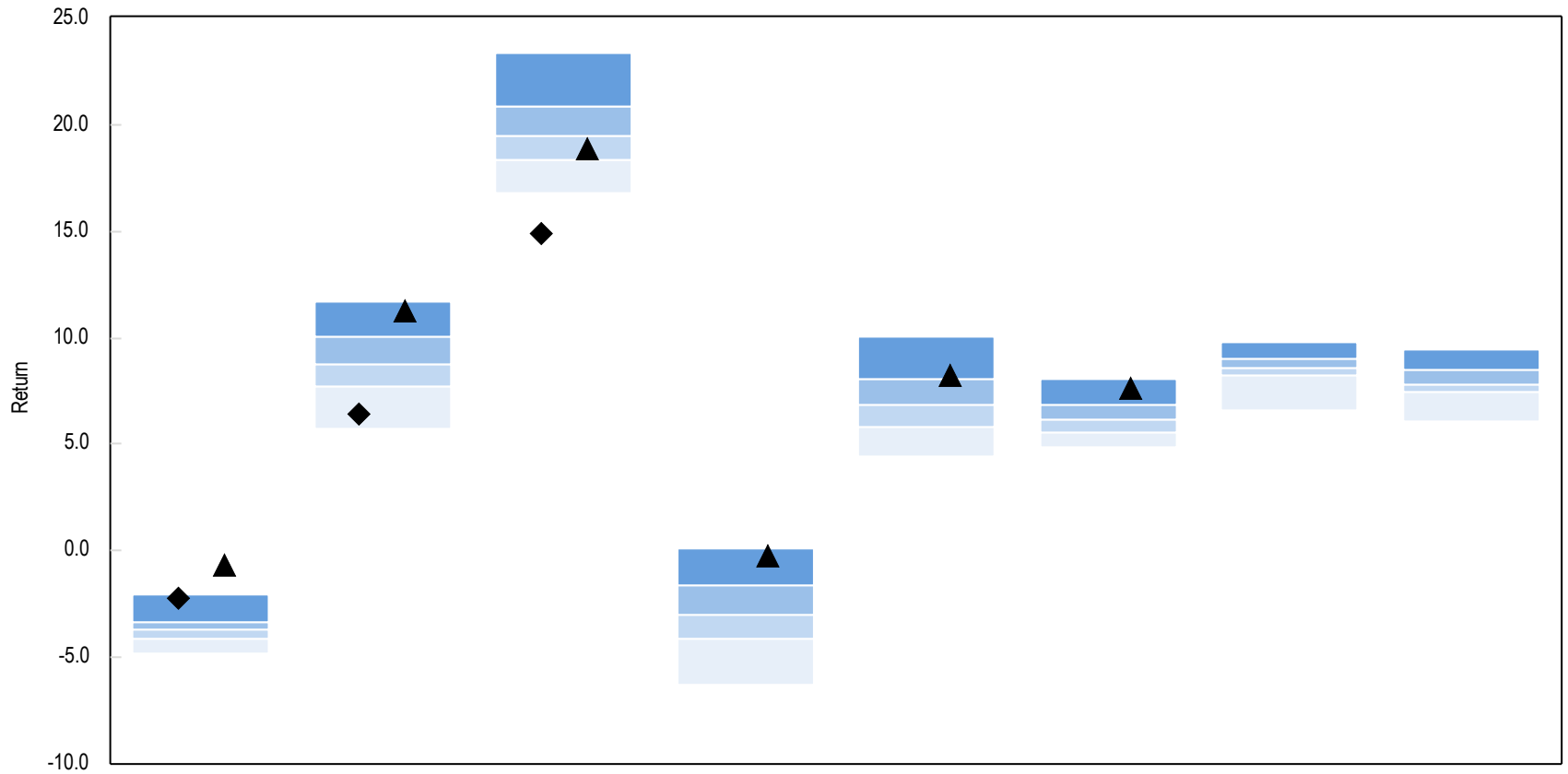


	Actual \$	Actual %	Manager Contribution to Excess Return %
US Equity	\$1,315,019,186	38.4%	0.0%
International Equity	\$1,051,040,988	30.7%	-0.6%
Private Equity	\$382,514,815	11.2%	-0.8%
Opportunistic Credit	\$673,281,726	19.7%	0.0%
Actual vs. Policy Weight Difference			-0.1%
<b>Total</b>	<b>\$3,421,856,715</b>	<b>100.0%</b>	<b>-1.5%</b>

Statistics Summary  
1 Year

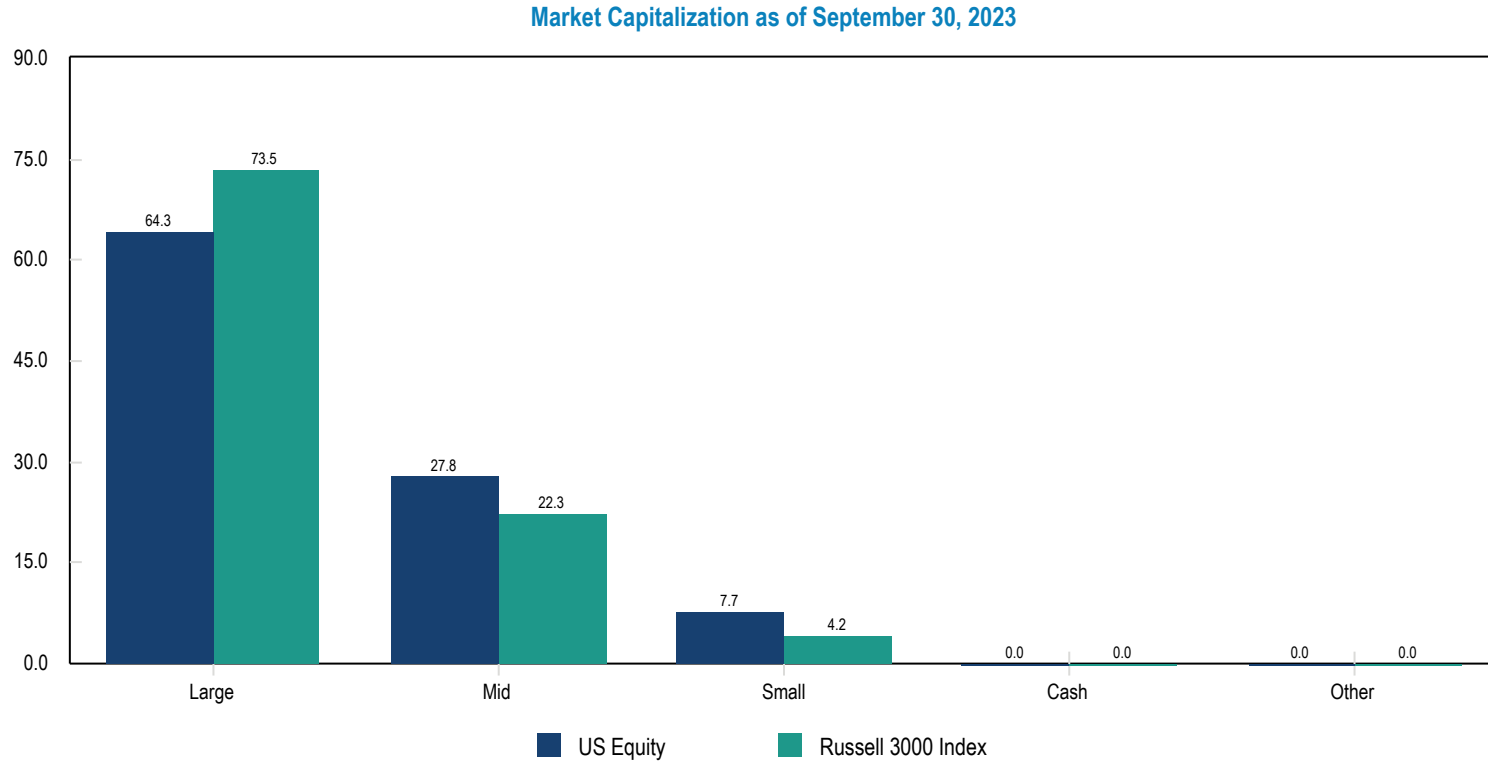
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Growth Portfolio	14.8	10.9	0.9	-1.2	2.9
<i>Blended Growth Index</i>	18.9	11.4	1.2	-	0.0
US Equity	17.1	15.3	0.8	-1.1	2.6
<i>Blended US Equity Index</i>	20.5	15.6	1.0	-	0.0
International Equity with Record	21.1	16.7	1.0	0.5	3.5
<i>Blended International Equity Index</i>	19.7	13.7	1.1	-	0.0
Private Equity	3.4	2.9	-0.3	-1.0	18.9
<i>Blended Private Equity Index</i>	22.0	19.1	0.9	-	0.0
Opportunistic Credit	7.3	3.4	0.8	-0.8	3.3
<i>Opportunistic Credit Index</i>	10.3	4.3	1.2	-	0.0

InvMetrics All DB US Eq Net Return Comparison



	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
◆ Growth Portfolio	-2.2 (8)	6.4 (91)	14.8 (99)	-	-	-	-	-
▲ Blended Growth Index	-0.7 (1)	11.3 (11)	18.9 (65)	-0.3 (7)	8.2 (22)	7.6 (10)	-	-
5th Percentile	-2.0	11.7	23.4	0.1	10.0	8.1	9.8	9.5
1st Quartile	-3.3	10.1	20.8	-1.6	8.1	6.9	9.0	8.5
Median	-3.7	8.8	19.5	-3.0	6.9	6.2	8.6	7.8
3rd Quartile	-4.1	7.7	18.3	-4.1	5.8	5.6	8.2	7.4
95th Percentile	-4.8	5.7	16.7	-6.3	4.4	4.8	6.6	6.1
Population	112	105	104	84	81	75	66	54





US Equity  
Equity Only Summary Statistics

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Characteristics

	Portfolio	Benchmark
Number of Stocks	2,237	2,994
Wtd. Avg. Mkt. Cap \$M	567,386.3	538,565.1
Median Mkt. Cap \$M	3,046.6	1,845.8
Price/Earnings ratio	21.1	20.6
Current Yield (%)	1.6	1.6
Beta (5 Years, Monthly)	0.9	1.0
Price/Book ratio	4.2	4.0
Return on Equity (%)	9.4	8.3

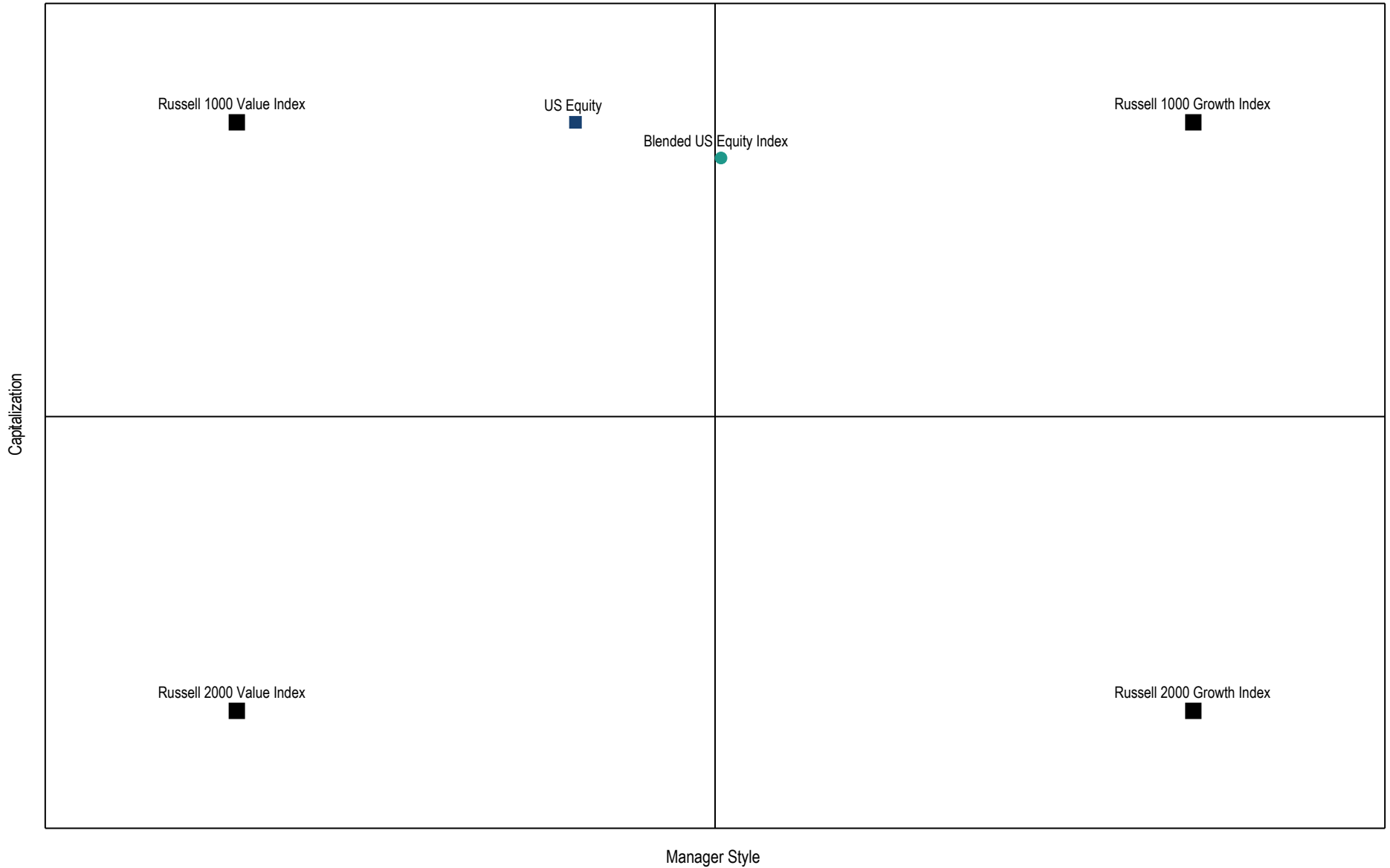
Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Apple Inc	6.4	Tango Therapeutics Inc	239.2	AMC Entertainment Holdings Inc	-79.4
Microsoft Corp	5.9	Cardlytics Inc	161.1	Akoustis Technologies Inc	-76.3
Amazon.com Inc	2.9	United States Cellular Corp	143.7	Benson Hill Inc	-74.5
NVIDIA Corporation	2.6	Telephone and Data Systems Inc	124.8	TPI Composites Inc	-74.4
Alphabet Inc	2.0	Immunovant Inc	102.4	Kodiak Sciences Inc	-73.9
Tesla Inc	1.8	TETRA Technologies Inc.	88.8	Origin Materials Inc	-70.0
Alphabet Inc	1.7	Centrus Energy Corp	74.3	FibroGen Inc	-68.0
Meta Platforms Inc	1.7	Celestica Inc	69.1	TG Therapeutics Inc	-66.3
Berkshire Hathaway Inc	1.6	Hallador Energy Co	68.3	Farfetch Limited	-65.4
Unitedhealth Group Inc	1.2	Intercept Pharmaceuticals Inc	67.6	Hawaiian Electric Industries Inc.	-65.0

U.S. Effective Style Map



**Characteristics**

	Portfolio	Benchmark
Number of Stocks	1,011	1,009
Wtd. Avg. Mkt. Cap \$M	568,459.5	568,620.9
Median Mkt. Cap \$M	12,268.7	12,272.6
Price/Earnings ratio	21.2	21.2
Current Yield (%)	1.6	1.6
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	4.2	4.2
Return on Equity (%)	10.2	10.2

**Top Holdings**

**Best Performers**

**Worst Performers**

	(%)		Return (%)		Return (%)
Apple Inc	6.4	AppLovin Corporation	55.3	AMC Entertainment Holdings Inc	-79.4
Microsoft Corp	5.9	Vertiv Holdings Co	50.2	Hawaiian Electric Industries Inc.	-65.0
Amazon.com Inc	2.9	Capri Holdings Ltd	46.6	NovoCure Limited	-61.1
NVIDIA Corporation	2.6	Rivian Automotive Inc	45.7	Apellis Pharmaceuticals Inc	-58.2
Alphabet Inc	2.0	Texas Pacific Land Corp	38.7	ViaSat Inc.	-55.3
Tesla Inc	1.7	Affirm Holdings Inc	38.7	Petco Health & Wellness Co Inc	-54.0
Alphabet Inc	1.7	Splunk Inc	37.9	Driven Brands Holdings Inc	-53.5
Meta Platforms Inc	1.7	H&R Block Inc	36.2	Olaplex Holdings Inc	-47.6
Berkshire Hathaway Inc	1.6	Ollie's Bargain Outlet Holdings Inc	33.2	Masimo Corp	-46.7
Exxon Mobil Corp	1.2	Zions Bancorporation National Association	31.4	Spirit Aerosystems Holdings Inc	-44.7

**Characteristics**

	Portfolio	Benchmark
Number of Stocks	241	1,009
Wtd. Avg. Mkt. Cap \$M	111,810.1	568,620.9
Median Mkt. Cap \$M	23,697.4	12,272.6
Price/Earnings ratio	19.6	21.2
Current Yield (%)	2.7	1.6
Beta (3 Years, Monthly)	0.7	1.0
Price/Book ratio	2.7	4.2
Return on Equity (%)	5.0	10.2

**Top Holdings**

**Best Performers**

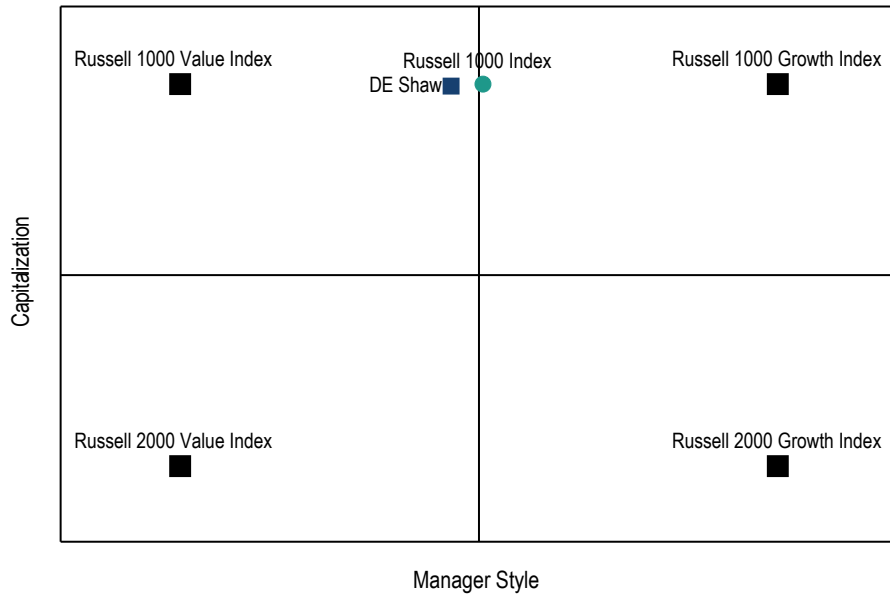
**Worst Performers**

	(%)		Return (%)		Return (%)
T-Mobile US Inc	1.9	Amgen Inc	22.0	Hawaiian Electric Industries Inc.	-65.0
Verizon Communications Inc	1.8	Packaging Corp Of America	17.2	Olaplex Holdings Inc	-47.6
AT&T Inc	1.7	Conocophillips	16.7	GameStop Corp.	-32.1
Chevron Corp	1.6	Assurant Inc.	14.8	Zimmer Biomet Holdings Inc	-22.8
Electronic Arts Inc	1.5	International Paper Co	13.0	NextEra Energy Inc	-22.3
Williams Cos Inc. (The)	1.5	Gentex Corporation	11.7	Johnson Controls International Plc	-21.4
Exxon Mobil Corp	1.5	Casey's General Stores Inc.	11.5	Keysight Technologies Inc	-21.0
Conocophillips	1.5	Exxon Mobil Corp	10.6	Sotera Health Co	-20.5
Fox Corp	1.5	Automatic Data Processing Inc	10.0	Hershey Co (The)	-19.4
Service Corp International	1.3	FactSet Research Systems Inc.	9.4	Avangrid Inc	-18.9

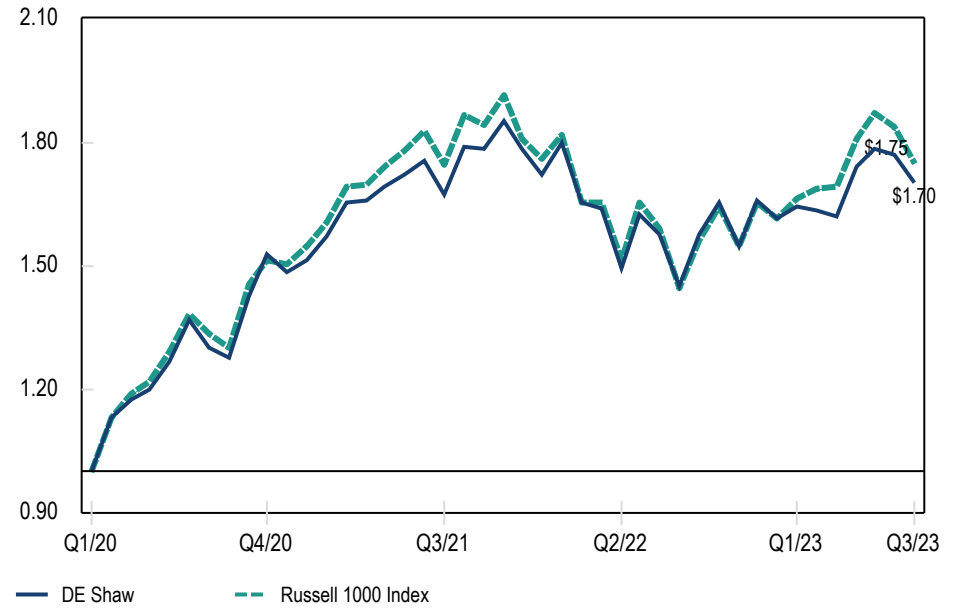
PanAgora Defuseq Performance Attribution vs. Russell 1000 Index

	Total Effects	Attribution Effects			Performance		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1	-0.3	0.3	-0.1	5.9	12.4	6.1	4.0
Materials	0.2	0.1	-0.1	0.2	-1.4	-4.6	9.3	2.7
Industrials	-0.3	-0.3	0.0	0.0	-7.8	-4.8	10.7	9.6
Consumer Discretionary	0.1	0.0	0.0	0.0	-4.3	-4.6	8.8	10.9
Consumer Staples	-0.5	-0.2	-0.2	-0.2	-8.5	-5.6	12.5	6.3
Health Care	-0.3	-0.3	0.0	0.1	-5.4	-3.0	10.6	13.3
Financials	0.0	0.2	-0.1	-0.1	1.0	-0.6	7.7	12.9
Information Technology	0.6	0.5	0.4	-0.3	-3.6	-5.4	8.5	27.1
Communication Services	-0.6	-0.6	0.1	-0.1	-4.5	2.4	9.5	8.1
Utilities	-0.8	0.0	-0.6	-0.1	-10.6	-9.2	12.4	2.5
Real Estate	-0.1	-0.1	-0.1	0.0	-10.9	-8.5	3.7	2.7
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
<b>Total</b>	<b>-1.9</b>	<b>-0.9</b>	<b>-0.2</b>	<b>-0.7</b>	<b>-5.0</b>	<b>-3.1</b>	<b>100.0</b>	<b>100.0</b>

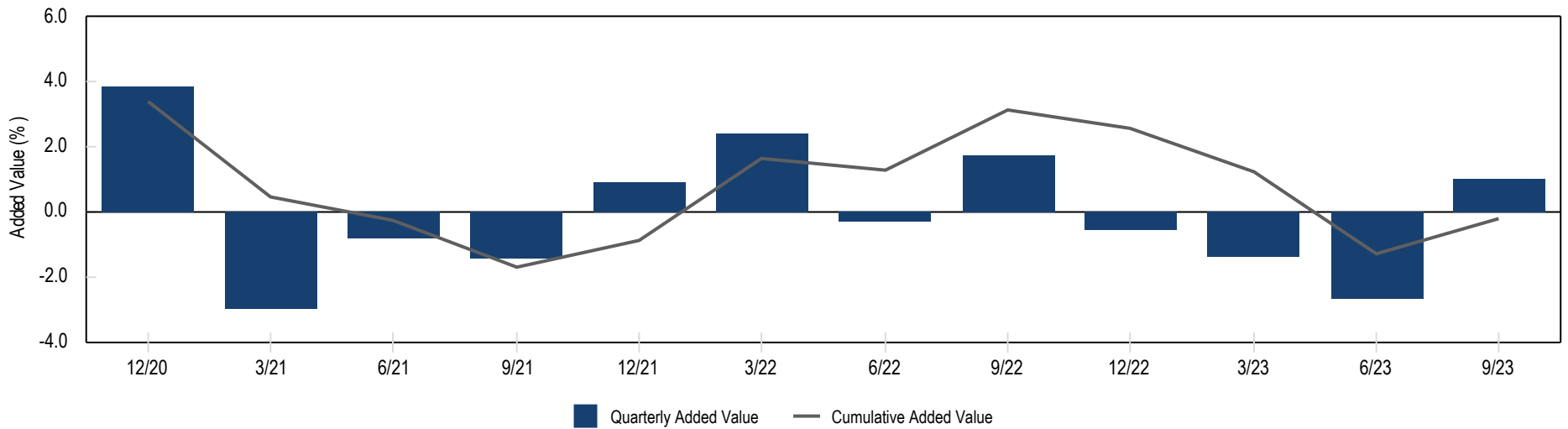
U.S. Effective Style Map



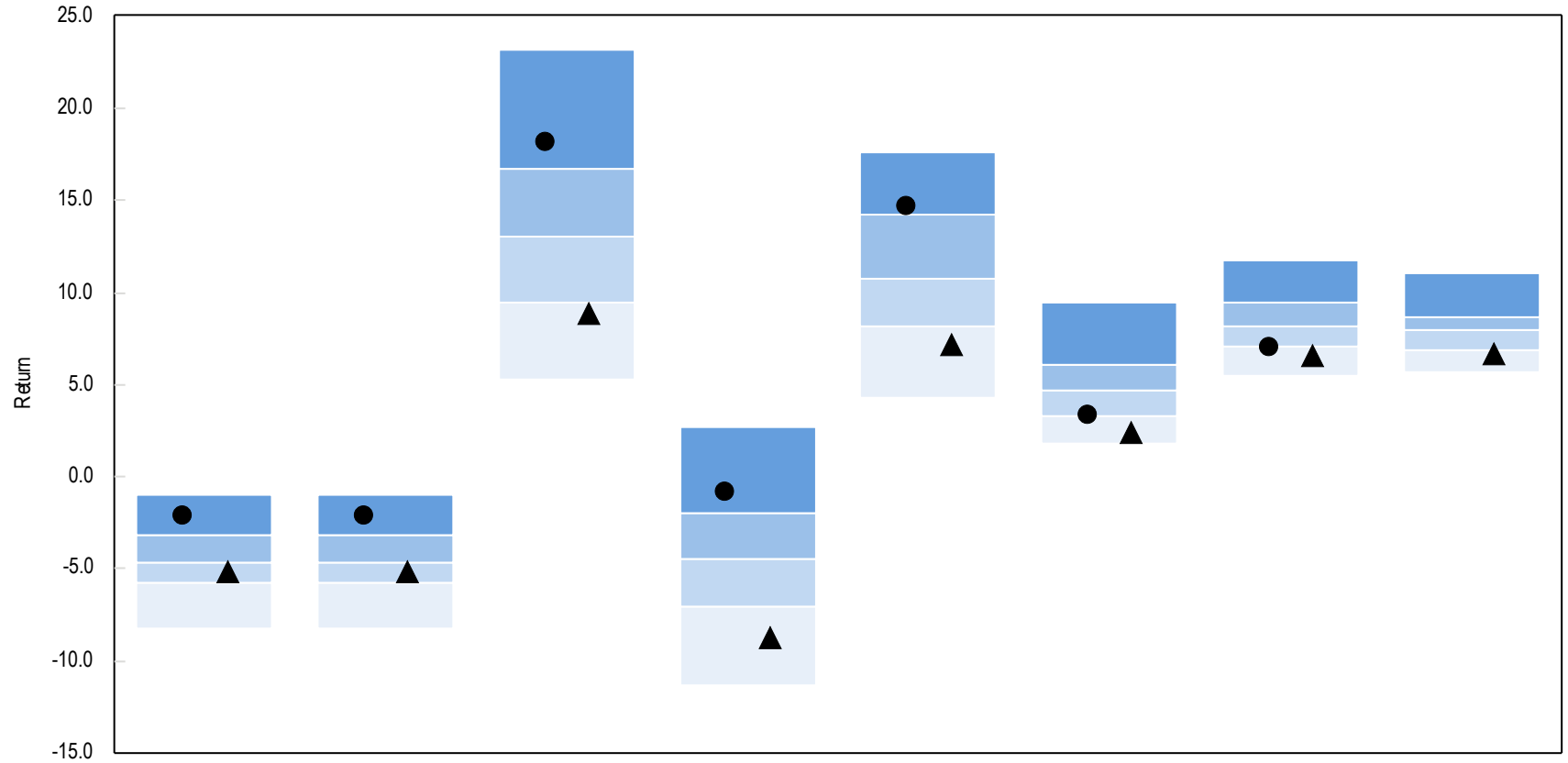
Growth of a Dollar



Quarterly and Cumulative Excess Performance



eV US Small Cap Core Equity Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● PGIM Quant Solutions	-2.1 (14)	-2.1 (14)	18.3 (17)	-0.8 (19)	14.8 (23)	3.4 (74)	7.1 (76)	-
▲ Russell 2000 Index	-5.1 (64)	-5.1 (64)	8.9 (78)	-8.7 (87)	7.2 (83)	2.4 (88)	6.6 (83)	6.6 (78)
5th Percentile	-1.0	-1.0	23.2	2.7	17.6	9.5	11.7	11.1
1st Quartile	-3.1	-3.1	16.7	-1.9	14.3	6.1	9.5	8.7
Median	-4.6	-4.6	13.1	-4.4	10.8	4.7	8.2	7.9
3rd Quartile	-5.8	-5.8	9.5	-7.0	8.2	3.3	7.1	6.8
95th Percentile	-8.3	-8.3	5.3	-11.3	4.3	1.8	5.5	5.7
Population	186	186	182	176	172	163	153	136



**Characteristics**

	Portfolio	Benchmark
Number of Stocks	350	1,985
Wtd. Avg. Mkt. Cap \$M	2,727.9	2,803.4
Median Mkt. Cap \$M	1,736.9	838.7
Price/Earnings ratio	10.4	12.5
Current Yield (%)	1.3	1.7
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	2.3	2.3
Return on Equity (%)	2.6	-27.0

**Top Holdings**

**Best Performers**

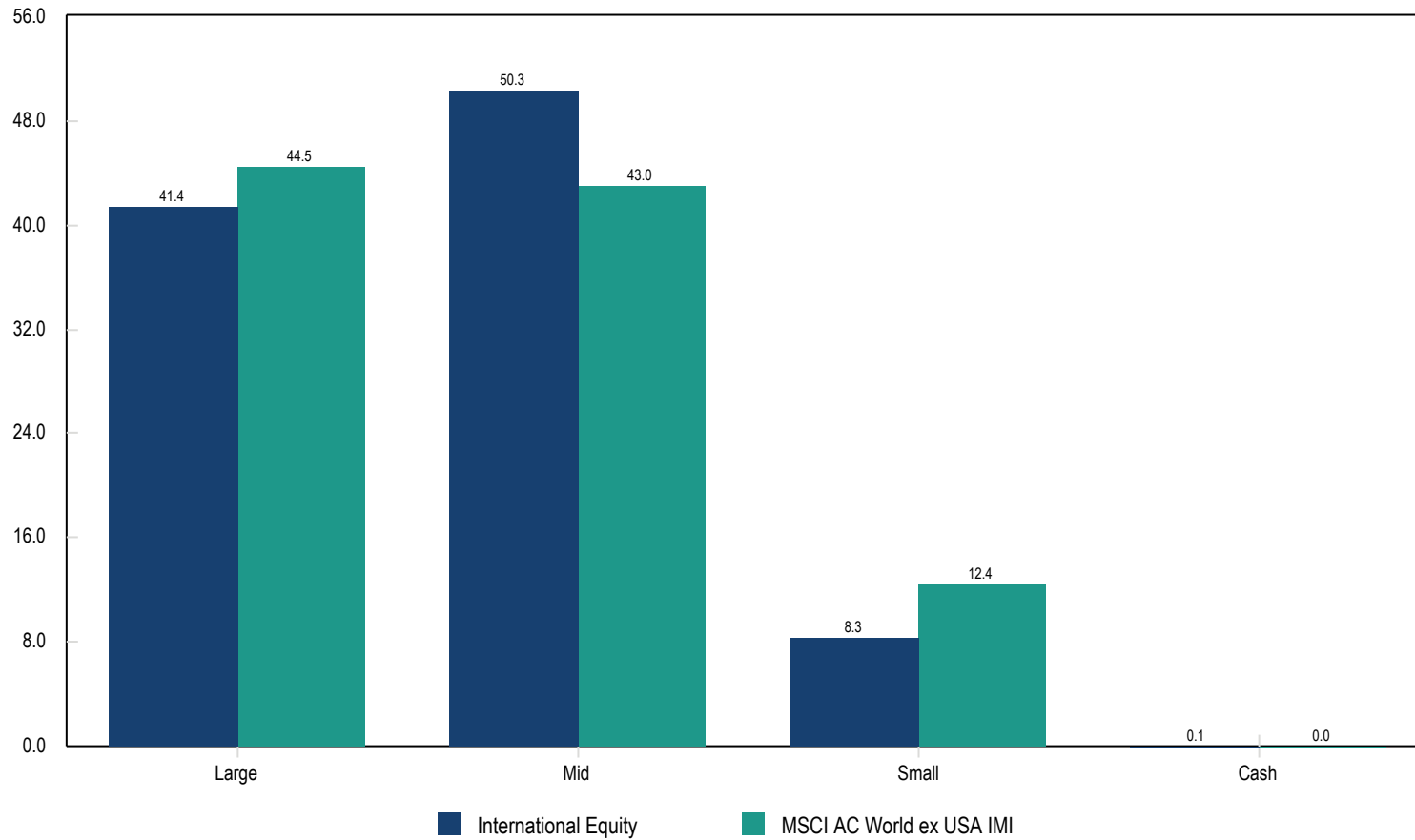
**Worst Performers**

	(%)		Return (%)		Return (%)
SM Energy Co	0.9	Telephone and Data Systems Inc	124.8	Vir Biotechnology Inc	-61.8
Axcelis Technologies Inc.	0.9	TETRA Technologies Inc.	88.8	2seventy bio Inc	-61.3
e.l.f. Beauty Inc	0.9	WW International Inc	64.7	Fate Therapeutics Inc	-55.5
SPS Commerce Inc	0.8	ThredUp Inc	64.3	Inogen Inc	-54.8
HealthEquity Inc	0.8	Hersha Hospitality Trust	62.7	JetBlue Airways Corp	-48.1
AppFolio Inc	0.8	First Foundation Inc	53.6	Enanta Pharmaceuticals Inc	-47.8
Veritiv Corp	0.8	Helix Energy Solutions Group Inc	51.4	Office Properties Income Trust	-45.0
Sterling Infrastructure Inc	0.8	NextGen Healthcare Inc	46.3	Tactile Systems Technology Inc	-43.6
Terex Corp	0.8	American Eagle Outfitters Inc.	41.9	Lumen Technologies Inc	-37.2
Peabody Energy Corp	0.8	Perdoceo Education Corp	40.3	Akoya Biosciences Inc	-37.1

**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	0.7	0.5	0.1	0.1	27.0	18.9	7.4	6.8
Materials	-0.1	-0.1	0.0	0.0	-9.0	-7.0	4.2	4.6
Industrials	0.9	0.9	0.0	0.0	-0.2	-5.2	17.6	17.4
Consumer Discretionary	0.4	0.4	0.0	0.0	-2.4	-5.8	10.6	10.6
Consumer Staples	0.0	0.0	0.0	0.0	-2.7	-2.9	4.2	3.4
Health Care	0.2	0.2	0.0	0.0	-13.5	-14.8	17.1	16.9
Financials	0.8	0.9	0.0	0.0	7.0	1.2	14.7	15.1
Information Technology	0.0	0.0	0.0	0.0	-9.5	-9.1	13.0	13.6
Communication Services	0.4	0.3	0.0	0.1	4.9	-7.4	3.2	2.5
Utilities	0.0	-0.1	0.0	0.0	-14.6	-11.7	2.3	3.0
Real Estate	0.3	0.4	0.0	0.0	0.4	-5.4	5.4	6.1
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
<b>Total</b>	<b>3.6</b>	<b>3.3</b>	<b>0.2</b>	<b>0.1</b>	<b>-1.5</b>	<b>-5.1</b>	<b>100.0</b>	<b>100.0</b>

Market Capitalization as of September 30, 2023



See appendix for the market capitalization breakpoints.

International Equity  
Equity Only Summary Statistics

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Characteristics

	Portfolio	Benchmark
Number of Stocks	6,817	6,739
Wtd. Avg. Mkt. Cap \$M	64,835.5	71,239.2
Median Mkt. Cap \$M	1,525.4	1,519.4
Price/Earnings ratio	13.8	12.8
Current Yield (%)	3.0	3.3
Beta (5 Years, Monthly)	0.9	1.0
Price/Book ratio	2.4	2.3
Return on Equity (%)	3.5	5.4

Top Holdings

	(%)
United Overseas Bank Ltd	1.3
ASML Holding NV	1.2
Taiwan Semiconductor Man.	1.0
Novartis AG	1.0
LVMH Moet Hennessy Louis V	0.9
Taiwan Semiconductor Man.	0.9
Banco Santander SA	0.9
Sanofi	0.9
Shell Plc	0.9
Sony Group Corporation	0.8

Best Performers

	Return (%)
Posco Dx Company Ltd	247.0
Kiler Holding A.S.	162.5
IS Yatirim Menkul Degerler A.S.	161.5
Ulker Biskuvi Sanayi AS	158.7
Nuh Cimento Sanayii A.S.	153.3
Alfa Solar Enerji Sanayi Ve Ticaret Anonim Sirketi	150.1
Borusan	148.4
Canggang Railway Limited	144.6
Europower Enerji Ve Otomasyon Teknolojileri Sanayi Ticaret Anonim Sirketi	144.1
Kum Yang Co Ltd	121.2

Worst Performers

	Return (%)
Air France KLM SA	-93.2
Abalance Corp	-69.5
Alliance International Education Leasing Holdings Limited	-69.1
Grupo Casas Bahia S A	-68.2
Mesoblast Ltd	-66.7
Farfetch Limited	-65.4
Chalice Mining Ltd	-64.1
Abacus Group	-62.3
Idorsia Ltd	-60.7
Maxeon Solar Technologies Ltd	-58.8

International Equity Performance Attribution vs. MSCI AC World ex USA IMI

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3	-0.1	-0.2	0.0	6.6	8.9	3.8	5.2
Materials	0.0	0.0	0.0	0.0	-3.5	-3.1	7.1	8.4
Industrials	-0.1	-0.2	0.0	0.0	-6.7	-5.2	11.5	14.3
Consumer Discretionary	-0.2	-0.1	0.0	0.0	-6.4	-5.3	13.6	12.1
Consumer Staples	-0.1	-0.1	0.0	0.0	-6.7	-5.7	9.5	8.3
Health Care	-0.3	-0.4	0.0	0.0	-6.7	-2.9	7.9	9.2
Financials	-0.5	-0.5	0.0	0.0	-2.7	-0.3	19.8	19.3
Information Technology	-0.5	-0.2	-0.2	-0.1	-9.4	-7.8	16.6	11.8
Communication Services	0.2	0.2	0.0	0.0	-0.9	-4.4	5.8	5.3
Utilities	0.1	0.1	0.0	0.0	-3.7	-7.3	2.3	3.2
Real Estate	0.0	0.0	0.0	0.0	-2.3	-2.2	1.5	2.9
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
<b>Total</b>	<b>-1.6</b>	<b>-1.3</b>	<b>-0.3</b>	<b>0.0</b>	<b>-5.1</b>	<b>-3.4</b>	<b>100.0</b>	<b>100.0</b>

International Equity vs. MSCI AC World ex USA IMI

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Australia	2.7	4.8	-2.2	-3.5	0.1	0.0	0.0	0.0
Austria	0.1	0.2	-3.5	-3.7	0.0	0.0	0.0	0.0
Belgium	0.6	0.6	-3.2	-5.0	0.0	0.0	0.0	0.0
Brazil	3.5	1.6	0.2	-5.7	0.1	0.0	0.1	0.2
Canada	5.1	7.5	-6.3	-3.7	-0.2	0.0	0.1	-0.1
Chile	0.4	0.2	-15.2	-9.5	0.0	0.0	0.0	0.0
China	12.7	6.7	-3.4	-2.5	-0.1	0.1	-0.1	-0.1
Colombia	0.0	0.0	3.2	3.1	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.8	0.7	0.0	0.0	0.0	0.0
Denmark	1.2	1.9	-1.5	1.2	-0.1	0.0	0.0	-0.1
Egypt	0.0	0.0	19.3	19.7	0.0	0.0	0.0	0.0
Finland	0.4	0.7	-5.0	-5.0	0.0	0.0	0.0	0.0
France	4.6	6.7	-9.5	-6.9	-0.2	0.1	0.1	0.0
Germany	3.7	5.2	-9.4	-7.8	-0.1	0.1	0.0	0.0
Greece	0.1	0.1	-8.0	-8.0	0.0	0.0	0.0	0.0
Hong Kong	2.2	2.0	-9.8	-9.7	0.0	0.0	0.0	0.0
Hungary	0.0	0.1	1.0	1.0	0.0	0.0	0.0	0.0
India	6.4	4.5	3.1	4.6	-0.1	0.2	0.0	0.1
Indonesia	0.9	0.6	-5.3	-2.6	0.0	0.0	0.0	0.0
Ireland	0.7	0.8	-5.1	0.7	0.0	0.0	0.0	0.0
Israel	0.3	0.6	2.0	2.0	0.0	0.0	0.0	0.0
Italy	0.8	1.5	-3.1	-3.1	0.0	0.0	0.0	0.0
Japan	12.3	15.3	-5.5	-1.2	-0.7	-0.1	0.1	-0.6
Korea	5.4	3.5	-5.2	-5.4	0.0	0.0	0.0	0.0
Kuwait	0.1	0.2	-3.6	-3.6	0.0	0.0	0.0	0.0
Malaysia	0.2	0.4	5.3	5.2	0.0	0.0	0.0	0.0
Malta	0.0	0.0	-18.6	-18.6	0.0	0.0	0.0	0.0
Mexico	1.0	0.8	-2.9	-5.9	0.0	0.0	0.0	0.0
Netherlands	3.9	3.3	-16.2	-10.4	-0.2	0.0	0.0	-0.3
New Zealand	0.5	0.2	-8.0	-7.0	0.0	0.0	0.0	0.0
Norway	0.3	0.5	7.5	7.5	0.0	0.0	0.0	0.0
Peru	0.7	0.0	-13.2	-9.3	0.0	0.0	0.0	-0.1
Philippines	0.1	0.2	-3.4	-3.4	0.0	0.0	0.0	0.0

International Equity  
Equity Performance Attribution

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Poland	0.1	0.2	-9.8	-9.7	0.0	0.0	0.0	0.0
Portugal	0.5	0.1	-16.5	-4.1	0.0	0.0	0.0	-0.1
Qatar	0.1	0.2	0.7	0.7	0.0	0.0	0.0	0.0
Russia	0.0	0.0	-5.8	0.0	0.0	0.0	0.0	0.0
Saudi Arabia	1.0	1.2	-6.2	-4.4	0.0	0.0	0.0	0.0
Singapore	1.0	0.9	2.5	0.7	0.0	0.0	0.0	0.0
South Africa	0.4	0.8	-2.4	-2.4	0.0	0.0	0.0	0.0
Spain	0.8	1.6	-3.6	-3.6	0.0	0.0	0.0	0.0
Sweden	2.5	2.1	-6.3	-7.1	0.0	0.0	0.0	0.0
Switzerland	3.9	6.4	-9.8	-5.3	-0.3	0.0	0.1	-0.1
Taiwan	7.1	4.5	-7.9	-5.5	-0.1	-0.1	-0.1	-0.2
Thailand	0.4	0.6	-2.4	-3.6	0.0	0.0	0.0	0.0
Turkey	0.1	0.2	40.0	40.0	0.0	0.0	0.0	0.0
United Arab Emirates	0.2	0.4	6.1	6.1	0.0	0.0	0.0	0.0
United Kingdom	8.5	9.2	-2.6	-1.9	-0.1	0.0	0.0	-0.1
United States	0.7	0.2	-12.7	-14.5	0.0	-0.1	0.0	0.0
Other	1.1	0.4	2.0	-0.5	0.0	0.0	0.0	0.0
Cash	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-5.1</b>	<b>-3.4</b>	<b>-1.8</b>	<b>-0.1</b>	<b>0.3</b>	<b>-1.6</b>

International Equity vs. MSCI AC World ex USA IMI

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	11.4	10.2	-5.1	-4.5	-0.1	0.0	0.0	-0.1
Asia Pacific	52.0	44.2	-4.0	-2.2	-0.8	0.1	-0.1	-0.8
EMEA	34.9	45.2	-6.9	-4.4	-1.1	0.1	0.3	-0.8
Other	1.1	0.4	2.0	-0.5	0.0	0.0	0.0	0.0
Cash	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-5.1</b>	<b>-3.4</b>	<b>-2.0</b>	<b>0.2</b>	<b>0.1</b>	<b>-1.6</b>



**Characteristics**

	Portfolio	Benchmark
Number of Stocks	86	2,320
Wtd. Avg. Mkt. Cap \$M	64,330.6	82,287.9
Median Mkt. Cap \$M	21,258.2	8,822.4
Price/Earnings ratio	19.2	12.8
Current Yield (%)	1.5	3.4
Beta (5 Years, Monthly)	1.1	1.0
Price/Book ratio	3.7	2.4
Return on Equity (%)	-0.1	5.6

**Top Holdings**

**Best Performers**

**Worst Performers**

	(%)		Return (%)		Return (%)
Taiwan Semiconductor Man.	4.1	MakeMyTrip Ltd	50.2	Farfetch Limited	-65.4
United Overseas Bank Ltd	2.7	LY Corporation	16.2	Adyen N.V	-56.8
ASML Holding NV	2.6	UBI Soft Entertainment SA	15.3	AUTO1 Group SE	-30.8
MercadoLibre Inc	2.4	United Spirits Ltd	9.1	Nibe Industrier Ab, Markaryd	-30.3
Cie Financiere Richemont	2.3	Cochlear Ltd	8.8	Systemex Corp	-29.1
Auto Trader Group plc	2.1	MercadoLibre Inc	7.0	Cie Financiere Richemont	-25.6
Investor Ab, Stockholm	2.1	Alibaba Group Holding Ltd	5.5	Zalando SE	-22.2
Sartorius AG	2.0	Weir Group PLC	4.0	LONZA GROUP AG	-22.0
Mettler-Toledo International Inc	2.0	United Overseas Bank Ltd	3.9	Shiseido Co Ltd	-21.7
Shiseido Co Ltd	2.0	Rightmove PLC	3.8	Remy Cointreau SA	-21.6

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

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.7	-0.9	-0.5	0.7	-8.8	8.3	1.2	5.4
Materials	-0.2	-1.1	0.0	1.0	-17.6	-3.3	1.0	7.9
Industrials	-0.7	-0.5	-0.1	-0.2	-9.2	-5.6	17.7	13.2
Consumer Discretionary	-1.4	-0.7	-0.2	-0.5	-11.2	-5.6	21.6	12.1
Consumer Staples	-0.6	-0.3	-0.1	-0.2	-9.8	-6.4	13.6	8.6
Health Care	-0.8	-0.8	0.0	0.0	-11.7	-2.8	9.5	9.5
Financials	-1.5	-2.0	-0.2	0.7	-10.2	-0.5	13.8	20.6
Information Technology	-1.0	-0.6	-0.2	-0.2	-13.9	-8.6	15.2	11.9
Communication Services	0.4	0.4	0.0	0.0	2.1	-4.9	6.2	5.5
Utilities	0.1	0.0	0.1	0.0	0.0	-7.7	0.0	3.2
Real Estate	-0.1	0.0	-0.1	0.0	0.0	-1.0	0.0	2.0
Cash	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0
<b>Total</b>	<b>-6.5</b>	<b>-6.6</b>	<b>-1.2</b>	<b>1.4</b>	<b>-10.2</b>	<b>-3.7</b>	<b>100.0</b>	<b>100.0</b>

Baillie Gifford vs. MSCI AC World ex USA Index

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Australia	1.3	4.5	8.8	-3.3	0.6	0.0	-0.4	0.1
Austria	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Belgium	1.3	0.5	-1.7	-5.0	0.0	0.0	0.0	0.0
Brazil	1.5	1.5	-9.4	-4.8	-0.1	0.0	0.0	-0.1
Canada	3.6	7.6	-14.2	-3.8	-0.8	0.0	0.4	-0.4
Chile	0.0	0.2	0.0	-9.2	0.0	0.0	0.0	0.0
China	6.2	7.4	-5.6	-2.3	-0.2	0.0	0.0	-0.2
Colombia	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Denmark	1.1	2.0	-10.8	2.5	-0.3	-0.1	0.1	-0.2
Egypt	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0
Finland	0.0	0.7	0.0	-3.9	0.0	0.0	0.0	0.0
France	4.8	7.4	-16.9	-6.8	-0.7	0.1	0.3	-0.4
Germany	5.0	5.5	-12.7	-7.7	-0.3	0.0	0.0	-0.2
Greece	0.0	0.1	0.0	-7.6	0.0	0.0	0.0	0.0
Hong Kong	3.2	2.1	-14.5	-10.3	-0.1	-0.1	0.0	-0.2
Hungary	0.0	0.1	0.0	0.4	0.0	0.0	0.0	0.0
India	5.0	4.1	4.0	2.6	0.1	0.1	0.0	0.1
Indonesia	0.0	0.6	0.0	-3.4	0.0	0.0	0.0	0.0
Ireland	1.1	0.9	-14.4	0.7	-0.1	0.0	0.0	-0.2
Israel	0.0	0.4	0.0	4.6	0.0	0.0	0.0	0.0
Italy	0.0	1.4	0.0	-2.8	0.0	0.0	0.0	0.0
Japan	18.7	14.5	-12.8	-1.5	-1.6	0.1	-0.5	-2.0
Korea	0.0	3.4	0.0	-6.1	0.0	0.1	0.0	0.1
Kuwait	0.0	0.2	0.0	-2.7	0.0	0.0	0.0	0.0
Malaysia	0.0	0.4	0.0	4.5	0.0	0.0	0.0	0.0
Mexico	0.9	0.8	-3.8	-6.4	0.0	0.0	0.0	0.0
Netherlands	9.1	3.6	-20.5	-10.5	-0.4	-0.4	-0.6	-1.3
New Zealand	1.5	0.2	-8.3	-8.4	0.0	-0.1	0.0	-0.1
Norway	0.0	0.4	0.0	12.0	0.0	-0.1	0.0	-0.1
Peru	0.0	0.0	0.0	-9.3	0.0	0.0	0.0	0.0
Philippines	0.0	0.2	0.0	-3.6	0.0	0.0	0.0	0.0
Poland	0.0	0.2	0.0	-11.5	0.0	0.0	0.0	0.0

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Portugal	1.8	0.1	-18.3	-6.5	0.0	0.0	-0.2	-0.3
Qatar	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0
Saudi Arabia	0.0	1.2	0.0	-4.4	0.0	0.0	0.0	0.0
Singapore	2.3	0.8	3.9	2.4	0.0	0.1	0.0	0.1
South Africa	0.0	0.8	0.0	-3.6	0.0	0.0	0.0	0.0
Spain	0.0	1.6	0.0	-4.0	0.0	0.0	0.0	0.0
Sweden	5.8	2.0	-5.6	-6.3	0.0	-0.1	0.0	-0.1
Switzerland	3.7	7.0	-24.6	-5.2	-1.4	0.0	0.6	-0.7
Taiwan	4.1	4.3	-13.4	-6.9	-0.3	0.0	0.0	-0.3
Thailand	0.0	0.5	0.0	-4.5	0.0	0.0	0.0	0.0
Turkey	0.0	0.2	0.0	32.7	0.0	-0.1	0.0	-0.1
United Arab Emirates	0.0	0.4	0.0	6.1	0.0	0.0	0.0	0.0
United Kingdom	11.7	9.3	-5.2	-1.7	-0.3	0.0	-0.1	-0.4
United States	2.6	0.2	-12.4	-17.2	0.0	-0.3	0.1	-0.2
Other	3.5	0.3	2.6	-4.7	0.0	0.0	0.2	0.2
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-10.2</b>	<b>-3.7</b>	<b>-5.9</b>	<b>-0.8</b>	<b>0.2</b>	<b>-6.5</b>

Baillie Gifford vs. MSCI AC World ex USA Index

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	Total Effects
Americas	8.7	10.3	-11.7	-4.5	-0.7	0.0	0.1	-0.6
Asia Pacific	42.2	43.0	-8.2	-2.8	-2.3	0.0	0.0	-2.3
EMEA	45.4	46.4	-12.7	-4.4	-3.9	0.0	0.1	-3.8
Other	3.5	0.3	2.6	-4.7	0.0	0.0	0.2	0.2
Cash	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-10.2</b>	<b>-3.7</b>	<b>-6.9</b>	<b>0.0</b>	<b>0.5</b>	<b>-6.5</b>

Mondrian  
Equity Only Summary Statistics

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Characteristics

	Portfolio	Benchmark
Number of Stocks	46	1,354
Wtd. Avg. Mkt. Cap \$M	49,879.6	63,383.9
Median Mkt. Cap \$M	24,241.9	8,618.3
Price/Earnings ratio	12.0	9.5
Current Yield (%)	4.2	4.8
Beta (5 Years, Monthly)	1.0	1.0
Price/Book ratio	1.7	1.7
Return on Equity (%)	2.7	3.1

Top Holdings

Best Performers

Worst Performers

	(%)		Return (%)		Return (%)
Banco Santander SA	4.3	Honda Motor Co Ltd	14.2	Kering	-17.1
Enel Ente Nazionale	3.9	Eni SpA	14.1	WPP PLC	-14.5
GSK plc	3.5	Toyota Industries Corp	12.1	TC Energy Corp	-12.9
Sanofi	3.5	Shell Plc	8.4	MINEBEA MITSUMI Inc	-12.6
Koninklijke Philips NV	3.5	Shell Plc	7.9	Aurizon Holdings Ltd	-11.8
Fujitsu Ltd	3.4	Bouygues, Guyancourt	4.6	CK Hutchison Holdings Ltd	-10.8
Sony Group Corporation	3.4	GSK plc	4.2	Mitsubishi Electric Corp	-10.7
CK Hutchison Holdings Ltd	3.4	United Overseas Bank Ltd	3.9	Snam SPA	-9.8
United Overseas Bank Ltd	3.3	Banco Santander SA	3.7	Sony Group Corporation	-8.3
Allianz SE	3.2	Kao Corp	3.1	Fujitsu Ltd	-7.7

Mondrian Performance Attribution vs. MSCI AC World ex USA Value

	Attribution Effects				Performance		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effect	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.6	-0.3	-0.5	0.2	5.2	7.9	3.6	9.8
Materials	-0.3	-0.2	0.0	0.0	-2.8	-0.4	10.5	9.6
Industrials	0.3	0.0	0.3	0.0	0.0	-3.2	0.0	10.3
Consumer Discretionary	0.1	0.1	0.0	0.0	2.0	1.3	8.9	9.2
Consumer Staples	-0.1	0.0	-0.1	0.0	-3.9	-3.6	7.6	5.1
Health Care	-0.5	-0.7	0.0	0.2	-12.1	-0.8	4.2	6.4
Financials	-1.1	-1.2	0.0	0.1	-2.5	1.3	27.0	30.6
Information Technology	-2.2	-0.3	-0.5	-1.3	-8.4	-2.4	27.3	5.7
Communication Services	0.3	0.3	-0.1	0.1	2.3	-3.4	6.3	4.5
Utilities	0.5	0.7	0.2	-0.4	4.8	-7.5	2.7	5.6
Real Estate	0.0	0.0	0.0	0.0	0.0	-1.0	0.0	3.2
Cash	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
<b>Total</b>	<b>-3.4</b>	<b>-1.7</b>	<b>-0.6</b>	<b>-1.0</b>	<b>-3.4</b>	<b>0.0</b>	<b>100.0</b>	<b>100.0</b>

Mondrian vs. MSCI AC World ex USA Value

	Weights		Performance			Attribution Effects		
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	Total Effects
Australia	0.0	4.8	0.0	-1.7	0.0	0.1	0.0	0.1
Austria	0.0	0.2	0.0	-0.5	0.0	0.0	0.0	0.0
Belgium	0.0	0.5	0.0	-6.3	0.0	0.0	0.0	0.0
Brazil	9.3	1.6	3.7	-2.3	0.1	-0.2	0.5	0.4
Canada	1.7	7.5	-13.5	-2.9	-0.8	0.2	0.6	0.0
Chile	1.1	0.2	-17.0	-4.1	0.0	0.0	-0.1	-0.2
China	31.2	7.1	-3.4	-0.7	-0.2	-0.1	-0.6	-1.0
Colombia	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.0	-0.6	0.0	0.0	0.0	0.0
Denmark	0.0	0.4	0.0	-13.0	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0
Finland	0.0	1.1	0.0	-1.2	0.0	0.0	0.0	0.0
France	0.0	6.3	0.0	1.1	0.0	-0.1	0.0	-0.1
Germany	0.0	6.6	0.0	-7.6	0.0	0.5	0.0	0.5
Greece	0.0	0.1	0.0	-9.0	0.0	0.0	0.0	0.0
Hong Kong	1.4	2.2	0.3	-9.4	0.2	0.1	-0.1	0.2
Hungary	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
India	11.2	4.1	1.6	3.6	-0.1	0.3	-0.1	0.0
Indonesia	2.5	0.6	-6.6	-1.6	0.0	0.0	-0.1	-0.2
Ireland	0.0	0.6	0.0	-1.0	0.0	0.0	0.0	0.0
Israel	0.0	0.4	0.0	14.5	0.0	-0.1	0.0	-0.1
Italy	0.0	2.0	0.0	0.6	0.0	0.0	0.0	0.0
Japan	0.0	15.0	0.0	5.4	0.0	-0.8	0.0	-0.8
Korea	14.7	3.6	-5.0	-1.8	-0.1	-0.2	-0.4	-0.7
Kuwait	0.0	0.2	0.0	-3.1	0.0	0.0	0.0	0.0
Malaysia	0.0	0.4	0.0	6.5	0.0	0.0	0.0	0.0
Mexico	1.5	0.8	0.6	-5.6	0.0	0.0	0.0	0.1
Netherlands	0.0	1.7	0.0	-1.4	0.0	0.0	0.0	0.0
New Zealand	0.0	0.1	0.0	-5.6	0.0	0.0	0.0	0.0
Norway	0.0	0.8	0.0	12.3	0.0	-0.1	0.0	-0.1
Peru	2.6	0.1	-13.3	-6.3	0.0	-0.2	-0.2	-0.3
Philippines	0.0	0.2	0.0	-2.6	0.0	0.0	0.0	0.0
Poland	0.0	0.2	0.0	-7.2	0.0	0.0	0.0	0.0



Mondrian  
Equity Performance Attribution

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Weights		Performance			Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects		
Portugal	0.0	0.1	0.0	-9.2	0.0	0.0	0.0	0.0	
Qatar	0.0	0.2	0.0	1.8	0.0	0.0	0.0	0.0	
Saudi Arabia	1.6	1.2	-8.9	-8.5	0.0	0.0	0.0	0.0	
Singapore	0.0	1.0	0.0	3.7	0.0	0.0	0.0	0.0	
South Africa	0.0	0.9	0.0	-1.1	0.0	0.0	0.0	0.0	
Spain	0.0	2.4	0.0	-0.9	0.0	0.0	0.0	0.0	
Sweden	0.0	1.7	0.0	0.9	0.0	0.0	0.0	0.0	
Switzerland	0.0	5.0	0.0	3.3	0.0	-0.2	0.0	-0.2	
Taiwan	15.3	4.0	-7.9	-2.1	-0.2	-0.2	-0.7	-1.1	
Thailand	0.0	0.6	0.0	-2.4	0.0	0.0	0.0	0.0	
Turkey	0.0	0.2	0.0	32.1	0.0	-0.1	0.0	-0.1	
United Arab Emirates	0.0	0.4	0.0	13.5	0.0	0.0	0.0	0.0	
United Kingdom	3.7	12.5	2.3	0.6	0.2	-0.1	-0.1	0.0	
United States	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	
Other	0.0	0.3	0.0	-5.4	0.0	0.0	0.0	0.0	
Cash	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.4</b>	<b>0.0</b>	<b>-0.9</b>	<b>-1.2</b>	<b>-1.3</b>	<b>-3.4</b>	

Mondrian vs. MSCI AC World ex USA Value

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	16.2	10.2	-2.5	-3.0	0.1	-0.2	0.0	-0.1
Asia Pacific	76.4	43.6	-3.9	1.1	-2.2	0.4	-1.6	-3.5
EMEA	5.3	45.9	-1.1	-0.4	-0.3	0.2	0.3	0.1
Other	0.0	0.3	0.0	-5.4	0.0	0.0	0.0	0.0
Cash	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.4</b>	<b>0.0</b>	<b>-2.4</b>	<b>0.4</b>	<b>-1.4</b>	<b>-3.4</b>

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

	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	8.9	8.9	5.3	5.2
Materials	0.0	0.0	0.0	0.0	-3.1	-3.1	8.4	8.4
Industrials	0.0	0.0	0.0	0.0	-5.2	-5.2	14.2	14.3
Consumer Discretionary	0.0	0.0	0.0	0.0	-5.2	-5.3	12.1	12.1
Consumer Staples	0.0	0.0	0.0	0.0	-5.6	-5.7	8.3	8.3
Health Care	0.0	0.0	0.0	0.0	-2.9	-2.9	9.0	9.2
Financials	0.0	0.0	0.0	0.0	-0.3	-0.3	19.3	19.3
Information Technology	0.0	0.0	0.0	0.0	-7.8	-7.8	11.9	11.8
Communication Services	0.0	0.0	0.0	0.0	-4.4	-4.4	5.3	5.3
Utilities	0.0	0.0	0.0	0.0	-7.1	-7.3	3.3	3.2
Real Estate	0.0	0.0	0.0	0.0	-2.3	-2.2	2.9	2.9
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-3.4</b>	<b>-3.4</b>	<b>100.0</b>	<b>100.0</b>

**Characteristics**

	Portfolio	Benchmark
Number of Stocks	6,797	6,739
Wtd. Avg. Mkt. Cap \$M	69,632.0	71,239.2
Median Mkt. Cap \$M	1,523.3	1,519.4
Price/Earnings ratio	12.9	12.8
Current Yield (%)	3.3	3.3
Beta (3 Years, Monthly)	1.0	1.0
Price/Book ratio	2.3	2.3
Return on Equity (%)	5.5	5.4

**Top Holdings**

	(%)
Taiwan Semiconductor Man.	1.6
Novo Nordisk A/S	1.1
Nestle SA, Cham Und Vevey	1.1
Tencent Holdings LTD	1.0
Samsung Electronics Co Ltd	0.9
ASML Holding NV	0.9
Shell Plc	0.8
LVMH Moet Hennessy Louis V	0.8
Novartis AG	0.8
Toyota Motor Corp	0.7

**Best Performers**

	Return (%)
Posco Dx Company Ltd	247.0
Kiler Holding A.S.	162.5
IS Yatirim Menkul Degerler A.S.	161.5
Ulker Biskuvi Sanayi AS	158.7
Nuh Cimento Sanayii A.S.	153.3
Alfa Solar Enerji Sanayi Ve Ticaret Anonim Sirketi	150.1
Borusan	148.4
Canggang Railway Limited	144.6
Europower Enerji Ve Otomasyon Teknolojileri Sanayi Ticaret Anonim Sirketi	144.1
Kum Yang Co Ltd	121.2

**Worst Performers**

	Return (%)
Air France KLM SA	-93.2
Abalance Corp	-69.5
Alliance International Education Leasing Holdings Limited	-69.1
Grupo Casas Bahia S A	-68.2
Mesoblast Ltd	-66.7
Chalice Mining Ltd	-64.1
Abacus Group	-62.3
Idorsia Ltd	-60.7
Maxeon Solar Technologies Ltd	-58.8
Synthomer PLC	-58.5

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

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Australia	4.8	4.8	-3.6	-3.5	0.0	0.0	0.0	0.0
Austria	0.2	0.2	-3.5	-3.7	0.0	0.0	0.0	0.0
Belgium	0.5	0.6	-5.0	-5.0	0.0	0.0	0.0	0.0
Brazil	1.5	1.6	-5.7	-5.7	0.0	0.0	0.0	0.0
Canada	7.6	7.5	-3.7	-3.7	0.0	0.0	0.0	0.0
Chile	0.2	0.2	-9.5	-9.5	0.0	0.0	0.0	0.0
China	6.7	6.7	-2.6	-2.5	0.0	0.0	0.0	0.0
Colombia	0.0	0.0	3.2	3.1	0.0	0.0	0.0	0.0
Czech Republic	0.0	0.0	0.8	0.7	0.0	0.0	0.0	0.0
Denmark	1.9	1.9	1.2	1.2	0.0	0.0	0.0	0.0
Egypt	0.0	0.0	19.3	19.7	0.0	0.0	0.0	0.0
Finland	0.7	0.7	-5.0	-5.0	0.0	0.0	0.0	0.0
France	6.7	6.7	-6.9	-6.9	0.0	0.0	0.0	0.0
Germany	4.9	5.2	-7.8	-7.8	0.0	0.0	0.0	0.0
Greece	0.1	0.1	-8.0	-8.0	0.0	0.0	0.0	0.0
Hong Kong	2.0	2.0	-9.7	-9.7	0.0	0.0	0.0	0.0
Hungary	0.1	0.1	1.0	1.0	0.0	0.0	0.0	0.0
India	4.6	4.5	4.6	4.6	0.0	0.0	0.0	0.0
Indonesia	0.6	0.6	-2.5	-2.6	0.0	0.0	0.0	0.0
Ireland	0.8	0.8	0.8	0.7	0.0	0.0	0.0	0.0
Israel	0.6	0.6	2.0	2.0	0.0	0.0	0.0	0.0
Italy	1.5	1.5	-3.1	-3.1	0.0	0.0	0.0	0.0
Japan	15.3	15.3	-1.2	-1.2	0.0	0.0	0.0	0.0
Korea	3.5	3.5	-5.4	-5.4	0.0	0.0	0.0	0.0
Kuwait	0.2	0.2	-3.6	-3.6	0.0	0.0	0.0	0.0
Malaysia	0.4	0.4	5.3	5.2	0.0	0.0	0.0	0.0
Malta	0.0	0.0	-18.6	-18.6	0.0	0.0	0.0	0.0
Mexico	0.8	0.8	-5.9	-5.9	0.0	0.0	0.0	0.0
Netherlands	3.3	3.3	-10.4	-10.4	0.0	0.0	0.0	0.0
New Zealand	0.2	0.2	-7.0	-7.0	0.0	0.0	0.0	0.0
Norway	0.5	0.5	7.5	7.5	0.0	0.0	0.0	0.0
Peru	0.0	0.0	-9.3	-9.3	0.0	0.0	0.0	0.0
Philippines	0.2	0.2	-3.4	-3.4	0.0	0.0	0.0	0.0

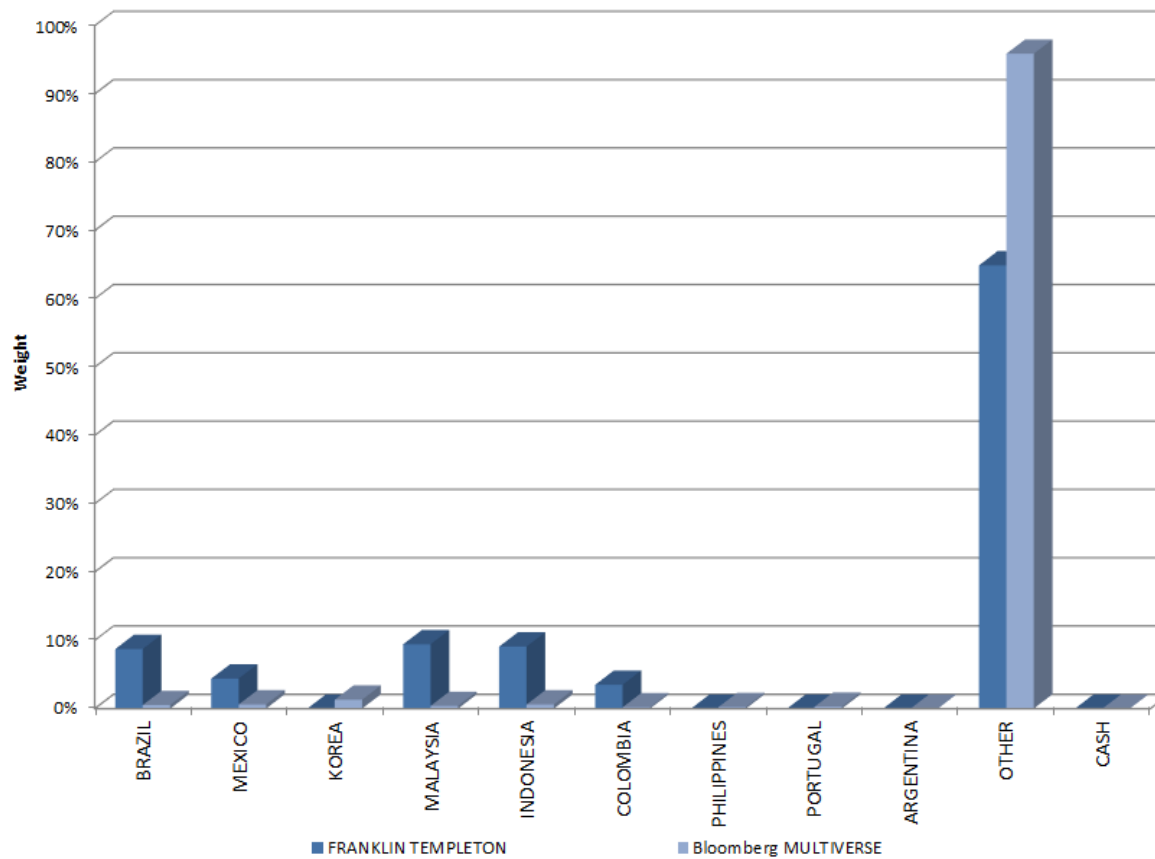
BlackRock MSCI ACWI EX-US IMI  
Equity Performance Attribution

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Country Effects	Interaction Effects	
Poland	0.2	0.2	-9.8	-9.7	0.0	0.0	0.0	0.0
Portugal	0.1	0.1	-4.2	-4.1	0.0	0.0	0.0	0.0
Qatar	0.3	0.2	0.7	0.7	0.0	0.0	0.0	0.0
Russia	0.0	0.0	-5.8	0.0	0.0	0.0	0.0	0.0
Saudi Arabia	1.2	1.2	-4.4	-4.4	0.0	0.0	0.0	0.0
Singapore	0.9	0.9	0.7	0.7	0.0	0.0	0.0	0.0
South Africa	0.8	0.8	-2.4	-2.4	0.0	0.0	0.0	0.0
Spain	1.6	1.6	-3.6	-3.6	0.0	0.0	0.0	0.0
Sweden	2.1	2.1	-7.1	-7.1	0.0	0.0	0.0	0.0
Switzerland	6.0	6.4	-5.3	-5.3	0.0	0.0	0.0	0.0
Taiwan	4.6	4.5	-5.5	-5.5	0.0	0.0	0.0	0.0
Thailand	0.8	0.6	-2.4	-3.6	0.0	0.0	0.0	0.0
Turkey	0.2	0.2	40.0	40.0	0.0	0.0	0.0	0.0
United Arab Emirates	0.4	0.4	6.1	6.1	0.0	0.0	0.0	0.0
United Kingdom	9.3	9.2	-2.0	-1.9	0.0	0.0	0.0	0.0
United States	0.2	0.2	-14.4	-14.5	0.0	0.0	0.0	0.0
Other	0.4	0.4	-0.7	-0.5	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.4</b>	<b>-3.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

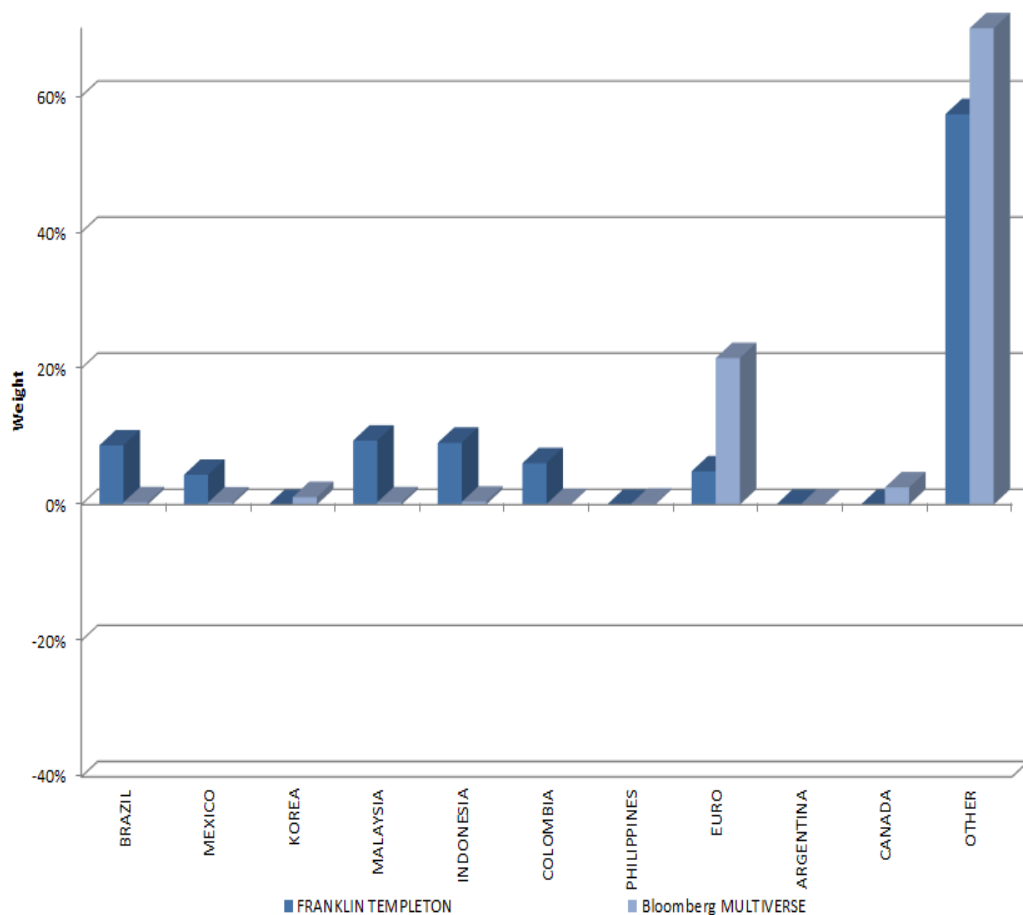
**BlackRock MSCI ACWI EX-US IMI vs. MSCI AC World ex USA IMI (Net)**

	Weights		Performance		Attribution Effects			Total Effects
	Portfolio	Benchmark	Portfolio	Benchmark	Selection Effects	Region Effects	Interaction Effects	
Americas	10.3	10.2	-4.5	-4.5	0.0	0.0	0.0	0.0
Asia Pacific	44.8	44.2	-2.2	-2.2	0.0	0.0	0.0	0.0
EMEA	44.5	45.2	-4.4	-4.4	0.0	0.0	0.0	0.0
Other	0.4	0.4	-0.7	-0.5	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>-3.4</b>	<b>-3.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

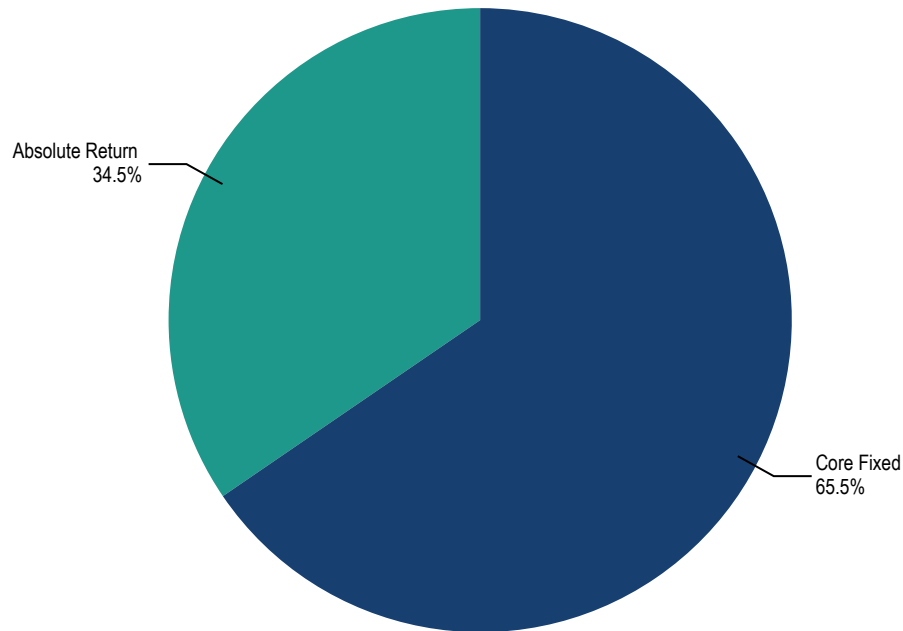


COUNTRY	MARKET VALUE	FRANKLIN TEMPLETON	Bloomberg MULTIVERSE	DIFF
BRAZIL	\$ 4,578	8.7%	0.5%	+8.2%
MEXICO	\$ 2,308	4.4%	0.6%	+3.8%
KOREA	\$ -	0.0%	1.3%	-1.3%
MALAYSIA	\$ 4,944	9.4%	0.4%	+9.0%
INDONESIA	\$ 4,772	9.1%	0.6%	+8.5%
COLOMBIA	\$ 1,828	3.5%	0.2%	+3.3%
PHILIPPINES	\$ -	0.0%	0.2%	-0.2%
PORTUGAL	\$ -	0.0%	0.3%	-0.3%
ARGENTINA	\$ -	0.0%	0.0%	0.0%
OTHER	\$ 34,081	64.9%	95.9%	-31.0%
CASH	\$ -	0.0%	0.0%	0.0%
	\$ 52,512	100.0%	100.0%	0.0%





CURRENCY	MARKET VALUE	FRANKLIN TEMPLETON	Bloomberg MULTIVERSE	DIFF
BRAZIL	\$ 4,578	8.7%	0.4%	+8.4%
MEXICO	\$ 2,308	4.4%	0.3%	+4.1%
KOREA	\$ -	0.0%	1.1%	-1.1%
MALAYSIA	\$ 4,944	9.4%	0.4%	+9.1%
INDONESIA	\$ 4,772	9.1%	0.4%	+8.6%
COLOMBIA	\$ 3,203	6.1%	0.1%	+6.0%
PHILIPPINES	\$ -	0.0%	0.2%	-0.2%
EURO	\$ 2,570	4.9%	21.5%	-16.6%
ARGENTINA	\$ -	0.0%	0.0%	0.0%
CANADA	\$ -	0.0%	2.5%	-2.5%
OTHER	\$ 30,137	57.4%	73.1%	-15.7%
	\$ 52,512	100.0%	100.0%	0.0%



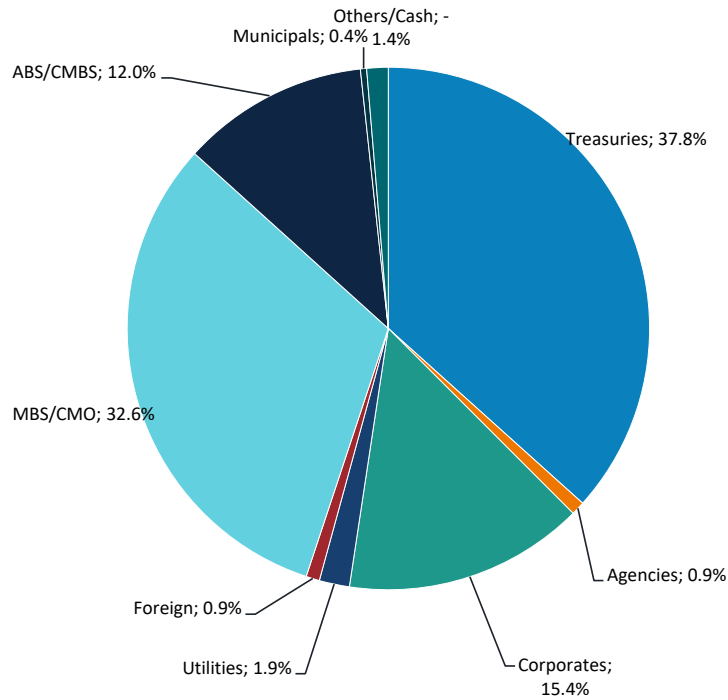
	Actual \$	Actual %	Manager Contribution to Excess Return %
Core Fixed Income	\$692,270,177	65.5%	0.8%
Absolute Return	\$365,179,140	34.5%	0.8%
Actual vs. Policy Weight Difference			0.1%
<b>Total</b>	<b>\$1,057,449,317</b>	<b>100.0%</b>	<b>1.7%</b>

Diversifying Portfolio  
Risk vs. Return (1 Year)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Statistics Summary  
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Diversifying Portfolio	-1.2	2.8	-2.0	-1.0	3.1
<i>Blended Diversifying Index</i>	1.8	4.9	-0.5	-	0.0
Core Fixed	-0.3	6.8	-0.6	1.3	1.0
<i>Blended Core Fixed Income Benchmark</i>	-1.5	7.4	-0.8	-	0.0
Absolute Return	-2.3	7.6	-0.8	-1.4	7.5
<i>Absolute Return Custom Index</i>	8.7	0.2	25.6	-	0.0



Sector	Account Weight	Bloomberg Aggregate	
		Weight	Difference
Treasuries	37.8%	40.8%	-3.0%
Agencies	0.9%	5.1%	-4.2%
Corporates	15.4%	25.1%	-9.7%
Utilities	1.9%	0.0%	1.9%
Foreign	0.9%	0.0%	0.9%
MBS/CMO	32.6%	26.4%	6.2%
ABS/CMBS	12.0%	2.2%	9.8%
Municipals	0.4%	0.0%	0.4%
Others/Cash	-1.4%	0.4%	-1.8%
<b>TOTAL</b>	<b>100.4%</b>	<b>100.0%</b>	<b>0.4%</b>

Portfolio Characteristics		
	Portfolio	
Total Number of Securities		
Total Market Value	\$	709,972,599
Current Coupon		3.92
Yield to Maturity		6.06
Average Life		10.43
Duration		6.92
Quality		AA

Bloomberg Aggregate	
	2.95
	5.39
	8.45
	5.95
	AA

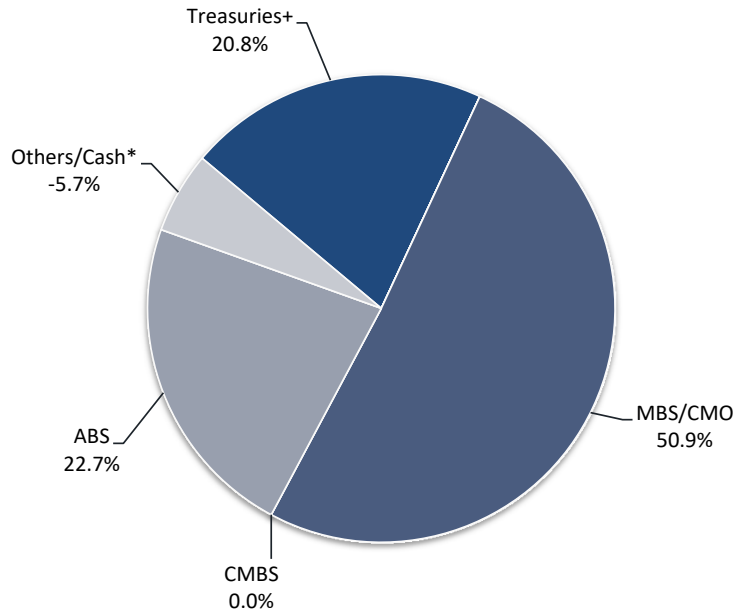
Yield to Maturity	
Range	% Held
0.0 - 5.0	27.6
5.0 - 7.0	57.3
7.0 - 9.0	10.4
9.0 - 11.0	2.8
11.0 - 13.0	0.9
13.0+	0.7
Unclassified	0.4

Average Life	
Range	% Held
0.0 - 1.0	-0.7
1.0 - 3.0	15.5
3.0 - 5.0	16.2
5.0 - 10.0	37.5
10.0 - 20.0	18.7
20.0+	12.8
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	6.2
1.0 - 3.0	17.0
3.0 - 5.0	19.6
5.0 - 7.0	19.7
7.0 - 10.0	14.5
10.0+	23.1
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	50.9
Aaa (10)	26.8
Aa (9)	3.4
A (8)	9.0
Baa (7)	12.8
Below Baa (6-1)	0.6
Other	-3.6

Coupon	
Range	% Held
0.0 - 5.0	82.0
5.0 - 7.0	18.5
7.0 - 9.0	2.7
9.0 - 11.0	0.1
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	-3.2



Sector	Account Weight	Bloomberg Aggregate Weight	Difference
Treasuries <sup>+</sup>	23.5%	40.8%	-17.4%
Agencies	0.0%	5.1%	-5.1%
Corporates	0.0%	25.1%	-25.1%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS/CMO	57.4%	26.4%	31.0%
CMBS	0.0%	0.0%	0.0%
ABS	25.6%	2.2%	23.4%
Municipals	0.0%	0.0%	0.0%
Others/Cash*	-6.4%	0.4%	-6.8%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

+ May include TIPS allocation.

\* Includes CLOs.

Portfolio Characteristics		
		Portfolio
Total Number of Securities		226
Total Market Value	\$	224,337,563
Current Coupon		5.92
Yield to Maturity		7.16
Average Life		9.47
Duration		6.27
Quality		AA+

Bloomberg Aggregate	
	2.95
	5.39
	8.45
	5.95
	AA

Yield to Maturity		
Range		% Held
0.0 - 5.0		-3.0
5.0 - 7.0		71.4
7.0 - 9.0		20.1
9.0 - 11.0		7.9
11.0 - 13.0		1.5
13.0+		1.9
Unclassified		0.0

Average Life		
Range		% Held
0.0 - 1.0		-7.5
1.0 - 3.0		22.3
3.0 - 5.0		9.9
5.0 - 10.0		42.1
10.0 - 20.0		26.9
20.0+		6.3
Unclassified		0.0

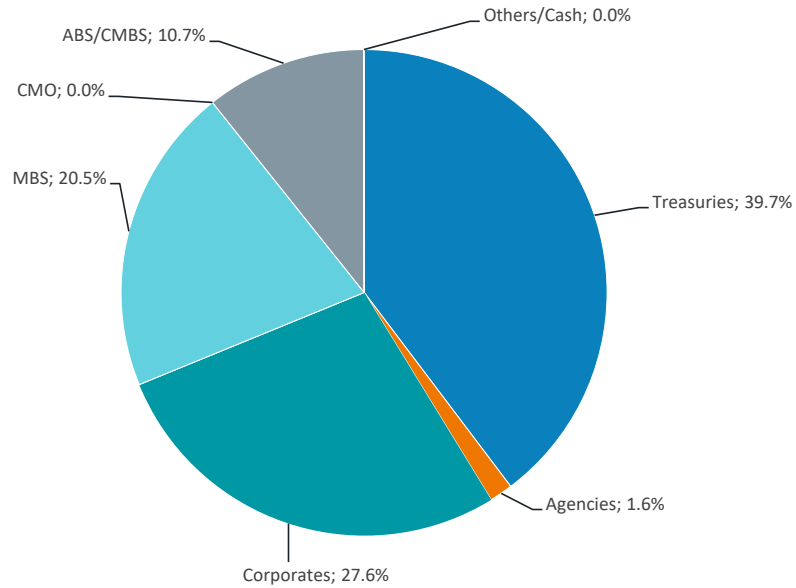
Duration		
Range		% Held
0.0 - 1.0		7.0
1.0 - 3.0		26.4
3.0 - 5.0		18.1
5.0 - 7.0		16.2
7.0 - 10.0		13.8
10.0+		18.5
Unclassified		0.0

Quality	
Range	% Held
Govt (10)	35.6
Aaa (10)	51.9
Aa (9)	6.0
A (8)	6.7
Baa (7)	9.5
Below Baa (6-1)	1.6
Other	-11.2

Coupon	
Range	% Held
0.0 - 5.0	85.6
5.0 - 7.0	19.8
7.0 - 9.0	5.7
9.0 - 11.0	0.2
11.0 - 13.0	0.0
13.0+	0.0
Unclassified/Cash	-11.4

FIAM Bond Duration Pool  
Bond Sector Allocation

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023



Sector	Bloomberg Aggregate		
	Account Weight	Weight	Difference
Treasuries	39.7%	40.8%	-1.2%
Agencies	1.6%	5.1%	-3.5%
Corporates	27.6%	25.1%	2.5%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	20.5%	26.4%	-5.9%
CMO	0.0%	0.0%	0.0%
ABS/CMBS	10.7%	2.2%	8.5%
Municipals	0.0%	0.0%	0.0%
Others/Cash	0.0%	0.4%	-0.4%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>



FIAM Bond Market Duration Pool  
Bond Summary Statistics

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Portfolio Characteristics		Portfolio
Total Number of Securities		452
Total Market Value	\$	136,394,714
Current Coupon		3.69
Yield to Maturity		5.81
Average Life		9.01
Duration		6.12
Quality		AA

Bloomberg Aggregate
2.95
5.39
8.45
5.95
AA

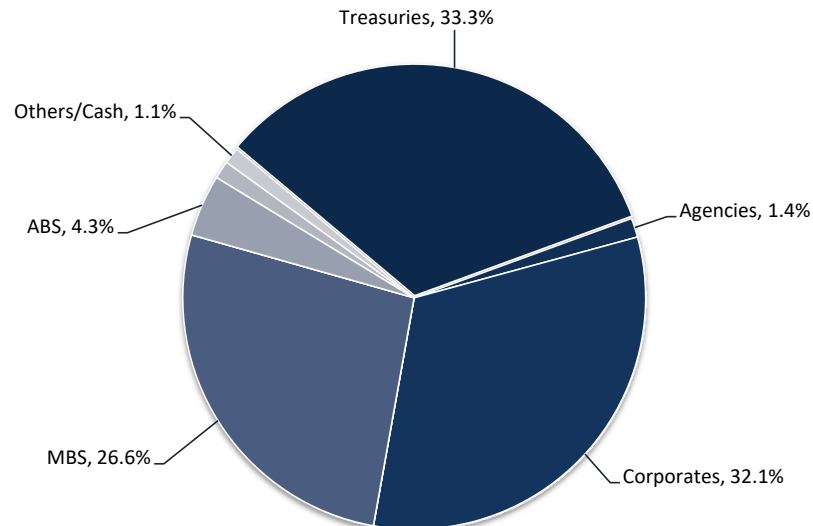
Yield to Maturity	
Range	% Held
0.0 - 5.0	37.4
5.0 - 7.0	48.8
7.0 - 9.0	11.0
9.0 - 11.0	1.1
11.0 - 13.0	1.4
13.0+	0.3
Unclassified	0.0

Average Life	
Range	% Held
0.0 - 1.0	0.9
1.0 - 3.0	9.3
3.0 - 5.0	26.7
5.0 - 10.0	44.1
10.0 - 20.0	8.3
20.0+	10.6
Unclassified	0.0

Duration	
Range	% Held
0.0 - 1.0	9.0
1.0 - 3.0	9.4
3.0 - 5.0	26.1
5.0 - 7.0	27.1
7.0 - 10.0	14.3
10.0+	14.1
Unclassified	0.0

Quality	
Range	% Held
Govt (10)	41.2
Aaa (10)	26.4
Aa (9)	3.0
A (8)	10.1
Baa (7)	19.0
Below Baa (6-1)	0.3
Other	0.0

Coupon	
Range	% Held
0.0 - 5.0	79.2
5.0 - 7.0	18.5
7.0 - 9.0	2.3
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified	0.0



Sector	Account Weight	Bloomberg Aggregate	
		Weight	Difference
Treasuries	33.3%	40.8%	-7.5%
Agencies	1.4%	5.1%	-3.7%
Corporates	32.1%	25.1%	7.0%
Utilities	0.0%	0.0%	0.0%
Foreign	0.0%	0.0%	0.0%
MBS	26.6%	26.4%	0.2%
CMO	0.0%	0.0%	0.0%
ABS	4.3%	2.2%	2.1%
Municipals	1.3%	0.0%	1.3%
Others/Cash	1.1%	0.4%	0.7%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.0%</b>

NISA Core Bond Market Duration Pool  
Bond Summary Statistics

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Portfolio Characteristics		Portfolio
Total Number of Securities		544
Total Market Value	\$	216,839,155
Current Coupon		2.45
Yield to Maturity		5.49
Average Life		9.31
Duration		6.09
Quality		Aa2

Bloomberg Aggregate
2.95
5.39
8.45
5.95
AA

Yield to Maturity	
Range	% Held
0.0 - 5.0	30.0
5.0 - 7.0	65.9
7.0 - 9.0	2.9
9.0 - 11.0	0.0
11.0 - 13.0	0.0
13.0+	0.0
Unclassified*	1.1

Average Life	
Range	% Held
0.0 - 1.0	4.2
1.0 - 3.0	18.4
3.0 - 5.0	17.5
5.0 - 10.0	37.0
10.0 - 20.0	14.2
20.0+	8.6
Unclassified	0.0

Duration	
Range	% Held
< 1.0	4.4
1.0 - 3.0	19.1
3.0 - 5.0	20.3
5.0 - 7.0	21.7
7.0 - 10.0	18.8
10.0+	15.6
Unclassified	0.0

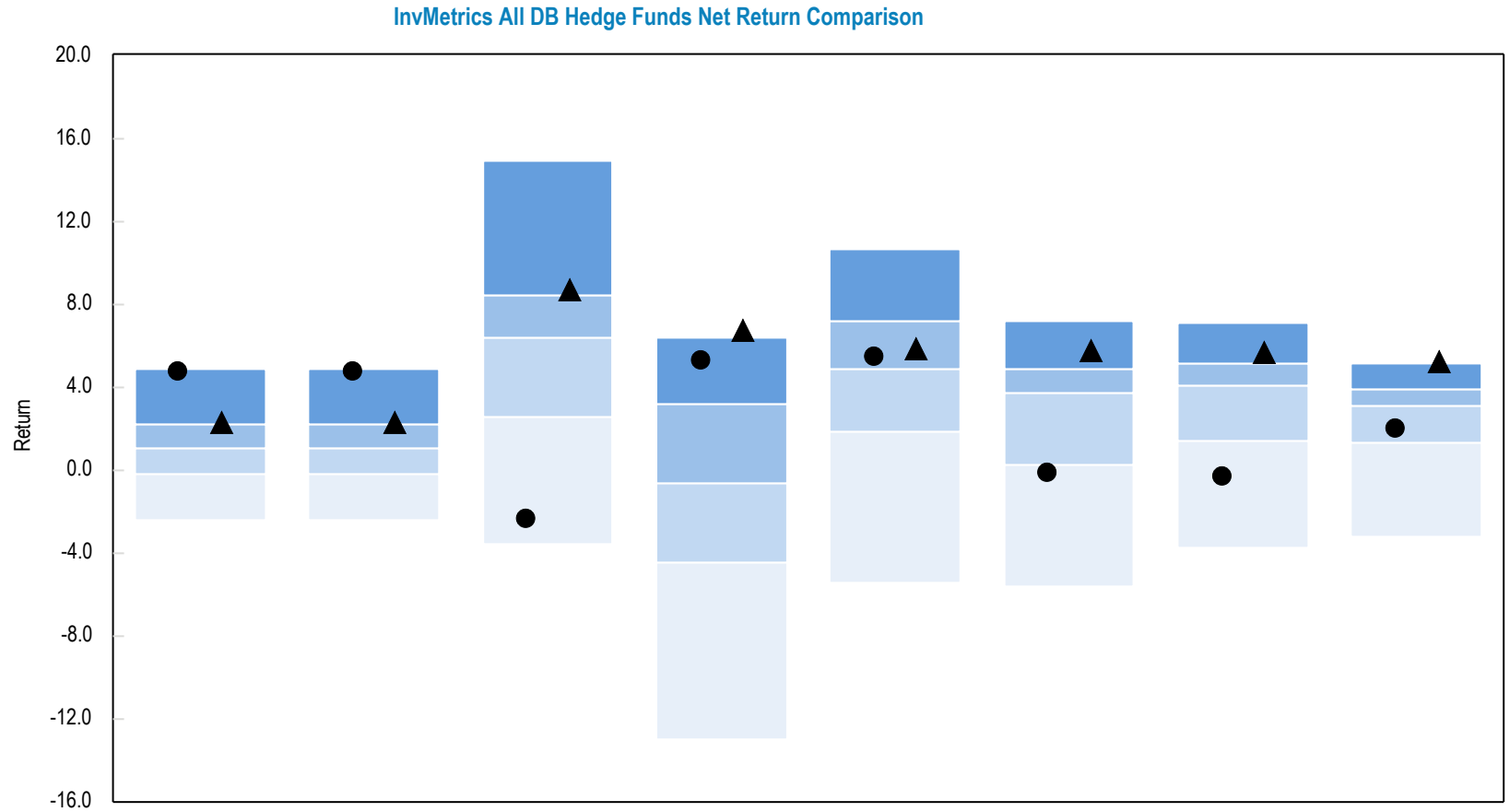
\*Unclassified includes a 0.65% cash position

Quality	
Range	% Held
Govt* (10)	62.0
Aaa (10)	9.2
Aa (9)	1.9
A (8)	12.9
Baa (7)	14.0
Below Baa (6-1)	0.0
Other	0.0

Coupon	
Range	% Held
0.0 - 5.0	76.2
5.0 - 7.0	22.0
7.0 - 9.0	0.6
9.0 - 10.0	0.0
10.0+	0.0
Unclassified	1.1

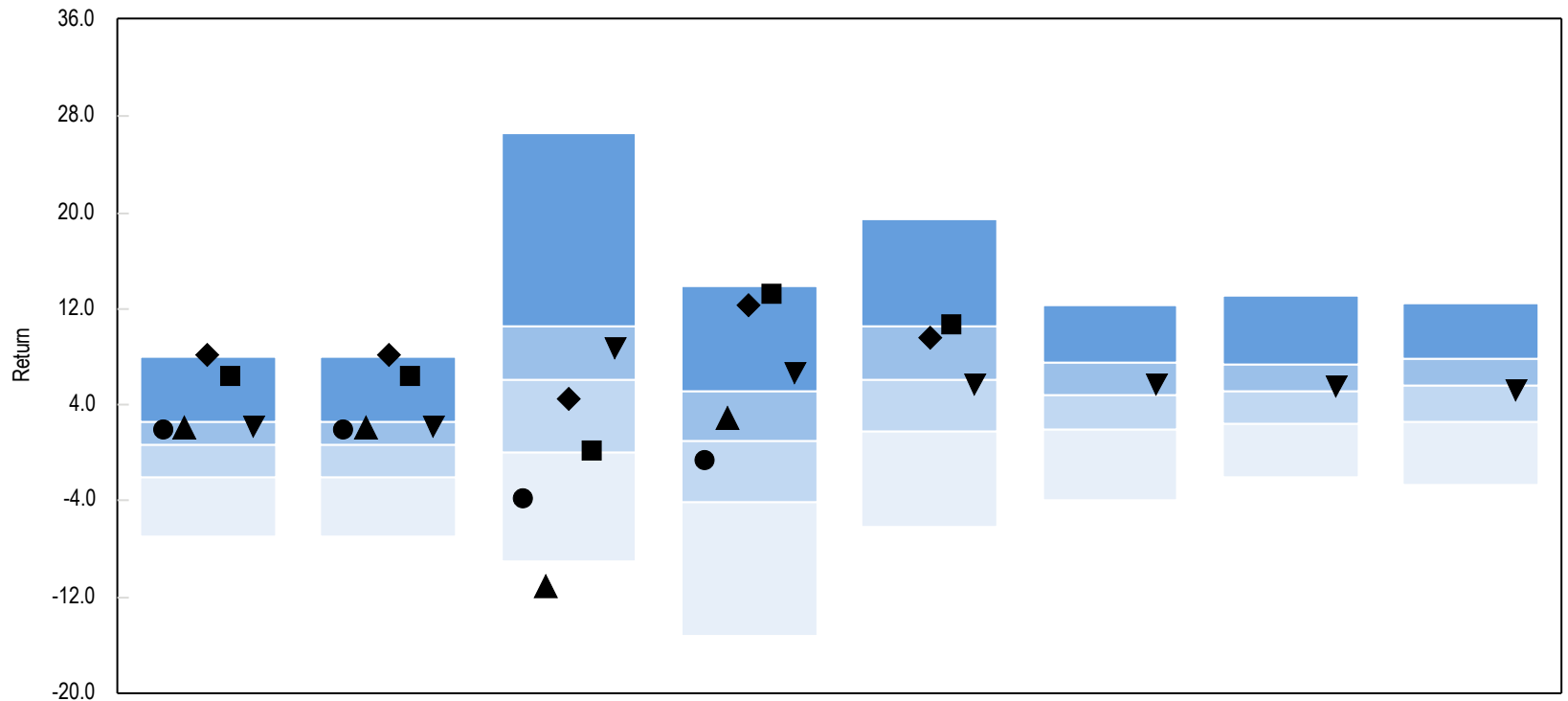
Absolute Return  
Peer Universe Comparison

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

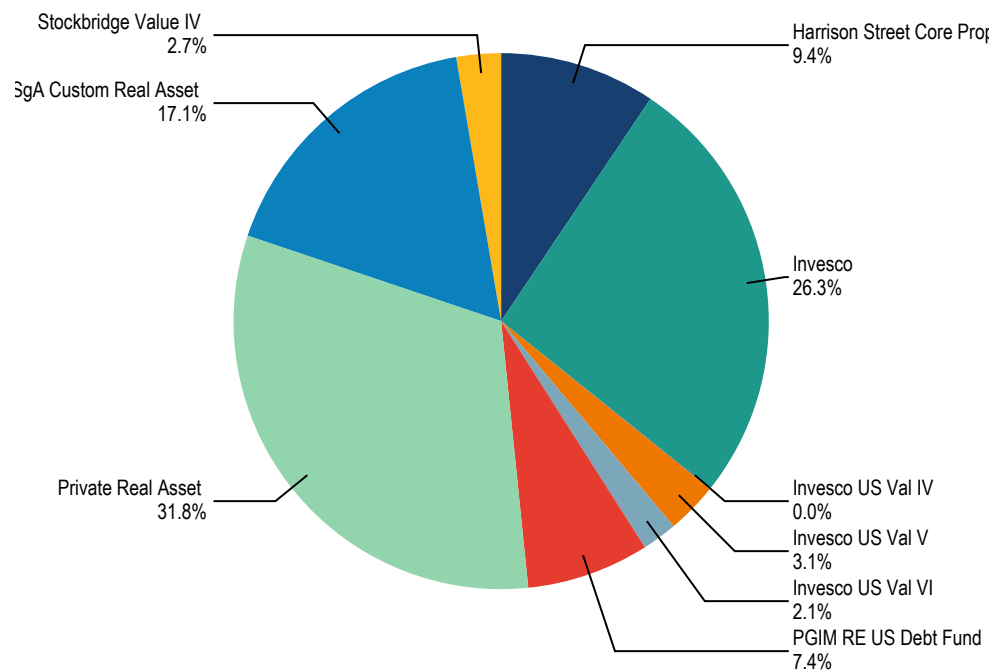


	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Absolute Return	4.8 (6)	4.8 (6)	-2.3 (95)	5.4 (13)	5.6 (39)	-0.1 (77)	-0.3 (89)	2.0 (65)
▲ Absolute Return Custom Index	2.3 (20)	2.3 (20)	8.7 (23)	6.7 (5)	5.8 (38)	5.8 (14)	5.7 (14)	5.2 (5)
5th Percentile	4.9	4.9	14.9	6.4	10.7	7.2	7.2	5.1
1st Quartile	2.2	2.2	8.4	3.2	7.2	4.9	5.1	3.9
Median	1.1	1.1	6.4	-0.6	4.9	3.7	4.0	3.1
3rd Quartile	-0.2	-0.2	2.6	-4.4	1.9	0.3	1.4	1.3
95th Percentile	-2.4	-2.4	-3.5	-12.9	-5.4	-5.6	-3.7	-3.2
Population	57	57	51	43	39	37	28	22

eV Alt All Multi-Strategy Net Return Comparison



	3 Mo	Fiscal YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Acadian MAAR Fund LLC	2.0 (36)	2.0 (36)	-3.7 (90)	-0.7 (61)	-	-	-	-
▲ CFM Systematic Global Macro	2.1 (34)	2.1 (34)	-11.0 (97)	2.9 (40)	-	-	-	-
◆ Graham Quant Macro	8.2 (5)	8.2 (5)	4.6 (58)	12.3 (8)	9.6 (30)	-	-	-
■ PIMCO MAARS Fund LP	6.4 (9)	6.4 (9)	0.2 (75)	13.2 (6)	10.8 (25)	-	-	-
▼ Absolute Return Custom Index	2.3 (32)	2.3 (32)	8.7 (32)	6.7 (20)	5.8 (52)	5.8 (40)	5.7 (47)	5.2 (54)
5th Percentile	8.0	8.0	26.7	13.8	19.4	12.4	13.0	12.5
1st Quartile	2.7	2.7	10.5	5.2	10.6	7.6	7.4	7.9
Median	0.7	0.7	6.1	0.9	6.1	4.9	5.2	5.6
3rd Quartile	-2.0	-2.0	0.1	-4.1	1.7	2.0	2.5	2.6
95th Percentile	-6.9	-6.9	-9.1	-15.2	-6.2	-3.9	-2.1	-2.6
Population	277	277	273	259	243	214	194	157



	Actual \$	Actual %	Manager Contribution to Excess Return %
Harrison Street Core Property	\$94,968,225	9.4%	0.0%
Invesco	\$264,899,443	26.3%	0.1%
Invesco US Val IV	\$432,108	0.0%	0.0%
Invesco US Val V	\$31,113,700	3.1%	-0.1%
Invesco US Val VI	\$21,355,451	2.1%	0.0%
PGIM RE US Debt Fund	\$74,671,299	7.4%	0.2%
Stockbridge Value IV	\$27,154,735	2.7%	-0.1%
Private Real Asset	\$320,233,648	31.8%	0.2%
SSgA Custom Real Asset	\$172,574,131	17.1%	0.0%
Actual vs. Policy Weight Difference			-0.1%
<b>Total</b>	<b>\$1,007,402,740</b>	<b>100.0%</b>	<b>0.3%</b>

Statistics Summary  
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Inflation Hedge	8.9	5.3	1.2	-0.2	5.0
Blended Inflation Hedge Index	10.0	7.9	1.0	-	0.0
Real Estate	6.6	6.3	0.8	-0.2	3.1
NCREIF ODCE	7.1	8.9	0.6	-	0.0
Invesco	6.6	8.6	0.6	-0.3	1.8
NCREIF ODCE	7.1	8.9	0.6	-	0.0
Invesco US Val IV	-30.4	32.0	-1.0	-1.2	30.6
NCREIF ODCE	7.1	8.9	0.6	-	0.0
Invesco US Val V	9.1	9.8	0.7	0.3	7.1
NCREIF ODCE	7.1	8.9	0.6	-	0.0
PGIM RE US Debt Fund	5.8	0.8	4.5	-0.2	8.9
NCREIF ODCE	7.1	8.9	0.6	-	0.0
Private Real Asset	14.6	11.5	1.1	0.0	19.9
Blended Private Real Asset Index	14.3	16.8	0.8	-	0.0
Public Real Assets	10.1	13.0	0.7	0.3	0.4
Blended Public Real Asset Index	10.0	13.1	0.7	-	0.0
SSgA Custom Real Asset	10.1	13.0	0.7	0.3	0.4
SSgA Custom Real Asset Index	10.0	13.1	0.7	-	0.0

Inflation Hedge  
Risk vs. Return

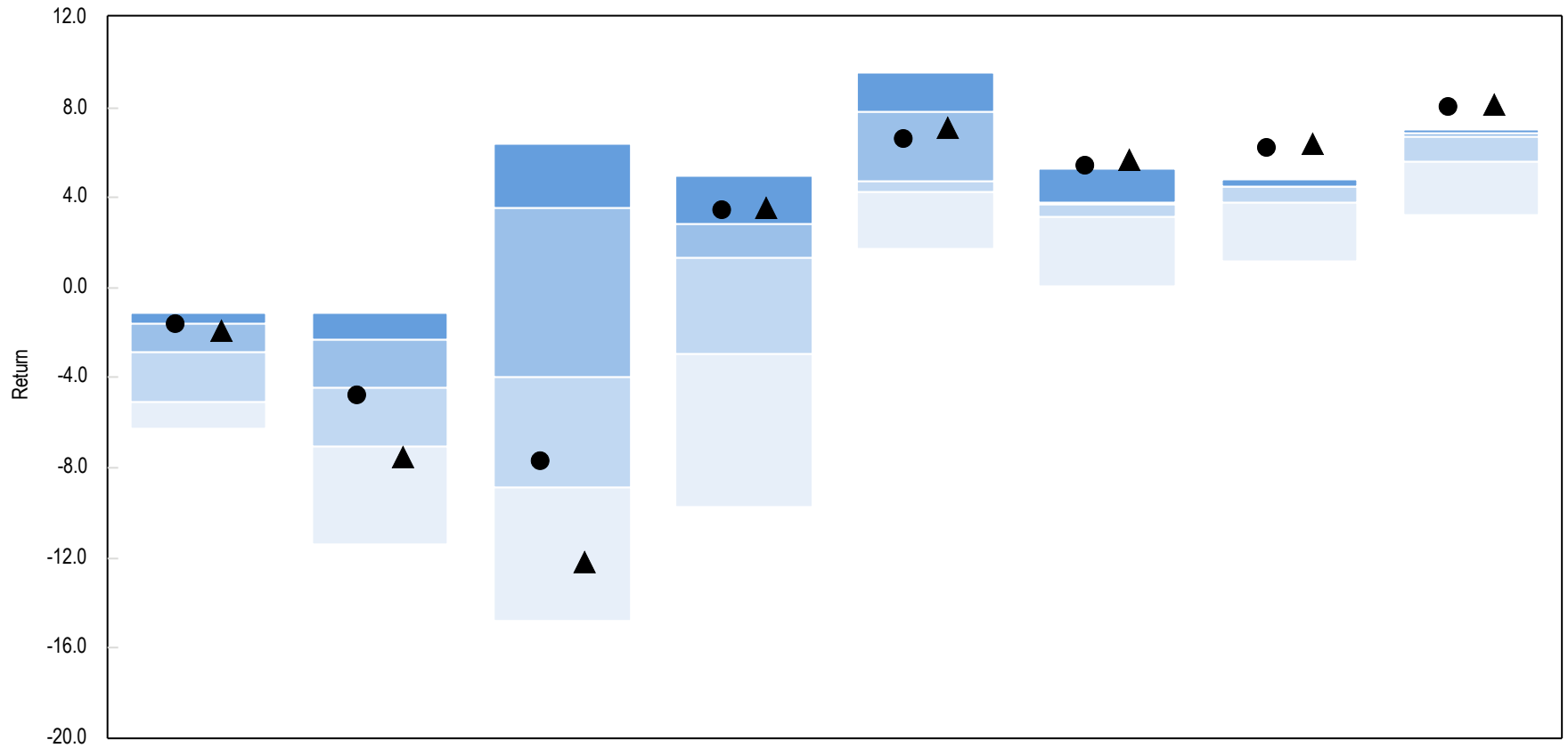
San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Statistics Summary  
5 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Inflation Hedge	3.8	6.6	0.3	-0.6	4.3
Blended Inflation Hedge Index	6.2	7.5	0.6	-	0.0
Real Estate	5.4	5.4	0.7	-0.1	2.5
NCREIF ODCE	5.7	7.1	0.6	-	0.0
Invesco	4.9	7.2	0.4	-0.4	2.0
NCREIF ODCE	5.7	7.1	0.6	-	0.0
Invesco US Val IV	-17.3	25.6	-0.6	-0.8	24.5
NCREIF ODCE	5.7	7.1	0.6	-	0.0
PGIM RE US Debt Fund	5.7	1.6	2.5	0.0	7.0
NCREIF ODCE	5.7	7.1	0.6	-	0.0
Private Real Asset	6.5	11.7	0.4	-0.1	20.1
Blended Private Real Asset Index	6.8	18.9	0.4	-	0.0
Public Real Assets	0.8	17.6	0.0	-0.7	3.4
Blended Public Real Asset Index	3.6	15.5	0.2	-	0.0
SSgA Custom Real Asset	3.7	15.4	0.2	0.1	0.7
SSgA Custom Real Asset Index	3.6	15.5	0.2	-	0.0

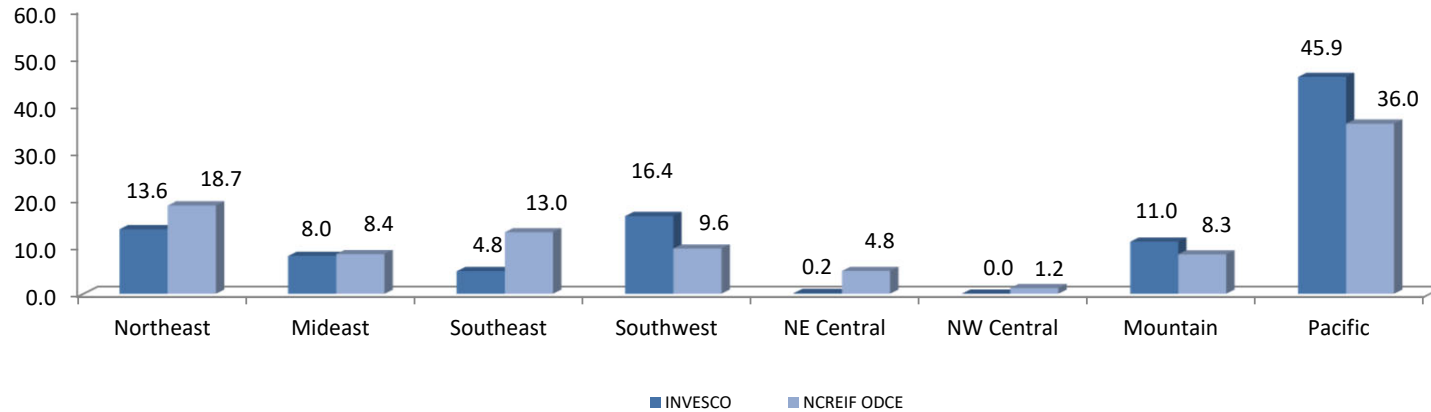


InvMetrics All DB Real Estate Public Net Return Comparison

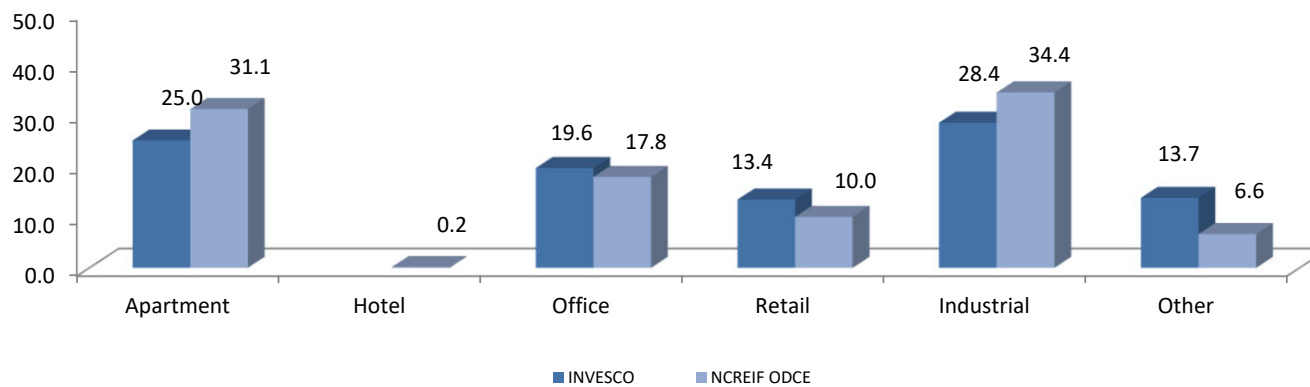


	3 Mo	YTD	1 Yr	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
● Real Estate	-1.6 (28)	-4.7 (62)	-7.7 (72)	3.5 (20)	6.6 (31)	5.4 (4)	6.3 (1)	8.0 (1)
▲ NCREIF ODCE	-1.9 (41)	-7.6 (78)	-12.1 (87)	3.6 (19)	7.1 (28)	5.7 (1)	6.4 (1)	8.2 (1)
5th Percentile	-1.1	-1.1	6.4	5.0	9.6	5.3	4.8	7.1
1st Quartile	-1.6	-2.3	3.5	2.8	7.8	3.8	4.5	6.8
Median	-2.8	-4.5	-4.0	1.3	4.8	3.7	4.5	6.7
3rd Quartile	-5.0	-7.0	-8.9	-2.9	4.2	3.2	3.8	5.6
95th Percentile	-6.2	-11.4	-14.8	-9.7	1.7	0.0	1.2	3.2
Population	14	11	11	9	9	5	5	4

### Geographic Diversification



### Property Diversification



Cash & Cash Overlay  
Risk vs. Return

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

Statistics Summary  
3 Years

	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
County Treasury Pool	2.0	1.6	0.2	0.2	1.7
90 Day U.S. Treasury Bill	1.7	0.6	-	-	0.0
Cash & Cash Overlay	2.1	0.7	2.1	2.1	0.2
90 Day U.S. Treasury Bill	1.7	0.6	-	-	0.0
General Account	2.2	0.6	3.7	3.7	0.1
90 Day U.S. Treasury Bill	1.7	0.6	-	-	0.0

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

Acadian Multi-Asset Absolute Return (MAARS) strategy was inceptioned in November 2017. MAARS targets a volatility of 6%-8% and a return of cash plus 5%. This is a multi-factor strategy 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. – AG Opportunistic Whole Loan Fund**

The Angelo Gordon Opportunistic Whole Loan (OWL) Fund was established to make investments primarily in a portfolio of non-performing loans (NPLs) and re-performing loans (RPLs). AG sees a lot of operational inefficiency in the market place. By acquiring these loans at a discounted price and replacing original servicers with better-focused special servicers, AG believes it can improve operational efficiency and generate attractive returns. In addition, OWL may also include investments in new residential mortgage loans and excess mortgage servicing rights. Opportunistic investments in commercial mortgage loans and other mortgage related investments may also be included in the Fund's portfolio. OWL is towards the end of its fund life and is continuing to sell down the fund's holdings and distribute proceeds to LPs.

**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 under-appreciate 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.

**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 investments 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.

**Franklin Templeton Investments – Global Fixed Income**

Franklin Templeton manages the global bond mandate in an unconstrained fashion using a top-down, fundamental framework. In the short term and on a country-by-country basis there are often inefficiencies in global bond and currency markets, however, over the longer term the market will generally price to fundamentals. Thus, FT focuses on fundamental research to identify long-term opportunities and uses short-term market inefficiencies to build positions in such investments. The investment and portfolio construction process begin with the determination of the Fund's or institutional client's investment objectives, resulting in a set of risk-return parameters and exposure limits within which the portfolio is managed. Next the firm's global economic outlook for the industrialized countries is developed, with a focus on interest rate and exchange rate forecasts. The portfolio's interest rate outlook is a function of global general equilibrium macroeconomic analysis as well as country-specific research. Macroeconomic conditions in the G-3 economies are analyzed first, primarily with respect to how current and projected growth and inflation dynamics are expected to influence monetary policy. This analysis is then extended out to the rest of the industrialized countries (G-13) as well as emerging markets, which results in broad targets for cash, duration, currencies and the developed/emerging market mix. Using the firm's interest rate and exchange rate outlook, probability-weighted horizon returns for bonds of various countries are then calculated. This analysis is used to establish specific country weights and duration targets based on risk-adjusted expected total return measured in the portfolio's base currency. Analysis of emerging markets includes sovereign credit analysis along with greater emphasis on capital flows, inter-market dynamics and trends in the level of risk aversion in the market.



**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 its 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.

**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.

# Policy Index & Benchmark History

# San Mateo County Employees' Retirement Association Period Ending: September 30, 2023

Total Plan Policy Index	As of														
	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
10 Year Treasury +2%	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%
60/40 MSCI World/Bloomberg Global Aggregate (RP)	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%
60/40 Russell 3000/Bloomberg US Aggregate (RP)	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%
91 Day T-Bills	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%	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%	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%	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%	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 BBB	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%
Bloomberg Credit BAA	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%
Bloomberg Long Treasury	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 Multiverse	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%
Bloomberg TIPS	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%
Bloomberg Commodity	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%
Citigroup non-US WGBI	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%
CPI + 5% (RA)	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%
Blended Public Real Asset	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 Asset	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%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
SOFR +4% (HF)	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	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%
MSCI ACWI ex US IMI 100% Hedged (Net)	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	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%
MSCI ACWI ex-US IMI (Net)	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%
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%
NCREIF ODCE	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%
NCREIF Property	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%
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%	0.0%
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%
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%	0.0%
Russell 3000	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%	7.0%
Russell 3000 +3% 1Q Lag (PE)	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%
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%
	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	As of			
	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%

Public Equity Benchmark	As of:																				
	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%	34.0%	31.3%	23.1%	0.0%	0.0%	0.0%
MSCI ACWI ex US IMI 100% Hedged (Net)	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%	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)	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%	0.0%	0.0%
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%	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%	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%	8.3%	12.0%	13.2%	13.5%	15.4%	24.2%	25.0%	25.0%
Russell 3000	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%	8.4%
	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:						
	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%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

International Equity Benchmark	As of:								
	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%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Core Fixed Income Benchmark	As of:	
	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%
	100.0%	100.0%

Opportunistic Credit Benchmark	As of:	
	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%
	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%
	100.0%	100.0%	100.0%

Private Equity Benchmark	As of:	
	4/1/18	10/1/10
Russell 3000 +3% 1Q Lag	100.0%	0.0%
Russell 3000 +3%	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

Absolute Return Benchmark	As of:	
	1/1/21	10/1/10
Libor +4%	0.00%	100.00%
SOFR +4%	100.0%	0.0%
	<b>100.0%</b>	<b>0.0%</b>

Inflation Hedge Benchmark	As of:								
	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 Asset	22.22%	23.53%	23.53%	35.29%	35.29%	33.3%	0.0%	0.0%	0.0%
Blended Private Real Asset	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%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Public Real Asset Benchmark	As of:		
	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	25.0%	33.0%	0.0%
S&P Global Infrastructure	25.0%	33.0%	0.0%
CPI + 5%	0.0%	0.0%	100.0%
Bloomberg TIPS	25.0%	0.0%	0.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Private Real Asset Benchmark	As of:			
	1/1/21	4/1/18	10/1/16	1/1/14
Bloomberg Roll Select Commodity	0.00%	0.00%	34.00%	0.0%
S&P Global Large-MidCap Commodity and Resources	0.00%	0.00%	33.00%	0.0%
S&P Global Infrastructure	0.00%	0.00%	33.00%	0.0%
50/50 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	0.00%	100.00%	0.00%	0.0%
75/25 S&P Global Infra & Lrg-MidCap Com & Resources +2% 1QL	100.00%	0.00%	0.00%	0.0%
CPI + 5%	0.00%	0.00%	0.00%	100.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Private RA Secondary Benchmark	As of:
	9/1/14
Cambridge Associates Private Natural Resources 1 Qtr Lag	50.0%
Cambridge Associates Private Infrastructure 1 Qtr Lag	50.0%
	<b>100.0%</b>

Real Estate Benchmark	As of:		
	1/1/09	6/1/00	7/1/96
10 Year Treasury +2%	0.0%	0.0%	100.0%
NCREIF ODCE	100.0%	0.0%	0.0%
NCREIF Property	0.0%	100.0%	0.0%
	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Liquidity Benchmark	As of:	
	10/1/22	7/1/22
Bloomberg US Govt/Credit 1-3 Yr. TR	81.8%	60.0%
91 Day T-Bills	18.2%	40.0%
	<b>100.0%</b>	<b>100.0%</b>



<b>Baillie Gifford Benchmark</b>	<b>As of:</b>	
	<b>1/1/14</b>	<b>5/1/12</b>
MSCI ACWI ex-US	100.0%	0.0%
MSCI EAFE	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

<b>Baillie Gifford Secondary Benchmark</b>	<b>As of:</b>	
	<b>1/1/14</b>	<b>5/1/12</b>
MSCI ACWI ex-US Growth	100.0%	0.0%
MSCI EAFE Growth	0.0%	100.0%
	<b>100.0%</b>	<b>100.0%</b>

<b>Brigade Secondary Benchmark</b>	<b>As of:</b>	
	<b>8/1/10</b>	
Bloomberg High Yield	50.0%	
Credit Suisse Leveraged Loans	50.0%	
	<b>100.0%</b>	

<b>PIMCO Diversified</b>	<b>As of:</b>	
	<b>9/1/17</b>	
JPMorgan EMBI Global	33.333%	
BofAMLBB-BRatedDvlpdMktsHYHdgdUSD	33.333%	
Global Agg Credit Ex EM USD hedged	33.334%	
	<b>100.0%</b>	

<b>SSgA Custom Real Asset</b>	<b>As of:</b>	
	<b>5/1/20</b>	<b>11/1/16</b>
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%
	<b>100.0%</b>	<b>100.0%</b>

## Fee Schedule

## San Mateo County Employees' Retirement Association Period Ending: September 30, 2023

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

On All Assets:	0.045% per annum
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### DoubleLine

On All Assets:	0.30% per annum
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### NISA

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

### Franklin Templeton Investment

First \$50 million:	0.40% per annum
Next \$50 million:	0.30% per annum
Thereafter:	0.25% 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
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### 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: September 30, 2023

Manager Compliance (Net)

Fund Name	Benchmark	Rule 1	Rule 2	Rule 3
Acadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	P	P	P
PanAgora Defuseq	Russell 1000 Index	-	-	-
PGIM Quant Solutions	Russell 2000 Index	✓	P	✓
Baillie Gifford	MSCI ACWI ex US	P	P	P
Mondrian	MSCI AC World ex USA Value	P	P	P
DoubleLine	Blmbg. U.S. Aggregate Index	-	-	-
FIAM Bond	Blmbg. U.S. Aggregate Index	✓	✓	✓
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 Opportunistic	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	✓	✓	✓
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	P	✓	P
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	P	-
Franklin Templeton	Blmbg. Global Multiverse	P	P	P
Acadian MAAR Fund LLC	Absolute Return Custom Index	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	-	-	-
PIMCO MAARS Fund LP	Absolute Return Custom Index	-	-	-

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive.

## Manager Compliance (Gross)

Fund Name	Benchmark	Rule 1	Rule 2	Rule 3
Acadian US MGD V	Russell 1000 Index	-	-	-
DE Shaw	Russell 1000 Index	P	P	P
PanAgora Defuseq	Russell 1000 Index	-	-	-
PGIM Quant Solutions	Russell 2000 Index	✓	P	✓
Baillie Gifford	MSCI ACWI ex US	P	P	P
Mondrian	MSCI AC World ex USA Value	P	P	P
DoubleLine	Blmbg. U.S. Aggregate Index	-	-	-
FIAM Bond	Blmbg. U.S. Aggregate Index	✓	✓	✓
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 Opportunistic	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	✓	✓	✓
Brigade Capital	Blmbg. U.S. Corp: High Yield Index	P	P	P
PIMCO Diversified	Blmbg. U.S. Corp: High Yield Index	-	P	-
Franklin Templeton	Blmbg. Global Multiverse	P	P	P
Acadian MAAR Fund LLC	Absolute Return Custom Index	-	-	-
CFM Systematic Global Macro	Absolute Return Custom Index	-	-	-
Graham Quant Macro	Absolute Return Custom Index	-	-	-
PIMCO MAARS Fund LP	Absolute Return Custom Index	-	-	-

Rule 1 - Manager has underperformed the benchmark index for the five year period.

Rule 2 - Manager has underperformed the 50th percentile in the appropriate style universe for the five year period

Rule 3 - Excess 5 Year Sharpe Ratio vs. Benchmark is positive.

Total Fund  
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Total Fund**</b>	<b>5,925,126,884</b>	<b>100.0</b>	<b>-1.5 (29)</b>	<b>-1.5 (29)</b>	<b>7.9 (92)</b>	<b>-0.9 (43)</b>	<b>5.5 (55)</b>	<b>5.1 (67)</b>	<b>6.4 (59)</b>
Policy Index			-1.1 (18)	-1.1 (18)	10.4 (46)	-0.2 (30)	5.6 (54)	5.6 (47)	6.6 (48)
Simple Benchmark			-2.9 (84)	-2.9 (84)	9.2 (74)	-2.0 (71)	4.4 (83)	5.2 (66)	6.3 (61)
<b>Total Fund ex Overlay</b>	<b>5,917,254,708</b>	<b>99.9</b>	<b>-1.5 (28)</b>	<b>-1.5 (28)</b>	<b>7.5 (94)</b>	<b>-0.9 (43)</b>	<b>5.5 (55)</b>	<b>5.0 (67)</b>	<b>6.3 (61)</b>
Policy Index			-1.1 (18)	-1.1 (18)	10.4 (46)	-0.2 (30)	5.6 (54)	5.6 (47)	6.6 (48)
Simple Benchmark			-2.9 (84)	-2.9 (84)	9.2 (74)	-2.0 (71)	4.4 (83)	5.2 (66)	6.3 (61)
<b>Growth Portfolio</b>	<b>3,421,856,715</b>	<b>57.8</b>	<b>-2.2</b>	<b>-2.2</b>	<b>15.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Blended Growth Index			-0.7	-0.7	18.9	-0.3	8.2	7.6	-
<b>US Equity</b>	<b>1,315,019,186</b>	<b>22.2</b>	<b>-3.2 (36)</b>	<b>-3.2 (36)</b>	<b>17.3 (83)</b>	<b>1.1 (12)</b>	<b>9.7 (51)</b>	<b>7.8 (82)</b>	<b>10.3 (78)</b>
Blended US Equity Index			-3.3 (39)	-3.3 (39)	20.5 (33)	-0.4 (40)	9.4 (61)	9.1 (32)	11.1 (40)
Russell 3000 Index			-3.3 (39)	-3.3 (39)	20.5 (33)	-0.4 (40)	9.4 (61)	9.1 (32)	11.3 (29)
BlackRock Russell 1000	797,183,836	13.5	-3.1 (55)	-3.1 (55)	21.2 (36)	0.2 (69)	9.5 (56)	9.6 (41)	-
DE Shaw	183,140,645	3.1	-2.0 (19)	-2.0 (19)	17.6 (66)	1.2 (50)	9.8 (49)	8.4 (71)	11.9 (31)
PanAgora Defuseq	218,737,593	3.7	-5.1 (93)	-5.1 (93)	7.9 (98)	1.3 (49)	7.7 (83)	-	-
Russell 1000 Index			-3.1 (56)	-3.1 (56)	21.2 (36)	0.2 (69)	9.5 (56)	9.6 (42)	11.6 (45)
PGIM Quant Solutions	113,614,502	1.9	-2.0	-2.0	18.9	-0.2	15.4	3.9	-
Russell 2000 Index			-5.1	-5.1	8.9	-8.7	7.2	2.4	6.6
<b>International Equity with Record</b>	<b>1,051,040,988</b>	<b>17.7</b>	<b>-4.0 (48)</b>	<b>-4.0 (48)</b>	<b>21.4 (61)</b>	<b>-4.5 (43)</b>	<b>4.5 (51)</b>	<b>3.7 (52)</b>	<b>4.4 (46)</b>
Blended International Equity Index			-2.0 (10)	-2.0 (10)	19.7 (87)	-2.0 (12)	6.4 (33)	4.2 (31)	4.5 (43)
Baillie Gifford	242,827,684	4.1	-10.0 (87)	-10.0 (87)	13.3 (77)	-16.5 (80)	-5.6 (85)	1.8 (80)	4.2 (88)
MSCI ACWI ex US			-3.7 (7)	-3.7 (7)	21.0 (28)	-4.6 (10)	4.2 (12)	3.1 (69)	3.9 (91)
MSCI ACWI ex US Growth			-7.3 (44)	-7.3 (44)	16.2 (63)	-9.8 (40)	-1.6 (56)	2.9 (70)	4.3 (87)
Mondrian	264,329,446	4.5	-2.3 (72)	-2.3 (72)	27.0 (57)	-1.8 (67)	7.2 (83)	2.5 (76)	3.4 (81)
MSCI AC World ex USA Value			0.1 (22)	0.1 (22)	26.1 (59)	0.8 (41)	10.3 (48)	3.0 (72)	3.2 (82)
MSCI AC World ex USA Index			-3.7 (83)	-3.7 (83)	21.0 (86)	-4.6 (90)	4.2 (96)	3.1 (71)	3.8 (76)
BlackRock MSCI ACWI EX-US IMI	528,820,717	8.9	-3.5 (29)	-3.5 (29)	20.6 (57)	-5.2 (48)	4.1 (50)	-	-
MSCI AC World ex USA IMI (Net)			-3.5 (29)	-3.5 (29)	20.2 (65)	-5.5 (49)	3.8 (57)	2.6 (86)	3.5 (95)
Record Dynamic Currency Hedge	15,063,142	0.3	297.6	297.6	-	-	-	-	-

Total Fund  
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Private Equity***</b>	<b>382,514,815</b>	<b>6.5</b>	<b>1.3 (45)</b>	<b>1.3 (45)</b>	<b>3.4 (50)</b>	<b>-4.8 (98)</b>	<b>15.1 (69)</b>	<b>19.7 (8)</b>	<b>18.7 (14)</b>
<i>Blended Private Equity Index</i>			8.2 (3)	8.2 (3)	22.0 (1)	4.3 (62)	17.0 (63)	14.4 (46)	14.6 (41)
<b>Opportunistic Credit</b>	<b>673,281,726</b>	<b>11.4</b>	<b>0.9</b>	<b>0.9</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Opportunistic Credit Index</i>			1.2	1.2	10.3	-1.0	3.0	3.4	4.3
<b>Public Credit</b>	<b>509,874,931</b>	<b>8.6</b>	<b>0.8</b>	<b>0.8</b>	<b>7.5</b>	<b>-0.4</b>	<b>3.3</b>	<b>3.5</b>	<b>5.4</b>
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5	0.5	10.3	-2.7	1.8	3.0	4.2
AG CSF ADF II	7,390,200	0.1	2.7	2.7	-	-	-	-	-
AG CSF II	20,675,200	0.3	3.5	3.5	13.9	-	-	-	-
Angelo Gordon Opportunistic	33,574	0.0	0.0	0.0	-10.9	0.9	8.7	4.6	-
Angelo Gordon Credit Solutions	10,926,909	0.2	2.3 (2)	2.3 (2)	7.0 (96)	2.2 (6)	11.1 (1)	-	-
Beach Point Select	115,114,534	1.9	2.5 (2)	2.5 (2)	9.9 (55)	2.5 (4)	8.2 (1)	6.8 (1)	-
Brigade Capital	112,774,733	1.9	2.0 (5)	2.0 (5)	6.9 (96)	-1.2 (35)	6.0 (3)	3.3 (58)	4.3 (55)
One William Street	61,500,258	1.0	2.5 (2)	2.5 (2)	-	-	-	-	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5 (66)	0.5 (66)	10.3 (46)	-2.7 (81)	1.8 (71)	3.0 (75)	4.2 (59)
PIMCO Diversified	129,111,218	2.2	-1.1 (99)	-1.1 (99)	7.2 (94)	-6.0 (100)	-2.6 (100)	1.0 (100)	-
<i>Blended PIMCO Diversified Index</i>			-	-	-	-	-	-	-
<i>Blmbg. U.S. Corp: High Yield Index</i>			0.5 (68)	0.5 (68)	10.3 (48)	-2.7 (81)	1.8 (73)	3.0 (76)	4.2 (60)
Franklin Templeton	52,348,305	0.9	-4.0 (83)	-4.0 (83)	7.9 (40)	-7.0 (62)	-5.6 (75)	-4.0 (99)	-1.1 (91)
<i>Blmbg. Global Multiverse</i>			-3.5 (75)	-3.5 (75)	2.7 (80)	-9.6 (77)	-6.6 (83)	-1.5 (83)	-0.3 (79)
<b>Private Credit</b>	<b>163,406,796</b>	<b>2.8</b>	<b>1.3</b>	<b>1.3</b>	<b>5.7</b>	<b>4.5</b>	<b>5.9</b>	<b>6.2</b>	<b>-</b>
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			3.1	3.1	10.1	3.5	6.2	4.0	4.1
Blackrock DL Feeder IX-U	41,558,162	0.7	3.0	3.0	8.5	6.2	6.7	-	-
PIMCO Private Income	51,162,727	0.9	1.7	1.7	5.2	3.4	7.5	-	-
TCP Direct Lending VIII	13,204,047	0.2	0.8	0.8	6.8	4.5	5.5	5.8	-
White Oak Yield	29,067,217	0.5	0.0	0.0	1.8	3.9	4.4	5.0	-
White Oak YSF V	28,414,643	0.5	0.0 (87)	0.0 (87)	-0.8 (100)	1.0 (14)	-	-	-
<i>Credit Suisse Leveraged Loan Index 1 Qtr Lag</i>			3.1 (1)	3.1 (1)	10.1 (49)	3.5 (2)	6.2 (3)	4.0 (18)	4.1 (69)

Total Fund  
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Diversifying Portfolio</b>	<b>1,057,449,317</b>	<b>17.8</b>	<b>-1.3</b>	<b>-1.3</b>	<b>-1.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blended Diversifying Index</i>			-2.9	-2.9	1.8	-3.4	-2.0	1.7	2.4
<b>Core Fixed</b>	<b>692,270,177</b>	<b>11.7</b>	<b>-4.1</b>	<b>-4.1</b>	<b>-0.1</b>	<b>-7.7</b>	<b>-5.0</b>	<b>0.0</b>	<b>1.5</b>
<i>Blended Core Fixed Income Benchmark</i>			-5.3	-5.3	-1.5	-8.3	-5.9	-0.3	0.9
DoubleLine	223,887,031	3.8	-3.1 (62)	-3.1 (62)	1.0 (49)	-7.3 (81)	-5.0 (93)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.2 (63)	-3.2 (63)	0.6 (56)	-7.3 (82)	-5.2 (96)	0.1 (56)	1.1 (68)
FIAM Bond	136,394,714	2.3	-3.0 (46)	-3.0 (46)	1.4 (36)	-6.8 (34)	-4.4 (31)	1.0 (19)	2.0 (17)
NISA Core Bond	216,839,155	3.7	-3.1 (61)	-3.1 (61)	1.1 (66)	-6.8 (37)	-4.8 (62)	-	-
<i>Blmbg. U.S. Aggregate Index</i>			-3.2 (76)	-3.2 (76)	0.6 (83)	-7.3 (77)	-5.2 (92)	0.1 (95)	1.1 (98)
NISA Long Treasury	110,023,152	1.9	-11.8	-11.8	-	-	-	-	-
<i>Blmbg. U.S. Treasury: Long</i>			-11.8	-11.8	-9.1	-18.3	-15.7	-2.8	0.8
<b>Absolute Return</b>	<b>365,179,140</b>	<b>6.2</b>	<b>4.8 (5)</b>	<b>4.8 (5)</b>	<b>-2.3 (95)</b>	<b>5.4 (13)</b>	<b>5.6 (37)</b>	<b>-0.1 (75)</b>	<b>2.1 (63)</b>
<i>Absolute Return Custom Index</i>			2.3 (21)	2.3 (21)	8.7 (24)	6.7 (5)	5.8 (37)	5.8 (13)	5.2 (10)
Acadian MAAR Fund LLC	82,016,408	1.4	2.0 (28)	2.0 (28)	-3.7 (89)	-0.7 (62)	-	-	-
CFM Systematic Global Macro	84,822,193	1.4	2.1 (26)	2.1 (26)	-11.0 (95)	2.9 (41)	-	-	-
Graham Quant Macro	99,863,746	1.7	8.2 (5)	8.2 (5)	4.6 (62)	12.3 (10)	9.6 (24)	-	-
PIMCO MAARS Fund LP	98,476,792	1.7	6.4 (8)	6.4 (8)	0.2 (82)	13.2 (9)	10.8 (22)	-	-
<i>Absolute Return Custom Index</i>			2.3 (25)	2.3 (25)	8.7 (39)	6.7 (22)	5.8 (50)	5.8 (42)	5.2 (35)
<b>Inflation Hedge</b>	<b>1,007,402,740</b>	<b>17.0</b>	<b>-1.0</b>	<b>-1.0</b>	<b>-1.6</b>	<b>4.2</b>	<b>9.3</b>	<b>4.1</b>	<b>-</b>
<i>Blended Inflation Hedge Index</i>			-1.3	-1.3	-3.8	4.7	10.0	6.2	-
<b>Real Estate</b>	<b>514,594,961</b>	<b>8.7</b>	<b>-1.5 (31)</b>	<b>-1.5 (31)</b>	<b>-7.1 (66)</b>	<b>4.0 (6)</b>	<b>7.3 (29)</b>	<b>6.0 (10)</b>	<b>8.5 (1)</b>
<i>NCREIF ODCE</i>			-1.9 (40)	-1.9 (40)	-12.1 (88)	3.6 (24)	7.1 (30)	5.7 (14)	8.2 (1)
Harrison Street Core Property	94,968,225	1.6	-1.9	-1.9	-2.1	6.1	7.3	-	-
Invesco	264,899,443	4.5	-1.6	-1.6	-12.5	2.5	6.9	5.2	8.1
Invesco US Val IV	432,108	0.0	-28.0	-28.0	-50.9	-44.4	-29.5	-16.3	-
Invesco US Val V	31,113,700	0.5	-4.0	-4.0	-8.8	0.0	10.0	-	-
Invesco US Val VI	21,355,451	0.4	0.0	0.0	-1.5	-	-	-	-
PGIM RE US Debt Fund	74,671,299	1.3	1.5	1.5	7.5	6.8	6.6	6.4	-
<i>NCREIF ODCE</i>			-1.9	-1.9	-12.1	3.6	7.1	5.7	8.2
Stockbridge Value IV	27,154,735	0.5	-4.7	-4.7	-0.8	16.6	-	-	-
<i>NCREIF ODCE</i>			-1.9	-1.9	-12.1	3.6	7.1	5.7	8.2

\*NISA Core Treasury funded 6/15/2023.  
See Appendix for Benchmark History

Total Fund  
Performance Summary (Gross of Fees)

San Mateo County Employees' Retirement Association  
Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo Rank	Fiscal YTD	1 Yr Rank	2 Yrs Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank
<b>Private Real Asset***</b>	<b>320,233,648</b>	<b>5.4</b>	<b>-0.2</b>	<b>-0.2</b>	<b>3.2</b>	<b>6.3</b>	<b>14.6</b>	<b>6.5</b>	<b>-</b>
<i>Blended Private Real Asset Index</i>			-0.9	-0.9	6.1	7.1	14.3	6.8	-
<i>Blended Secondary CA Private RA Index</i>			1.3	1.3	6.9	13.2	16.4	7.6	-
<b>Public Real Assets</b>	<b>172,574,131</b>	<b>2.9</b>	<b>-0.7</b>	<b>-0.7</b>	<b>4.7</b>	<b>2.7</b>	<b>10.3</b>	<b>1.1</b>	<b>-</b>
<i>Blended Public Real Asset Index</i>			-0.8	-0.8	4.2	2.3	10.0	3.6	-
SSgA Custom Real Asset	172,574,131	2.9	-0.7	-0.7	4.7	2.7	10.3	3.9	-
<i>SSgA Custom Real Asset Index</i>			-0.8	-0.8	4.2	2.3	10.0	3.6	-
<b>Liquidity</b>	<b>438,418,112</b>	<b>7.4</b>	<b>1.3</b>	<b>1.3</b>	<b>4.6</b>	<b>2.4</b>	<b>1.8</b>	<b>1.5</b>	<b>-</b>
<i>Blended Liquidity Index</i>			0.8	0.8	3.1	-	-	-	-
<b>Cash Flow-Matched Liquidity</b>	<b>313,223,854</b>	<b>5.3</b>	<b>1.2</b>	<b>1.2</b>	<b>4.1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Blmbg. 1-3 Year Gov/Credit index</i>			0.7	0.7	2.8	-1.2	-0.7	1.2	1.0
<i>Blmbg. 1-3 Year Credit</i>			0.8	0.8	3.5	-0.9	-0.3	1.6	1.5
Insight Investment*	297,195,840	5.0	1.2	1.2	4.3	-	-	-	-
<i>Blmbg. 1-3 Year Credit</i>			0.8	0.8	3.5	-0.9	-0.3	1.6	1.5
County Treasury Pool**	16,028,014	0.3	0.4	0.4	3.9	2.4	2.0	2.2	1.9
<i>90 Day U.S. Treasury Bill</i>			1.3	1.3	4.5	2.5	1.7	1.7	1.1
<b>Cash &amp; Cash Overlay</b>	<b>132,662,993</b>	<b>2.2</b>	<b>1.5</b>	<b>1.5</b>	<b>5.3</b>	<b>3.1</b>	<b>2.3</b>	<b>1.8</b>	<b>1.3</b>
<i>90 Day U.S. Treasury Bill</i>			1.3	1.3	4.5	2.5	1.7	1.7	1.1
General Account	124,790,830	2.1	1.5	1.5	5.2	3.1	2.2	2.6	2.1
<i>90 Day U.S. Treasury Bill</i>			1.3	1.3	4.5	2.5	1.7	1.7	1.1

\*\*\*Returns are one-quarter lag, excludes EnCap Energy Capital Fund and Sheridan Production Partners  
See Appendix for Benchmark History



# Glossary

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**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:  $\text{Portfolio Return} - [\text{Risk free Rate} + \text{Portfolio Beta} \times (\text{Market Return} - \text{Risk free Rate})]$ .

**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 the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

**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:  $\text{Portfolio Excess Return} / \text{Portfolio Standard Deviation}$ .

**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.

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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 not 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**

December 5, 2023

Agenda Item 6.3

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Report on Absolute Return Manager Annual Reviews

**Recommendation**

Review the report on the annual reviews of SamCERA's absolute return managers, CFM, PIMCO and Acadian Asset Management.

**Background**

On October 5<sup>th</sup>, SamCERA staff and consultant held annual review meetings with CFM, PIMCO and Acadian Asset Management.

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

**Discussion**

On October 5<sup>th</sup>, CFM's Systematic Global Macro (SGM) strategy was reviewed first. The SGM strategy is a directional strategy that takes long/short positions in liquid derivatives markets with the goal of providing absolute returns uncorrelated with traditional asset classes.

Next, PIMCO's Multi-Asset Alternative Risk Premia Strategy (MAARS) was reviewed. PIMCO's MAARS strategy is a systematic, alternative risk premia strategy that invests across multiple, dynamic strategies and markets with low correlation to traditional market factors.

Lastly, Acadian's Multi-Asset Absolute Return (MAAR) strategy was reviewed. Acadian's MAAR strategy is a systematic, market-neutral, multi-factor strategy that exploits behavioral inefficiencies within and across global markets with low correlation to other asset classes. Acadian noted a senior departure on the investment team.

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

**Attachments**


CFM SGM Annual Review Meeting Notes (confidential)  
PIMCO MAARS Annual Review Meeting Notes (confidential)  
Acadian MAAR Annual Review Meeting Notes (confidential)

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

December 5, 2023

Agenda Item 6.4

**TO:** Board of Retirement

**FROM:** Doris Ng, Investment Analyst 

**SUBJECT:** Report on Investment Consultant Annual Review

**Recommendation**

Review the information below summarizing Verus' annual performance evaluation and comment accordingly during the agenda item.

**Background**

The annual evaluation of SamCERA's investment consultant has three parts:

1. A survey completed by trustees and staff
2. Responses to an annual questionnaire completed by consultant
3. A discussion at the Board meeting to present the findings of the survey and questionnaire responses

The survey was provided online, and results were collected from 8 trustees and 4 staff members. There was a total of 20 questions in the survey with 16 of the questions scored on a scale from 1 to 5, with 5 being the highest rating (High). Questions were asked about the general consulting team, the private equity consulting team, and the real assets consulting team. In addition, the survey prompted the Board to provide strategic and educational topics that they would like Jeff MacLean from Verus to cover in 2024.

**Discussion**

Please refer to the summary of the survey scores below. For each question, the responses are broken out and grouped by trustee and staff scores. The minimum, maximum, and average scores are presented for each question as well. Both the Board and staff generally marked the components of the evaluation as above average/high.

In addition, the Board and Staff provided the following strategic and educational topics they would like Jeff MacLean from Verus to cover with the Board in year 2024:

- 1) "Continue the education that we have been receiving on mature funds, inflation"
- 2) "Cybersecurity and AI. As investment risks and what seems to be incredible investing opportunities"
- 3) "What "higher for longer" means for bonds/fixed income weighting at this point in the economic cycle and interest rate cycle. Does the bond math justify overweighting or pushing the higher end of the approved range?"
- 4) "The effects of current interest rates and inflation upon our investments."

- 5) "Investment implications of higher rates for longer, management of climate risk in portfolios."
- 6) "Get into more detail on the options for cash investments for the liquidity (benefit payment) portfolio."

2023 Survey		Trustees			Staff		
		Min	Avg	Max	Min	Avg	Max
<b>General Consulting</b>							
2	How would you rate the general consulting team's ability to effectively convey concise and useful information during Board meetings?	4	4.8	5	5	5.0	5
3	How would you rate the general consulting team's responsiveness to questions and requests?	4	4.6	5	5	5.0	5
4	How would you rate the general consulting team's analytical sophistication?	4	4.6	5	5	5.0	5
5	How would you rate the effectiveness of the general consulting team's ability to lead strategic initiatives/projects and provide strategic advice (e.g. Asset-Liability Studies, Asset Allocation Reviews, Risk Management)?	4	4.8	5	4	4.8	5
6	How would you rate the effectiveness of the general consulting team's ability to assist and guide the Board on "big-picture" total Fund investment policy and structure on an on-going basis?	4	4.6	5	4	4.8	5
7	How would you rate the quality and/or clarity of the general consulting team's reports (e.g. Monthly Capital Markets Updates, Quarterly Performance Reports, Manager Review Notes, New Manager Investment Recommendations, etc.)?	4	4.6	5	4	4.8	5
8	How would you rate the effectiveness of the general consulting team's educational presentations (e.g. Investment Leverage, Liquidity Analysis, Plan Maturity, etc.)?	3	4.6	5	5	5.0	5
9	How would you rate the general consulting team's knowledge of institutional investment practices?	4	4.9	5	5	5.0	5
<b>Private Equity</b>							
11	How would you rate the private equity consulting team's ability to effectively convey concise and useful information during Board meetings?	4	4.8	5	5	5.0	5
12	How would you rate the quality and/or clarity of the private equity program's reports (e.g. Semi-Annual Private Equity Performance Reports, Private Equity Investment Recommendations, Educational Presentations)?	3	4.6	5	5	5.0	5
13	How would you rate the private equity consulting team's analytical sophistication?	4	4.8	5	5	5.0	5
14	How would you rate the overall effectiveness of the firm's private equity program?	3	4.6	5	5	5.0	5
<b>Real Assets</b>							
15	How would you rate the real asset consulting team's ability to effectively convey concise and useful information during Board meetings?	4	4.7	5	5	5.0	5
16	How would you rate the quality and/or clarity of the real asset program's reports (e.g. Semi-Annual Private Real Asset Performance Reports, Real Asset Investment Recommendations, Educational Presentations)?	4	4.6	5	4	4.8	5
17	How would you rate the real asset consulting team's analytical sophistication?	4	4.9	5	5	5.0	5
18	How would you rate the overall effectiveness of the firm's real assets program?	4	4.7	5	4	4.5	5

## Attachment

### Verus Annual Review Questionnaire



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**

2023 Annual Review Questionnaire

## San Mateo County Employees' Retirement Association

[VERUSINVESTMENTS.COM](https://www.verusinvestments.com)  
SEATTLE 206-622-3700  
LOS ANGELES 310-297-1777  
SAN FRANCISCO 415-362-3484  
PITTSBURGH 412-784-6678

**Mr. John Nicolini**  
Managing Director and Senior Consultant

**Mr. Joseph Abdou, CFA**  
Consultant

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## Annual Review Questionnaire

### Organizational Update

1) Provide an update on Verus's organization, with particular emphasis on:

(a) changes to your structure

We do not anticipate significant changes in the next twelve months. The number of employee shareholders has stayed steady over the last 12 months.

The history of our firm has been a steady movement towards broadening the breadth of ownership among our key employees, with the number of shareholders increasing from seven in 2006 to 35 today. We will continue to use equity ownership as a means for attracting and retaining talent and, more importantly, for aligning the interests of our employees with those of our clients.

(b) growth of assets/accounts under consultation

	2022	2023
Accounts	152	156
Assets	\$631B	\$952B

(c) breakdown by client type, and

Corporate	21	\$	7,971,427,245.82
Public	29	\$	854,125,612,787.38
Private	4	\$	1,692,821,514.42
Taft-Hartley	57	\$	23,513,557,623.25
Non-Profit	45	\$	65,312,160,675.34
Total	156	\$	952,615,579,846.21

(d) clients gained or lost in the past year. All significant changes should be accompanied by an explanation.

Clients Gained since the last Due Diligence Questionnaire:

#### 2022

Taft-Hartley Client	\$280,000	8/1/22
Non-Profit Client	\$1,100,000	8/1/22
Public Client	\$557,000	10/15/22
Non-Profit Client	\$330,000	11/1/22

#### 2023

Corporate Client	\$10,580	5/25/23
Public Client	\$71,000,000	6/9/23
Healthcare Client	\$3,500,000	8/1/23
Public Client	\$177,677,000	8/1/23



Public Client	\$7,099,000	9/1/23
Public Client	\$17,000,000	10/1/23

Clients lost since the last Due Diligence Questionnaire:

2022			
Healthcare	\$500,034	Requires new vendor after 10 years	10/24/2022
2023			
Taft-Hartley	\$204,469	Chose another provider	1/1/2023

- 2) Please provide a breakdown of the number of clients (and \$AUM) for the past 5 years by the type of service provided (i.e., general consulting, special consulting, OCIO, or other). If any clients have increased or narrowed scope of services, please explain.

	2019	2020	2021	2022	2023
Non-Discretionary (\$M)	\$427,313	\$433,895	\$653,326	\$671,736	\$948,191
Number	145	148	145	146	143
Discretionary (i.e., OCIO) (\$M)	\$3,487	\$4,044	\$5,264	\$5,020	\$4,423
Number	11	15	16	17	20

- 3) What services does your firm offer in addition to pension fund investment consulting?

Verus offers the full range of consulting services to pension plans in the DB and DC arenas. Most of our business is in non-discretionary investment consulting as shown in the table in Question 2 above, and our AUA for public pension plans is significant. Three specialty services offered by Verus, which are backed by dedicated resources, specialists and research teams, are not offered by some of our competitors, and are distinguishing capabilities of our firm. These include:

- Private markets consulting
- Risk advisory and monitoring
- Outsourced CIO discretionary services

- 4) How does your firm manage these services, such as discretionary management (OCIO), to avoid conflicts of interest with its consulting business?

While Verus' OCIO business may present perceived and potential conflicts to our non-discretionary clients, we believe through the application of appropriate policies, they can be managed. Below, we list what we believe to be two key potential or perceived conflicts and how we manage them.

A potential conflict exists because OCIO services generate higher fees than general consulting services. The OCIO model involves a substantial change in scope of services that materially affects how a Board conducts business. The decision to employ an OCIO provider is fundamentally a governance decision, one that is outside the scope of our advice to clients. Therefore, we would never recommend to a client to change from one form of service to another. This view is codified as firm policy.

Additionally, it may be perceived that our OCIO relationships could receive preference over our traditional non-discretionary clients with regards to capacity-constrained investment opportunities. OCIO clients, by the nature of the model, are nimbler than traditional non-discretionary clients and can act faster on investment opportunities than Trustees governing a non-discretionary investment program. Our opinion is that such opportunities rarely occur. Furthermore, this potential conflict exists even within consulting firms that do not have OCIO services as their clients maintain different meeting cycles and investment policies. That said, we have implemented an allocation procedure for limited capacity opportunities to ensure all clients are treated fairly. Following is our process for allocating capacity:

### **Approval Process**

Verus maintains a formal process for review and approval of external investment managers and their investment opportunities related to traditional asset classes and alternative asset classes. Only approved external managers and their particular investment opportunities may be recommended by Verus Consultants or utilized by Verus Portfolio Managers for non-discretionary and discretionary client's respectively. Verus has expanded its roster of approved managers in recent years, with a particular focus on ensuring that all client external managers have been fully vetted using our approval process.

External investment managers are approved by the Verus Investment Committee (IC) for traditional asset classes or the Alternatives Investment Committee (AIC) for alternative asset classes. Detailed information regarding operational due diligence and investment due diligence with recommendations for consideration is provided to the IC and the AIC by the manager research team and due diligence professionals within Verus.

### **Capacity Allocation**

We follow a multi-step process for allocating capacity in oversubscribed funds:

1. Verus informs the external investment manager (typically a general partner) that Verus does not allocate fund capacity between Verus clients and confirms that the GP has its own processes and procedures for allocating limited investment opportunities (typically an investment committee).
2. Verus determines from the external investment manager any limitations on client types it is accepting (public or corporate pensions, endowments/foundations, or other); size of client legal limitations; and the investor due diligence processes.
3. The approved external manager/product is disseminated to Verus consultants and portfolio managers for clients whose investment policies permit the type of investment presented. The information provided includes, among other items: (a) the fund/GP name, size (target and cap), (b) a brief description (c) fundraising update including amounts closed to date, planned closing dates, and open date for current available allocation (d) target date to inform external investment manager with indications of interest and levels.
4. Client feedback is solicited and based on such feedback clients interest levels/ranges, together with client profiles, size, key steps of investment process, and other pertinent issues such as specific FOIA requirements is summarized internally for presentation to the external investment manager.

5. If the total desire/claimed capacity is within the total amount of capacity, the Verus consultants and portfolio managers are informed that the claims are within capacity and that these claims for capacity will be presented to the external investment manager for consideration.

- 5) What percentage of your firm's income comes from pension fund investment consulting (provide breakdown between general, discretionary/OCIO and specialty)?

	<b>% of Total Revenue</b>
Non-Discretionary	85%
Discretionary	15%

- 6) Describe your plans for managing the future growth of your firm.

- a) Do you have limitations on the number of clients you intend to accept?

With respect to client loads, the assignment of new client responsibilities is determined primarily by the fit of the client with the consultant and the consultant’s capacity to take on new relationships. Firm leadership manages consultant workload and maintains excess capacity for new relationships. We do not set limits on consultants’ books of business but assess capacity individually. On average, consultants maintain about seven to ten client relationships. Consultants servicing large, sophisticated clients with complex portfolios and monthly meetings tend to have fewer relationships.

- b) What is the number of clients for the lead and secondary general consultant?

John Nicolini has four clients as lead general consultant, and Joseph Abdou has three clients as lead consultant and four clients as secondary consultant.

- c) Provide the number of clients for the specialty consultants, Faraz Shooshani and John Nicolini, for the past 5 years. Describe your policies for controlling the workload of Faraz Shooshani and John Nicolini.

During the past five years, Faraz Shooshani has served as private markets consultant to six clients. John Nicolini serves as general and/or real assets consultant to six clients. Verus added another analyst to the real assets team since SamCERA’s last review. Marc Gesell, who is a generalist consultant with a risk specialty, serves as co-consultant or secondary to nine clients.

Firm leadership is primarily responsible for managing consultants’ workloads. Although we do not set limits on a consultant’s book of business, workload is managed by factors that include (1) a consultant’s seniority and level of experience, (2) the complexity of services required by his or her client accounts, and (3) overall capacity for new relationships. The current client-to-consultant ratio is 5-to-1 for larger clients with complex portfolios. Verus’ firm infrastructure supports the firm’s consultants and consulting clients with resources across all asset classes. Faraz Shooshani heads the firm’s private markets consulting practice and has a team of nine assisting him with research resources across the private market spectrum (venture, buyout, debt-related, real assets, private credit). The private markets team also has dedicated reporting analysts to assist in performance reporting. John Nicolini has a senior real estate analyst and a newer real assets analyst supporting him.

7) Please specify the individuals (up to five) who you feel are key to the success of your firm.

Jeffrey MacLean (CEO)  
 Shelly Heier, CFA, CAIA (President)  
 Ian Toner, CFA (CIO)  
 Kraig McCoy, CFA (CFO & COO)  
 Faraz Shooshani (Managing Director and Senior Private Markets Consultant)

8) Please specify the individuals (up to five) who you feel are key to the success of Verus' account relationship with SamCERA.

John Nicolini - Lead consultant  
 Faraz Shooshani - Private markets consultant  
 Joe Abdou, CFA - Backup Consultant  
 Marc Gesell, CFA - Risk specialist/Backup Consultant

9) Has your firm been involved in any regulatory or litigation events in the past year?

No.

10) Summarize the coverage for errors and omissions, professional liability, fiduciary insurance or fidelity bonds held by your firm (i.e., amounts and respective carriers) and e-mail the certificates of insurance to [investments@samcera.org](mailto:investments@samcera.org).

Following is our current coverage applied to the firm as a whole.

Type of Insurance	Coverage Amount	Company	Rating
Fiduciary Liability	\$5m (\$25k deductible)	Allianz Underwriters Insurance Co.	A+ by A.M Best
Errors & Omissions	\$10m (\$500k deductible)	Allianz Underwriters Insurance Co.	A+ by A.M Best
Directors & Officer Liability	\$10m (\$500k deductible)	Allianz Underwriters Insurance Co.	A+ by A.M Best
Cyber Policy	\$2m (100k deductible)	North American Capacity Insurance Co.	A+ by A.M Best
Employment Practices Liability	\$7.5m (100k deductible)	Allianz Underwriters Insurance Co.	A+ by A.M Best
Financial Institution / Crime Bond	\$1m (\$50k deductible)	Federal Insurance Company	A+ by A.M Best
ERISA Fidelity Bond	10% plan assets or \$500k	Federal Insurance Company	A+ by A.M Best
Commercial General Liability	\$1m per occurrence	Phoenix Insurance Company	A++ by A.M Best

11) Update all personnel changes to the Verus team. Indicate the turnover of professional staff (senior management and key professionals) over the past two years.

Date Hired	Employee Gained	Title
6/5/2023	Madison Martin	Performance Analyst
6/5/2023	Palmer Pederson	Performance Analyst
5/30/2023	Chibueze Odoh	Public Markets Analyst
5/22/2023	Dan	Associate Director   Actuarial Services

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3/27/2023	Jonathan Powell	Performance Analyst
2/21/2023	Christian Reed	Private Markets Performance Analyst
2/1/2023	Philip Schmitt	Director   Public Markets
12/19/2022	Cholo Villanueva	Performance Analyst
12/19/2022	Demitri Castaneda	Performance Analyst

Position	Final Day	Departure Reason
Performance Analyst	11/2022	Voluntary
Senior Associate Director   Public Markets	12/2022	Voluntary
Associate Director   Risk Actuary	12/2022	Voluntary
Managing Director   Senior Consultant*	12/2022	Voluntary - Retired
Public Markets Research Analyst	1/2023	Voluntary
Senior Analyst	4/2023	Voluntary
Managing Director Senior Consultant Bus. Dev*	6/2023	Involuntary
Managing Director Senior Consultant*	7/2023	Voluntary
Director   Portfolio Management*	7/2023	Voluntary
Senior Consulting Associate	8/2023	Involuntary
Senior Consulting Associate	8/2023	Involuntary
Senior Performance Analyst	9/2023	Involuntary

\*Senior investment professionals denoted with an asterisk.

Year	Turnover % (All Employees)
2021	13%
2022	15%
2023	8%

### 12) Describe any new potential services/improvements to your existing services being considered.

SamCERA has previously considered utilizing Verus' enhanced holdings-based risk analytics and direct hedge fund resources. SamCERA staff reviewed both options and decided to maintain the current scope of service for Verus. We are happy to discuss either of these services with staff if appropriate.

### 13) Describe the relative strength and longevity of your back-office (performance and risk analytics) staff. Please provide a list of the Support Personnel for general consulting and specialty consulting services.

Verus' 15-person Performance Analytics Group is dedicated to data calculation, reconciliation, and performance evaluation. The group is supervised by Mr. Justin Hatley, Director of Performance Analytics, who reports to the President of the firm. Mr. Hatley has 20 years of experience. SamCERA's performance analyst, Phillip Thomas, has 8 years of investment experience and has been with Verus for eight years. The risk advisory team, led by the chief investment officer, Ian Toner, provides risk analytics, monitoring and education, and delivers end-to-end services to help clients develop a comprehensive framework for risk management that analyzes and communicates risk in every aspect of their investment program. Mr.

Toner has over 30 years of industry experience and sits on the Verus investment committee and management committee. Risk Director Danny Sullivan, FRM, CAIA, began his career with Verus in 2011 and Dan Hougard, FSA, was an actuarial analyst for 7 years prior to joining Verus in 2023.

- 14) What are the current technologies utilized in supporting the back-office processes? What performance measurement system do you use? Also what risk systems do you utilize in producing ex-post and ex-ante risk reports for clients? Please summarize your maintenance and upgrade policy/plan.

**Performance measurement resources**

Verus' main tool for performance analytics and source of peer universe data is Investment Metrics' Portfolio Analytics Reporting platform (PARis). PARis enables institutional investors and advisors to aggregate, analyze, optimize, and report on investment portfolios across plan types, plan sizes, asset classes, styles, and universes. PARis is built on a single, integrated platform, aggregating data from custodians, market indexes, managers, and clients and covering over \$14 trillion in assets under advisement for over 20,000 institutional plans and 900,000 portfolios. The solution provides over 200 standard reports with built-in analytics and the flexibility to create branded, customized reports for institutional investment portfolios with confidence, differentiation, and efficiency. The universe aggregates data submitted by institutional investment consulting organizations using institutional and custodial statements for separate accounts, and investment managers for privately held or commingled funds. The databases contain at least twenty-five years of performance data on each of the major asset classes and are updated monthly.

The PARis platform is distinguished by how it drives greater operational efficiencies in data aggregation, performance calculation, real-time analysis into client, manager and market movement, and timely, automated production of performance reports.

Investment Metrics is continually maintaining its system and upgrading its platform to respond to clients' needs. A Consultant's Collaborative of Investment Metrics clients meets periodically to discuss initiatives that would help guide the platform's improvements and development. This is mutually beneficial in that it saves Investment Metrics time tapping each client individually to learn about needs; instead they receive the information from the Collaborative. The Collaborative streamlines and consolidates client requests to enable Investment Metrics to focus on the most critical improvements and respond more quickly. Verus is an active participant in the Consultant Collaborative.

We supplement this platform with the following tools that we use for alternative investments, style analysis, risk analysis, and other types of portfolio analytics:

eVestment	Alliance Public markets database
MPI Stylus	Returns-based style analysis, regression analysis
MSCI BarraOne	Risk analysis
Morningstar Direct	Mutual fund information, analytics, index information
Aksia	Hedge fund database
Addepar	Private markets analytics and performance platform
Pitchbook	Private markets database
Thomson Reuter Cambridge Associates	Private markets database
Thomson One VentureXpert	Private equity database
Private Informant	Private equity database

Pitchbook

Private equity database

**Risk monitoring and analysis**

We evaluate risk/return characteristics of the total portfolio using our proprietary risk allocation system, which interacts with MSCI BarraOne, and the Risk modules built into the Investment Metrics platform. Our standard performance reporting delivers deep returns-based risk analytics, which includes ex-post risk metrics at the total fund, asset class composite, and individual manager level, such as standard deviation, tracking error, up-side/down-side capture, alpha, beta, r-squared, information ratio, and Sharpe ratio. In addition, we can offer a full suite of ex-ante, holdings-based risk analytics through our Risk Team.

**15) What are your mission critical systems?**

Technology is an integral part of our consulting practice. We have an in-house IT group composed of three technology specialists who assist our consulting staff in monitoring, testing and evaluating the tools of our trade. We have spent, on average, 10% of revenue on systems and technology in the last three years and anticipate technology investments to stay roughly between 9-12% of revenue over the next three years. We evaluate all IT systems on an annual basis for feature deficiency. We use automated software to apply operating system security patches as soon as they are available from the manufacturer, and continuously upgrade all internal IT systems to insure we maintain long-term support availability with our various vendors and partners.

Our technology infrastructure is a Linux and Windows-based network that allows for secure centralized management of all firewalls, switches and IPS devices as well as endpoint protection. It includes built-in fail over clustering as well as redundant data replication to safeguard data sets as well as the overall infrastructure that personnel utilize to accomplish necessary business tasks.

- Infrastructure Items
- Redundant Internet Service Providers
- Centrally managed Cisco Firewalls
- Intrusion Prevention System at all points of entry
- Centrally-managed Network Switches
- Centrally-managed Video Security Cameras
- Application and Management Servers
- Linux and Windows based operating system (OS)
- Virtual environment with built in clustering for fail over redundancy
- Fully replicated data sets for additional fail over redundancy
- Fully encrypted cloud-based storage for additional layer of redundancy
- Network Attached Storage (NAS)

We currently employ the following software and databases in aid of our consulting practice:

Investment Metrics	Performance measurement platform
PARis	Performance measurement platform
Portfolio Risk Dashboard	Internally developed risk management system
Asset allocation modeling tools evaluation tools	Proprietary stochastic model, scenario, stress test and risk factor
eVestment Alliance	Public markets database

MPI Stylus	Returns-based style analysis, regression analysis
MSCI BarraOne	Risk analysis
Morningstar Direct	Mutual fund information, analytics, index information
Aksia	Hedge funds database
Addepar	Private markets analytics and performance
Pitchbook	Private markets database
Cambridge Associates	Private markets database
Thomson One VentureXpert	Private equity database
Private Informant	Private equity database
Winklevoss Technologies ProVal	Liability simulation software
Pitchbook	Private equity database

We maintain a secured web portal that allows retrieval of our performance reports and research documents. The portal includes access to daily market value information (if the client’s custodian bank participates) and the ability for clients to run some basic on-the-fly reporting such as performance-to-date at the total fund or individual manager level. This portal will also provide an archive of reports and presentations.

With respect to leveraging information resources across the firm and with our clients, Verus employs several key technologies to drive communication capabilities which include but are not limited to the following:

Microsoft Teams	Integrated directly into Office 365 applications, Teams allows for a robust platform which includes many communications features for a team. The Teams platform runs as an “always on” application on Verus employees’ computers and allows for connectivity across multiple hardware device platforms. Committee work and many departments utilize Teams for more efficient collaboration on work products, reducing the use of email.
Skype for Business	Utilized largely for its capabilities which include recording meetings, the sharing of co-worker’s screens and ability to annotate PowerPoint for real-time collaboration among Verus employees. The Skype for Business technologies also include whiteboarding, polling, and built in Instant Messaging for fast and efficient instant collaboration capabilities across all offices. This technology is also largely utilized for its ability to support HD quality video/audio feeds for fast and efficient communications amongst teams and co-workers.
Email	Industry standard email housed in the Office 365 platform is utilized for many day to day communications between Verus Investment employees as well as for outside company communications.
SharePoint	Various internal company SharePoint portals are utilized for the collection and distribution of company related content, including finalized marketing and research materials.
VPN	Verus has incorporated key security technology that allows for both point-to-point VPN connectivity between all offices and further allows for client VPN connectivity to all offices. The Virtual Private Network protocols allow for an always available secure communications between all offices. This also allows approved employees to securely connect to any/all offices via a secure communications channel.
VOIP	Voice over IP has been implemented through all Verus Investments offices to allow for instant and seamless voice communications via 3-digit dial and directory



	lookup. Although offices are geographically dispersed the integrated VOIP technology allows internal phone calls to route and handle as though all offices act as a single office.
CRM	Microsoft Dynamics CRM is utilized as a robust tool for managing client, prospect and manager communications amongst other available tooling. Verus Investments utilizes CRM Online which is a secure cloud-based offering where all backend processes are managed by Microsoft. This also allows for greater flexibility for remote availability and support of multiple hardware devices such as different mobile devices and tablets.
Conference Rooms	Each Verus office has multiple conference rooms of varying sizes that support video conferencing, audio conferencing, Skype, Zoom.us as well as GoToMeeting. Each conference room is outfitted with large format HDTVs, high quality external microphones as well as VOIP enabled conference phones.

**Has your firm experienced any problems with these systems in the past eighteen months?**

Outside of normal maintenance and sporadic and minimal vendor outages, no significant problems have occurred in the last 18 months.

**When were these systems implemented and when were they last upgraded?**

Microsoft’s Office 365 is the technology driving most of our communication resources. We implemented O365 in the spring of 2014, since then Microsoft has upgraded these systems on a consistent and reliable basis.

Our internal database system was implemented in the summer of 2013 and has been upgraded to stay current with the vendors long term support release.

Our server infrastructure has gone through a complete overhaul that was completed in the fall of 2015. All internal systems are hosted and run on a virtual machine and clustered system with local and offsite redundancy. The specific hardware stack is built upon Dell’s VRTX framework.

**Do you anticipate any changes to these systems in the next eighteen months?**

We review and update our systems on a regular basis.

**16) Provide an overview of your firm’s business continuity plan.**

Verus maintains a Business Continuity and Disaster Recovery Plan (BCDR). Forensic review is conducted annually by the compliance department. Third-party audits of the plan were completed in 2014 and 2018. IT security testing is done continuously, with outside third-party penetration testing provided on a regular basis. The plan provides for alternative work sites, geographic and service provider diversity, remote access to critical systems, secure laptops with VPN access, and data retention enforcement for data recovery. We conduct DR/BCP testing exercises regularly to ensure validity, viability, and timely execution. The BCDR has been live-tested successfully during a massive power outage in Seattle and, like many businesses right now, Verus employees are predominantly working hybrid since COVID-19 using many elements of the BCDR. The BCDR has been expanded to incorporate the new office in Pittsburgh where a similar set of procedures has been implemented.

In January 2023, we retained the services of SecurityScorecard, a security assessment and cybersecurity risk rating company, to perform security testing and evaluation of our systems on an ongoing basis. In January 2023, SecurityScorecard completed its initial security and vulnerability assessment using the following 10 risk factors and gave our systems an overall rating of “A”. Going forward, the firm will test our systems regularly.

- Network security
- DNS health
- Patching cadence
- Endpoint security
- IP reputation
- Application security
- Cubit score
- Hacker chatter
- Information leak
- Social engineering

## Performance

17) Detail your perspective of SamCERA's performance expectations, as spelled out in the contract and SamCERA's Investment Policy Statement, and how your firm is doing relative to those expectations.

Verus believes we are meeting SamCERA's performance expectations as detailed in both the Verus contract as well as SamCERA's IPS. Since our last review, Verus has performed all services described in the contract and along with staff, have run the portfolio in a manner consistent with the objectives described in the IPS. SamCERA is a risk conscious plan and has taken steps to lower the overall risk in the portfolio through both the strategic asset allocation as well as implementation decisions. Performance through 6/30/2023 lagged both the benchmark and peer group. Performance versus peers lagged due to strategic asset allocation differences between SamCERA and the majority of the peer group (ie. SamCERA taking less risk than most peers.) SamCERA's implementation also favored a more conservative approach such as the 8% low volatility allocation (cut to 4% in mid-2023). The conservative implementation contributed to shortfalls versus policy which gained 6.5% for the year. Alternatives lagged their benchmark and peers due to the equity rally in early 2023. Alternatives was designed to protect and provide other sources of alpha during struggling equity markets and as such has a low beta and correlation to equities. They performed quite well in 2022 but struggled in 2023. Overall, Verus and SamCERA staff have implemented the portfolio as requested by the Board during the last ERT/ALM study. Currently, Verus is working with Staff to slightly increase risk around the margin, which was discussed in the 2023 ALM.

18) Discuss the domestic equity, international equity, fixed income, alternatives, real assets and real estate markets and SamCERA's relative success or failure in the current market.

### US Equity

- Global equities delivered negative performance during the quarter (MSCI ACWI -3.4%). Weakness in markets was broad-based, with international developed (MSCI EAFE -4.1%) slightly underperforming domestic and emerging market equities (S&P 500 -3.3%, MSCI EM -2.9%).
- Over the quarter, the valuation gap between domestic and international equities grew even larger. An analysis of international developed Price/Earnings ratios shows that all sectors currently hold a valuation discount relative to U.S. shares, and that those discounts are generally much wider than the historical average.
- Currency movements dragged portfolio performance lower for investors with unhedged foreign currency exposure. Investors with unhedged international developed equity exposure saw losses of -3.6% due to currency volatility during the quarter.
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, with value stocks outperforming growth by 11.5%.
- Within US Equity SamCERA had a large low volatility allocation of 8% which caused the US equity composite to lag during the current market environment through June 30, 2023. SamCERA cut the low volatility allocation by half following the Asset Liability Study. DE Shaw has also lagged the benchmark by 3.1% for the 1-year time period. Long Term, DE Shaw has provided results under the index but in

line with the median manager for the 3 and 5-year time periods. PGIM Quant Solutions, the sole Small Cap strategy outperformed when its factors were in favor over the past year (specifically the value factor).

### International Equity

- International developed shares fell -4.1% during Q3 in unhedged currency terms, underperforming U.S. and emerging markets. However, international developed equities in hedged currency terms were the best performing markets (returning -0.5%), as currency hedging would have avoided the U.S. dollar surge fueled by a *higher for longer* interest rate narrative.
- Underperformance within the Eurozone dragged the overall index lower, with the STOXX 50 Index falling -7.7% over the quarter in unhedged terms—the worst performer across regional indices. The broader bloc continues to struggle to bring down inflation, while policymakers also deal with stagnant economic growth. In contrast to weakness seen from European shares, Japanese equities delivered another quarter of positive performance in unhedged terms (TOPIX -1.0%), and significant outperformance in currency hedged terms (+4.0%). While a weaker Japanese Yen (JPY) hurt performance in U.S. dollar terms, the weak JPY has boosted local corporate earnings. These currency movements combined with meaningful inflation and equity reforms—meant to spark investment in wages, higher growth, and therefore shareholder value—have been a tailwind to strong year-over-year Japanese equity performance.
- Overall, we believe international developed equities are less attractive in the near-term, specifically due to the economic headwinds facing the U.K. and broader Eurozone.
- Short term active management within International Equities has been mixed with Baillie Gifford outperforming and Mondrian underperforming for the 1-year time period ending June 30, 2023. Both managers have struggled over the 3 and 5 year time periods versus peers and their benchmark.
- The newly implemented dynamic currency hedge performed well since inception, providing a tailwind to the International Equity composite.

### Fixed Income

- The 10-year U.S. Treasury yield increased during the quarter from 3.81% to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations. This has led to a flattening of the yield curve, though the curve remains inverted at -0.5% (defined as the 10-year Treasury yield minus 2-year Treasury yield).
- Rising interest rates combined with lower inflation have brought real (inflation-adjusted, based on the U.S. TIPS Inflation Breakeven Rate) 10- and 30-year Treasury yields to the highest levels in over a decade. Real yields for 10- and 30-year Treasuries finished the month at 2.24% and 2.33%, respectively. In March of 2022 these rates were negative.
- The Federal Reserve hiked interest rates by 0.25% in July but held rates steady at the September meeting as inflation moderated. Importantly, Chairman Powell signaled that additional rate hikes may be warranted if the economy remains strong and inflation above target.

- During Q3, higher quality bonds and U.S. Treasuries saw mild losses due primarily to their longer duration profile. Riskier credit performed well, with larger coupons and shorter duration contributing to positive performance.
- Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) performed very poorly, falling by -7.3% during the quarter as rising interest rates acted as a headwind.
- With inflation moderating during the quarter, investors expressed optimism that the Federal Reserve would soon pause interest rate hikes. However, interest rate volatility increased during the period as concerns related to the U.S. government's budget deficit and the amount of expected issuance contributed to higher long-term bond yields.
- SamCERA's Fixed Income composite underperformed the index over the 1-year time period, but outperformed over the 3 and 10-year time periods, while in line with the benchmark over the 5-year. Performance in Core Fixed long term was in line with the benchmark. The Opportunistic Credit bucket provided strong absolute and relative returns gaining 4.4% for the 3-year and 3.7% for the 5-year, which enhanced returns for the total fixed income composite.

### Real Assets

- Data pointing towards resilient economic growth was widely viewed as the initial driver of the “higher for longer” rate environment. Adding to this narrative in the third quarter was a tick up in energy costs due to supply side dynamics. This brought an increased focus to energy prices, as the four-decade high inflation experienced during 2022 was partly fueled by a rapid spike in oil and natural gas prices. As inflation has moderated back to levels closer to target, energy price movements have raised concerns of another potential catalyst for higher inflation, and therefore higher rates.
- Oil was the largest contributor, as WTI and Brent Crude prices rose 24.3% and 28.5%, respectively. These significant price increases were driven by a combination of supply cuts by Saudi Arabia and Russia. A slowing economic outlook provides little motivation for oil companies to increase production.
- From a performance standpoint, the outsized gain of the Bloomberg Commodity Energy Index (+19.6%) lifted the broader index, with the Bloomberg Commodity Index finishing the quarter up 4.7%.
- SamCERA's private real asset portfolio has outperformed both public equities and fixed income over the last 2 year by a substantial margin, benefiting from the higher inflation rate environment. Exposure to diversifying assets like commodity producers and infrastructure has benefited SamCERA in an environment where stocks and bonds have struggled to add value. Further, the private real asset portfolio has added substantial value above the liquid real asset portfolio, providing that sought after illiquidity premium. Moving away from a commodity heavy portfolio many years ago and developing a private real asset program has resulted in improved results for SamCERA overall. The liquid real asset pool still has a role to play for SamCERA and has been a source of inflation protection and liquidity. We strategically reduced the allocation to liquid real assets in 2023 as we anticipated inflation coming down. That ended up being a good decision as the portfolio has struggled with falling inflation this year.

### U.S. Real Estate

- As summer ends, the real estate market looks much like it did as it began. Real estate transaction activity continues to be frozen, as buyers and sellers disagree about pricing, leading to a very large bid-ask spread. Private valuations remain higher than public, and write-downs should continue over the next several quarters. While movement has been slow thus far, opportunities may pick up as a wall of low interest rate loan maturities will be coming due and asset owners will need to either refinance at much higher rates, provide additional capital, and/or sell assets.
- New capital should find a compelling environment to deploy in over the next several years at lower entry pricing. We are favoring managers experienced with investing in stressed and distressed environments and those with flexibility to invest across the debt and equity capital spectrum.
- SamCERA has benefited in this environment, relative to the NCREIF Core Real Estate benchmark, by adding core real estate debt, Harrison Street Core Real Estate and diversifying the value-add real estate portfolio. The real estate debt strategy has remained positive over the last two years in an environment when the benchmark has been taking write-downs. The Harrison Street product was positioned as a diversifier in SamCERA's portfolio and has weathered the downturn by avoiding exposure to office and traditional multifamily. Finally, the value-add fund series has been diversified to include additional managers beyond Invesco which has so far been beneficial to overall performance.

### Private Equity

- Private equity deal activity remains weak in the face of rising interest rates. Rising interest rates and falling public market indexes in 2022 are having a direct impact on the current pricing environment. In many cases, with the cost of debt rising, the proportion of equity has also risen. Multiples are coming down, and, until a more stable environment has been established, deal activity will likely remain subdued. Though deal activity is down broadly, transactions for high quality assets and add-ons still occur.
- Exit activity is down a considerable margin, year over year. Considering falling market values, sponsors are opting to retain their portfolio companies instead of selling them at less favorable prices. Public listings were closed due to the decline in public equities and risk premiums in 2022, but upcoming IPOs and market rebound could lead to increased IPO activity.
- A higher rate for longer scenario may benefit prospective investors. Deal activity may pick up alongside motivations borne out of stress and liquidity in a weak macro-environment. Investors who can creatively handle complex situations and cater to seller preferences may find opportunities in stressed situations. Buyers will have leverage in these negotiations and will push for friendlier deal terms and may benefit from discounted purchase prices. We expect distressed opportunities to increase but not to the level of prior market downturns.
- With decreasing premiums on risk, reduced inflows to private equities have occurred. Fundraising has decreased across most of U.S. Private Equity and Venture Capital, especially in the late-stage. LPs who remain active may find a multitude of benefits from the tough fundraising environment, and GPs who remain active may find less competitive markets to be beneficial.

## Investment Consulting Philosophy

19) Describe your investment consulting philosophy, including (a) what are your firm's consulting specialties, strengths and limitations (b) your assessment of the value added by your investment philosophy and (c) what sets your services apart from other pension consultants' services?

Our investment advice follows a consistent and research-driven approach that is governed by the following principles:

- Enterprise objectives and risk tolerance guide all decisions.
- Asset allocation and risk exposures drive portfolio results.
- Economic factors and valuations drive long-term asset class returns. This is the rationale behind the tremendous resources that we invest in scenario analyses, macroeconomic research, capital market valuations, and risk and trend analysis.
- Risk and diversification must be viewed through multiple lenses. We view strategic allocation beyond mean variance analysis, and account for the many facets of portfolio risk in our asset allocation modeling.
- Fees and costs impact on long-term performance and must be minimized and justified.
- We act as a true extension of our clients' staff and an advocate for their interests.

We serve as an ERISA §3(21) fiduciary to our non-discretionary clients and an ERISA §3(38) fiduciary to our discretionary clients. We view our role as an extension of our client's staff in the service of the Board or Investment Committee. With respect to investment managers, brokers and other third-party providers, we act as an advocate on behalf of our clients ensuring that providers perform in accordance with guidelines and charge competitive fees.

Risk-based services permeate our entire service offering, an approach that differentiates us from the rest of the industry. Our professional teams have decades of experience applying risk management techniques to create thoughtful, targeted, and customized results. We believe that risk management is a culture, not a system. We, therefore, emphasize education, improved communication, enterprise risk tolerance, policy development; and seek a level of commitment from all parties to enhance the traditional returns seeking approach with a risk-aware mindset.

Lastly, we believe that among independently-owned, generalist consulting firms, Verus has an especially experienced and tenured private markets team which has been in place since 1994. Current Verus clients who incorporate private markets into their retainer relationships work closely and directly with senior professionals on the private markets team.

As far as limitations, Verus is 100% focused on consulting. For clients who are looking for a variety of services under one roof (e.g., actuarial, recordkeeping), larger, multi-service firms are a better solution.

20) Describe and explain your firm's brokerage relationships, money management activities, fee relationships and soft dollar relationships. Include the amount of income derived in the last calendar year from investment managers.

Verus does not have any brokerage arrangement and does not accept soft dollars.

**21) Provide your assessment of the risks associated with SamCERA's portfolio and describe your firm's risk management capabilities and the tools employed in risk assessment.**

The most important risk to pension funds is unfunded liability. The plan's number one priority is to ensure future obligations are met. The two levers that can be pulled to reduce the unfunded liability are: increasing contributions and changing the risk/return profile of the investment portfolio. Comprehensive risk management and a careful determination of an appropriate risk level is especially important in the current low return environment. Chasing returns can result in a risk level that is beyond a Plan's enterprise risk tolerance.

SamCERA's portfolio is structured in alignment with its risk tolerance and considers important factors such as the MOU (County's overfunding) and the financial strength of San Mateo County which enables the Plan to have 6.25% actuarial expected return and a relatively conservative strategic asset allocation compared with many peers. We view the biggest risk in the SamCERA portfolio as peer risk or the risk of being different from peers. Verus is comfortable with this difference and believes that the portfolio is prudently structured, well diversified and well positioned for the future. Moreover, Verus believes that SamCERA would not capitulate and abandon a well-conceived plan at an inopportune time.

Verus has a risk advisory team that is dedicated to research and delivery of risk advisory services and portfolio analytics. The Risk Advisory Group is composed of professionals who dedicate 100% of their time to risk analysis and monitoring activities. We use MSCI BarraOne software as the backbone of our risk platform and deliver risk analysis through Verus' proprietary Risk Dashboards. This is combined with tools that we have developed to accurately load daily holdings into BarraOne, and efficiently pull risk analytics out of BarraOne for our reporting. The risk team has also developed tools for trend line analysis and daily portfolio risk monitoring. We also use RiskManager, FINCAD, and MPI Stylus Pro. Portfolio construction is driven by our Risk Allocation system, which interacts with MSCI BarraOne, to construct index-based portfolios and download risk data to evaluate the risk and return characteristics of various asset allocation decisions. We can also employ R scripts to power risk-based rebalancing and optimization algorithms.

Verus' Risk Advisory Service has the capability to consolidate all underlying positions and quantify where concentrated risks lie in the portfolio. Our risk advisory service pulls data from custodians and loads it into MSCI BarraOne's risk system. We work directly with MSCI to monitor and direct the implementation and ongoing maintenance of data in the risk system, and provide monthly Risk Dashboard reports, if desired by the client. At this time, SamCERA has opted for index-based analysis which is a cost-effective means of disaggregating risk across the portfolio.

**22) What are your recommendation(s) regarding categories of managers appropriate to implement SamCERA's Investment Policy Statement?**

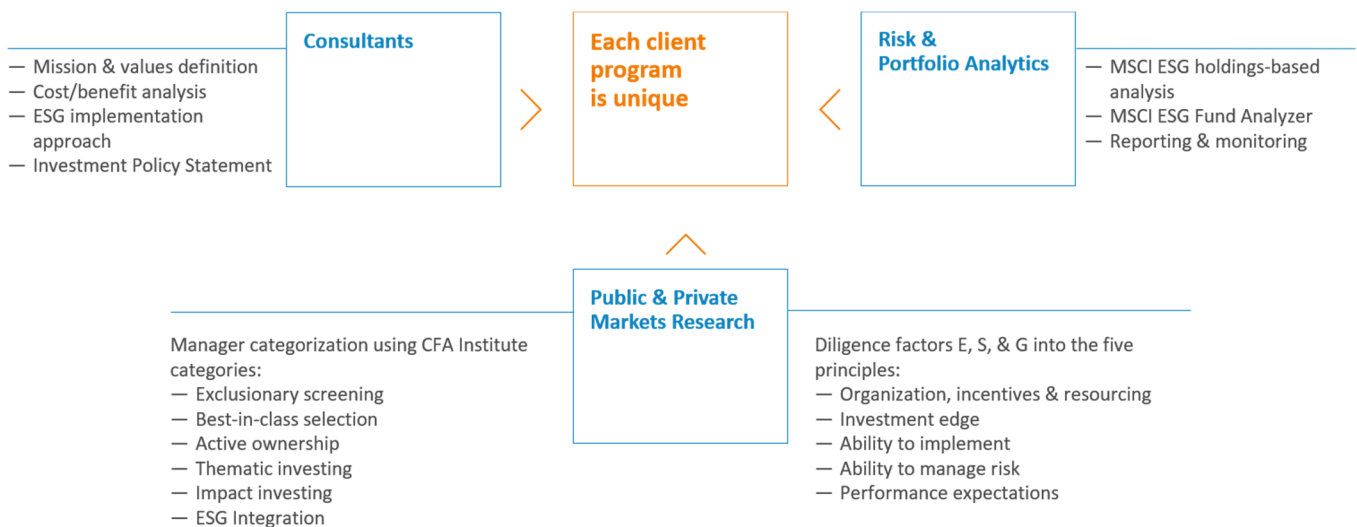
We believe the categories of managers currently in the portfolio, both public and private, are appropriate and capable of implementing objectives and expectations outlined in SamCERA's Investment Policy Statement. Verus has worked with SamCERA to add/change categories of managers as appropriate as market conditions have evolved. We may consider reviewing the number of managers within discrete asset classes that have overlapping strategies that could be consolidated in order to reduce fees, reduce administrative complexity and potentially maximize alpha.



SamCERA completed an Asset Liability study in 2023 which set the strategic direction of the Plan. Verus intends to implement changes to the asset allocation in accordance with the results of the AL Study and ERT survey.

23) Please provide your philosophy around incorporating ESG issues in the management of the pension plan. Do any of your clients currently incorporate ESG issues in their investment process? If so, how?

Customization is at the heart of how we approach ESG, SRI, and other mission-related investing considerations of our clients. Our role as a consultant is to ensure that the ESG/SRI-related decisions that a client would make on behalf of its portfolios are implemented effectively instead of imposing a single solution based on our own values and norms. ESG/SRI efforts are integrated across all our investment teams, who play a role in ESG/SRI policy setting and implementation.



Verus currently consults to several clients that incorporate ESG, SRI and/or labor-friendly goals within their investment programs. To assist these clients, Verus utilizes an integrated approach to following ESG strategies which encompasses designated consultants and consulting associates, and research professionals. Using an integrated approach harnesses the maximum resources available to build expertise in this area. In addition, an integrated approach broadens the firm’s proactive outreach and individual networks to create a more robust pipeline of ESG strategies to consider in our due diligence process. All of the firm’s resources are employed in ESG strategy identification and monitoring. Thus, we tap into our manager research group and our performance analytics group in addition to the focused ESG resources.

Verus helps clients accomplish their ESG objectives through the following process:

1. Strategic planning: clarification of ESG beliefs, values and objectives through discussion with and/or survey of committee/board members and staff with goal of building consensus view
2. ESG policy development
  - a. clarification of roles and responsibilities related to ESG implementation
  - b. ESG benchmarking
  - c. ESG implementation approach (i.e., specific asset classes vs. total portfolio level; funding sources, exposure limits, etc.)

- d. ESG risk tolerance (i.e., tracking error vs. traditional market benchmarks, risk of shortfall vs. objectives, etc.)
- 3. Identification and implementation of ESG managers and strategies (will focus on highly rated strategies via MSCI ratings) appropriate for client given their objectives
- 4. Negotiation and establishment of ESG manager guidelines
- 5. Performance and risk measurement/monitoring of ESG exposures
- 6. Ad hoc activities which may incorporate the unique objectives and risk tolerance of clients implementing ESG

Verus’ role is as facilitator, educator and resource to clients to enable them to identify and establish their strategic objectives and approach to ESG investing. Additionally, Verus will assist clients in defining specific ESG metrics that are relevant with their respective implementation of ESG investing. Verus supports clients in implementing their respective ESG objectives in several key areas as follow.

- 1. Positive/negative screening
- 2. Themed investing (e.g., climate change (reduced carbon footprint), diversity (pay/opportunity equality), etc.)
- 3. Impact investing

Verus subscribes to the MSCI ESG Ratings, which is considered a best practices standard for rating ESG mandates. We can employ these ratings in our ESG mandate selection and monitoring activities on clients’ behalf. Verus can identify ESG strategies across both public and private markets and multiple asset classes given the tools we regularly employ. All of our approved strategies are also assigned an ESG rating, based on an assessment of ESG integration into the investment strategy, alongside an investment rating.

24) Please discuss any enhancements currently under research or contemplation, such as in the areas of asset liability studies or risk management.

Topic of the Research	Research Title	Date published
We first lay out the market environment of the past decade and its impact on hedge fund behavior. Then, we discuss the current market environment and what this may suggest for the hedge fund opportunity set going forward. Finally, we present two effective methods of hedge fund implementation and the characteristics of each.	Hedge Funds in 2023: How has the environment changed?	October 2023
In the 2023 Private Equity Outlook, we focus on the impact of a “higher rate for longer” scenario on the asset class. We also examine how the rising-rate environment has affected private markets so far.	Private Equity Outlook	October 2023
The quickly rising interest rate environment has changed the landscape for commercial real estate so much that investors are questioning how the appraised values of their private real estate assets might change in the future.	The rising rate environment’s impact on real estate cap rates	September 2023
This TOI is intended to help investors understand why the yield curve inversion has been an accurate predictor of recession by examining the macroeconomic factors during each historical period of inversion.	Yield curve inversion: recession signal, but why?	August 2023
Fixed income investors seeking higher return potential and increased portfolio diversification often choose to allocate to credit as a solution. An investor’s approach to taking on credit exposure, and the type of exposure that is appropriate, should take into account current credit conditions and the investor’s market outlook.	Credit, distress, default & the long term	August 2023

## SAMCERA 2023 ANNUAL REVIEW QUESTIONNAIRE

Topic of the Research	Research Title	Date published
Taft-Hartley pension funds in the United States often make allocations to private real estate with the dual objectives of generating robust returns and supporting union workers by investing in “labor-friendly” real estate strategies.	Private real estate in Taft-Hartley portfolios	July 2023
Coming into 2023, it appeared as though inflation would continue to retreat lower, but unexpected price increases have complicated the picture. There are now banking instability issues, geopolitics, a softening economy, and a dozen other headline issues weighing on investors’ minds.	2023 Real Assets Outlook	June 2023
We examine the causes of index concentration, the levels of concentration relative to global markets, and how this environment affects the success of active managers.	U.S. Equity Index Concentration	March 2023
Each January we consider the year just gone and the year ahead.	The Return of Simplicity	February 2023
Low interest rates over the last few years have caused investors significant asset allocation problems. The 2022 market reversal has begun to reverse these challenges.	Is Painless Diversification Back?	January 2023
We further explain this reasoning and conclude by offering approaches for Plans to reduce any mismatch between ER and AARR to a reasonable level, which we generally believe to be less than 0.5%.	Minding the Gap: Insights into actuarial assumed rate of return	October 2022
In the 2022 Private Equity Outlook, we focus attention on the rise of GP-led continuation funds and what investors should consider when evaluating such opportunities.	2022 Private Equity Outlook	October 2022
Revisiting the small cap premium thesis and a discussion of active management opportunities in small caps	Opportunities in Small Caps	September 2022
Investing in Chinese assets: overview, potential opportunities and threats	A Closer Look at China	July 2022
Investment thesis and Verus’ outlook on timberland and agriculture in the current market environment	A Primer: Timberland & Farmland	June 2022
Inflation & Recession	2022 Real Assets Outlook	May 2022
Introduction to mortgage income and its strategic role in portfolios	Primer on Mortgage Income	May 2022
Active manager dispersion has been very wide recently, as the pandemic-induced global recession and subsequent fast-paced recovery resulted in considerable economic divergence.	2022 Active Management Environment	March 2022
In the 2022 Private Equity Outlook, we focus attention on the rise of GP-led continuation funds and what investors should consider when evaluating such opportunities.	2022 Private Equity Outlook	October 2022
Revisiting the small cap premium thesis and a discussion of active management opportunities in small caps	Opportunities in Small Caps	September 2022

25) Given SamCERA’s current plan governance structure, do you recommend any changes in the way the Board/staff/consultant work together in managing and overseeing the plan assets?

We do not recommend any changes to the current governance structure.

## Outlook

### 26) What is Verus' outlook for the capital markets? Provide your firm's Capital Market Assumptions.

Following are our current 10-year return and risk assumptions for 45 asset classes. Note that we will be updating our capital market assumptions this month for use in asset allocation studies the coming year.

Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Geometric	Arithmetic					
<b>Equities</b>								
U.S. Large	S&P 500	6.5%	7.6%	15.6%	0.21	0.28	0.76	0.79
U.S. Small	Russell 2000	5.4%	7.5%	21.5%	0.10	0.20	0.42	0.49
International Developed	MSCI EAFE	9.1%	10.5%	17.8%	0.33	0.40	0.21	0.27
International Small	MSCI EAFE Small Cap	9.2%	11.3%	22.1%	0.27	0.36	0.29	0.36
Emerging Markets	MSCI EM	8.5%	11.2%	25.2%	0.21	0.31	0.02	0.10
Global Equity	MSCI ACWI	7.4%	8.7%	17.1%	0.23	0.32	0.47	0.52
Global Equity ex-US	MSCI ACWI ex-US	9.0%	10.7%	19.9%	0.29	0.37	0.16	0.23
Private Equity	CA U.S. Private Equity	9.2%	12.1%	25.8%	0.23	0.34	-	-
Private Equity Direct	CA U.S. Private Equity	10.2%	13.0%	25.8%	0.27	0.38	-	-
Private Equity (FoF)	CA U.S. Private Equity	8.2%	11.1%	25.8%	0.19	0.30	-	-
<b>Fixed Income</b>								
Cash	30 Day T-Bills	3.3%	3.3%	1.2%	-	-	-	-
U.S. TIPS	Bloomberg U.S. TIPS 5-10	4.1%	4.3%	5.6%	0.14	0.18	0.06	0.08
U.S. Treasury	Bloomberg Treasury 7-10 Year	3.8%	4.0%	7.1%	0.07	0.10	(0.02)	0.01
Long U.S. Treasury	Bloomberg Treasury 20+ Year	3.8%	4.6%	13.2%	0.04	0.10	(0.01)	0.05
Global Sovereign ex U.S.	Bloomberg Global Treasury ex U.S.	2.2%	2.7%	10.0%	(0.11)	(0.06)	(0.47)	(0.44)
Global Aggregate	Bloomberg Global Aggregate	3.0%	3.2%	6.7%	(0.05)	(0.01)	(0.30)	(0.28)
Core Fixed Income	Bloomberg U.S. Aggregate Bond	4.3%	4.4%	4.6%	0.22	0.24	0.05	0.07
Core Plus Fixed Income	Bloomberg U.S. Universal	4.6%	4.7%	4.6%	0.28	0.30	0.17	0.14
Short-Term Gov't/Credit	Bloomberg U.S. Gov't/Credit 1-3 Year	3.9%	4.0%	3.7%	0.16	0.19	0.11	0.11
Short-Term Credit	Bloomberg Credit 1-3 Year	4.3%	4.4%	3.7%	0.27	0.30	0.40	0.40
Long-Term Credit	Bloomberg Long U.S. Credit	5.3%	5.9%	11.0%	0.18	0.24	0.11	0.16
High Yield Corp. Credit	Bloomberg U.S. Corporate High Yield	6.4%	7.0%	11.2%	0.28	0.33	0.44	0.47
Bank Loans	S&P/LSTA Leveraged Loan	6.8%	7.2%	9.2%	0.38	0.42	0.53	0.54
Global Credit	Bloomberg Global Credit	4.5%	4.8%	7.9%	0.15	0.19	0.00	0.03
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	8.9%	9.4%	10.7%	0.52	0.57	0.05	0.09
Emerging Markets Debt (Local)	JPM GBI-EM Global Diversified	7.0%	7.7%	12.3%	0.30	0.36	(0.28)	(0.23)
Private Credit	S&P LSTA Leveraged Loan Index	8.2%	9.0%	13.0%	0.38	0.44	-	-
Private Credit (Direct Lending - Unlevered)	S&P LSTA Leveraged Loan Index	6.8%	7.2%	9.2%	0.38	0.42	-	-
Private Credit (Direct Lending - Levered)	S&P LSTA Leveraged Loan Index	9.1%	10.1%	15.3%	0.38	0.44	-	-
Private Credit (Credit Opportunities)	S&P LSTA Leveraged Loan Index	8.5%	9.4%	13.8%	0.38	0.44	-	-
Private Credit (Junior Capital / Mezzanine)	S&P LSTA Leveraged Loan Index	9.0%	10.0%	15.1%	0.38	0.44	-	-
Private Credit (Distressed)	S&P LSTA Leveraged Loan Index	9.1%	12.7%	29.1%	0.20	0.32	-	-

Investors wishing to produce expected geometric return forecasts for their portfolios should use the arithmetic return forecasts provided here as inputs into that calculation, rather than the single-asset-class geometric return forecasts. This is the industry standard approach, but requires a complex explanation only a heavy quant could love, so we have chosen not to provide further details in this document – we will happily provide those details to any readers of this who are interested.

Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast (g)	Sharpe Ratio Forecast (a)	10-Year Historical Sharpe Ratio (g)	10-Year Historical Sharpe Ratio (a)
		Geometric	Arithmetic					
<b>Other</b>								
Commodities	Bloomberg Commodity	5.7%	6.9%	16.3%	0.15	0.22	(0.20)	(0.13)
Hedge Funds	HFRI Fund Weighted Composite	4.6%	4.9%	7.7%	0.17	0.21	0.70	0.71
Hedge Fund of Funds	HFRI Fund of Funds Composite	3.6%	3.9%	7.7%	0.04	0.08	-	-
Hedge Funds (Equity Style)	Custom HFRI Benchmark Mix*	7.4%	8.4%	14.6%	0.28	0.35	-	-
Hedge Funds (Credit Style)	Custom HFRI Benchmark Mix*	7.1%	7.5%	9.8%	0.39	0.43	-	-
Hedge Funds (Asymmetric Style)	Custom HFRI Benchmark Mix*	4.8%	4.9%	4.8%	0.31	0.33	-	-
Real Estate Debt	Bloomberg CMBS IG	5.2%	5.5%	7.5%	0.25	0.29	0.26	0.28
Core Real Estate	NCREIF Property	5.8%	6.5%	12.6%	0.20	0.25	1.94	1.87
Value-Add Real Estate	NCREIF Property + 200bps	7.8%	8.9%	15.5%	0.29	0.36	-	-
Opportunistic Real Estate	NCREIF Property + 300bps	8.8%	10.8%	21.3%	0.26	0.35	-	-
REITs	Wilshire REIT	5.8%	7.5%	19.4%	0.13	0.22	0.32	0.40
Global Infrastructure	S&P Global Infrastructure	7.8%	9.1%	17.3%	0.26	0.34	0.28	0.35
Risk Parity**	S&P Risk Parity 10% Vol Index	8.3%	8.8%	10.0%	0.50	0.55	-	-
Currency Beta	MSCI Currency Factor Index	1.6%	1.7%	3.4%	(0.49)	(0.46)	0.20	0.21
Inflation		2.5%	-	-	-	-	-	-

Following are our current correlation assumptions:

	Cash	US Large	US Small	Intl Large	Intl Small	EM	Global Equity	PE	US TIPS	US Treasury	Global Sovereign ex-US	US Core	Core Plus	Short-Term Gov't/Credit	Short-Term Credit	Long-Term Credit	US HY	Bank Loans	Global Credit	EMD USD	EMD Local	Commodities	Hedge Funds	Real Estate	REITs	Infrastructure	Risk Parity	Currency Beta	
Cash	1.0																												
US Large	-0.2	1.0																											
US Small	-0.2	0.9	1.0																										
Intl Large	-0.2	0.9	0.8	1.0																									
Intl Small	-0.3	0.9	0.8	1.0	1.0																								
EM	-0.2	0.7	0.6	0.8	0.8	1.0																							
Global Equity	-0.2	1.0	0.9	1.0	0.9	0.8	1.0																						
PE	-0.2	0.7	0.6	0.6	0.6	0.6	0.7	1.0																					
US TIPS	0.0	0.4	0.3	0.4	0.4	0.4	0.4	0.2	1.0																				
US Treasury	0.2	0.0	-0.1	0.0	0.0	0.0	0.0	-0.2	0.8	1.0																			
Global Sovereign ex-US	0.1	0.0	-0.2	-0.1	-0.1	0.0	-0.1	-0.2	0.7	0.9	1.0																		
US Core	0.0	0.3	0.2	0.4	0.4	0.5	0.4	0.1	0.7	0.6	0.5	1.0																	
Core Plus	0.1	0.3	0.2	0.3	0.3	0.3	0.3	0.0	0.8	0.9	0.9	0.7	1.0																
Short-Term Gov't/Credit	0.0	0.4	0.3	0.4	0.4	0.4	0.4	0.1	0.9	0.8	0.8	0.7	1.0	1.0															
Short-Term Credit	0.2	0.1	0.1	0.2	0.2	0.2	0.2	-0.1	0.7	0.8	0.6	0.6	0.8	0.8	1.0														
Long-Term Credit	0.0	0.4	0.4	0.5	0.5	0.5	0.5	0.0	0.7	0.5	0.4	0.6	0.8	0.8	0.8	1.0													
US HY	0.0	0.5	0.4	0.5	0.5	0.5	0.5	0.1	0.7	0.6	0.7	0.6	0.8	0.9	0.6	0.7	1.0												
Bank Loans	-0.2	0.8	0.8	0.8	0.8	0.7	0.8	0.5	0.5	0.1	0.1	0.5	0.4	0.6	0.3	0.7	0.6	1.0											
Global Credit	-0.3	0.6	0.7	0.6	0.7	0.6	0.7	0.5	0.3	-0.2	-0.2	0.2	0.1	0.3	0.0	0.5	0.4	0.8	1.0										
EMD USD	-0.1	0.6	0.5	0.7	0.7	0.7	0.7	0.4	0.6	0.3	0.3	0.6	0.6	0.7	0.4	0.7	0.7	0.8	0.7	1.0									
EMD Local	0.0	0.5	0.4	0.7	0.6	0.8	0.6	0.4	0.5	0.2	0.1	0.6	0.4	0.5	0.3	0.5	0.5	0.7	0.5	0.8	1.0								
Commodities	-0.2	0.4	0.4	0.5	0.5	0.5	0.5	0.3	0.2	-0.3	-0.3	0.2	-0.1	0.0	-0.1	0.2	0.1	0.5	0.5	0.3	0.4	1.0							
Hedge Funds	-0.2	0.8	0.9	0.9	0.9	0.8	0.9	0.6	0.3	-0.2	-0.2	0.3	0.1	0.3	0.0	0.5	0.4	0.8	0.8	0.7	0.6	0.5	1.0						
Real Estate	-0.2	0.6	0.5	0.5	0.5	0.4	0.6	0.4	0.2	-0.1	-0.1	0.2	0.0	0.1	-0.1	0.1	-0.1	0.4	0.4	0.4	0.4	0.3	0.5	1.0					
REITs	-0.2	0.7	0.6	0.6	0.6	0.5	0.7	0.5	0.6	0.3	0.3	0.4	0.5	0.5	0.2	0.5	0.6	0.6	0.5	0.6	0.5	0.3	0.6	0.7	1.0				
Infrastructure	-0.2	0.8	0.7	0.8	0.8	0.7	0.8	0.7	0.5	0.1	0.0	0.5	0.3	0.5	0.2	0.5	0.6	0.8	0.7	0.7	0.7	0.5	0.8	0.3	0.7	1.0			
Risk Parity	-0.2	0.7	0.7	0.8	0.7	0.7	0.8	0.4	0.6	0.1	0.1	0.4	0.4	0.5	0.2	0.6	0.6	0.8	0.7	0.8	0.6	0.6	0.8	0.4	0.7	0.8	1.0		
Currency Beta	0.0	0.0	0.0	-0.1	-0.1	0.0	0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.1	0.0	0.0	0.0	1.0	

Note: as of 9/30/22 - Correlation assumptions are based on the last ten years. Private Equity and Real Estate correlations are especially difficult to model – we have therefore used BarraOne correlation data to strengthen these correlation estimates.

### Include an explanation of how Verus arrives at its Capital Market Assumptions.

We use a fundamental building block approach based on several inputs, including historical data and academic research to create asset class return forecasts. For most asset classes, we use the long-term historical volatility after adjusting for autocorrelation. Correlations between asset classes are calculated based on the last 10 years. For illiquid assets, such as private equity and private real estate, we use BarraOne correlation estimates.

Asset	Return Methodology	Volatility Methodology*
Inflation	25% weight to the University of Michigan Survey 5-10 year ahead inflation expectation and the Survey of Professional Forecasters (Fed Survey), and the remaining 50% to the market's expectation for inflation as observed through the 10-year TIPS breakeven rate	-
Cash	75% * current federal funds rate + 25% * U.S. 10-year Treasury yield	Long-term volatility
Bonds	Nominal bonds: current yield; Real bonds: real yield + inflation forecast	Long-term volatility
International Bonds	Current yield	Long-term volatility
Credit	Current option-adjusted spread + U.S. 10-year Treasury – effective default rate	Long-term volatility
International Credit	Current option-adjusted spread + foreign 10-year Treasury – effective default rate	Long-term volatility
Private Credit	Levered gross return (LIBOR + spread + original issuance discounts) – management fees – carried interest	Estimated volatility
Equity	Current yield + real earnings growth (historical average) + inflation on earnings (inflation forecast) + expected P/E change	Long-term volatility
Intl Developed Equity	Current yield + real earnings growth (historical average) + inflation on earnings (intl. inflation forecast) + expected P/E change	Long-term volatility
Private Equity	US large cap domestic equity forecast * 1.85 beta adjustment	1.2 * Long-term volatility of U.S. small cap
Commodities	Collateral return (cash) + spot return (inflation forecast) + roll return (assumed to be zero)	Long-term volatility
Hedge Funds	Return coming from traditional betas + 15-year historical idiosyncratic return	Long-term volatility
Core Real Estate	Cap rate + real income growth – capex + inflation forecast	65% of REIT volatility
REITs	Core real estate	Long-term volatility
Value-Add Real Estate	Core real estate + 2%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Opportunistic Real Estate	Core real estate + 3%	Volatility to produce Sharpe Ratio (g) equal to core real estate
Infrastructure	Current yield + real income growth + inflation on earnings (inflation forecast)	Long-term volatility
Risk Parity	Expected Sharpe Ratio * target volatility + cash rate	Target volatility

\*Long-term historical volatility data is adjusted for autocorrelation (see Appendix)

27) What is Verus’ outlook with regards to trends, challenges, and opportunities in the investment consulting industry?

While consolidation was prevalent pre-2019, the trend in consolidation among consulting firms has slowed significantly during and post-COVID. Consolidation was, in part, driven by the portfolio complexity that has occurred over the last decade in institutional portfolios. The need to have capabilities across public and private markets, risk analytics, OCIO, etc. led many smaller and mid-size firms to merge in order to gain scale and new resources. The top 10-15 consultants today mostly have the resources needed to provide the full suite of consulting services so further consolidation has become less important. Smaller consultants will increasingly find it challenging to compete in the marketplace and we expect overtime will need to find a buyer or slowly be outcompeted away. The rise of OCIO-only firms is also a growing trend which is contributing to a highly competitive market for OCIO mandates. We could see opportunities for consolidation in OCIO as gaining scale is far easier in discretionary portfolios vs non-discretionary.

ESG and subsequent implementation of ESG policies and procedures and even sustainability staff for larger plans has become more popular; we are seeing a trend where ESG is being politicized. As a result, there have been several states that have legislation ensuring ESG factors are used on a limited case basis. SamCERA’s approach is to leave ESG considerations up to each manager and their respective expertise.

28) Given the current environment, what portfolio changes (if any) are Verus considering or recommending to clients?

We will evaluate SamCERA’s asset allocation in this new interest rate environment in early 2024. We will likely evaluate opportunities within Fixed Income given this new environment. Verus will also evaluate the portfolio’s complexity and need/ability to use its complexity budget in alternatives with staff and the Board in 2024.

Within private markets, we have pivoted more towards credit and structured equity solutions in 2023 as the transaction activity on the equity side has slowed and valuations remain less attractive. We see this shift as likely temporary and more of an opportunistic pivot for private market portfolios versus a strategic

change in client portfolios but nonetheless something we are actively working with clients to implement. As an example, we have sourced a number of special situation funds within private equity that are targeting equity-like returns. In real estate, we have been active in opportunistic funds that can invest across the cap spectrum and in real estate debt. Once we have clarity around interest rate levels, we expect to see transaction activity to pickup in equity as buyers and sellers come to an agreement on valuations. We anticipate bringing more equity-oriented funds to clients in 2024.

29) What other issues or concerns have been brought up by your other clients in regards to products, markets, risk management, education and governance?

Clients have been considering China's effect on the market. China currently comprises 40% of Emerging Markets. The US government is concerned about US investment in Chinese technology names. The House of Representatives and Senate have both made committees to explore investment in Chinese tech names. The President signed an executive order to further investigate these companies and ties to the CCP. Clients are also concerned with China aligning its interests with Russia, and a possible invasion of Taiwan. There have been talks (no action) of looking for managers that exclude China.

The higher interest rate environment is inviting a number of discussions around the attractiveness of fixed income relative to other assets classes, particularly alternatives. Role of hedge funds, illiquidity risk, size of your growth tilt, etc. are all being examined but in an environment of uncertainty around the path of interest rates. The longer rates stay elevated, the more clients will assess the need to hold allocations to higher risk/return asset classes. This will also be balanced against plan sponsors willingness to hold assumed rates of return at levels below where they were when interest rates were higher.

Other concerns clients are discussing is over-allocation to illiquid investments. Due to both a denominator effect (lower total AUM) and slower decline in valuations of private markets, many Plans are overweight and almost out of policy range. The discussions around this topic are, should the ranges be widened or ignored temporarily? how long will this shift happen, and how do we adjust pacing?

## Conclusion

30) Is there any information that would be timely per SamCERA's Investment Policy Statement or relative to this review?

Currently, we do not have anything to add to SamCERA's Investment Policy Statement, but we will conduct an Asset Allocation Study in early 2024 that may require amending the IPS.

31) Are your clients making significant changes in their asset mixes? Please describe these changes. Do you see any trends in asset allocation?

Verus' has a diverse client base of institutional, long-term investors. As such, clients maintain their asset mixes for an extended period of time with incremental changes. Portfolios are built to achieve specific goals, yet all are diversified in order to weather various market environments. That said, SamCERA has been at the forefront of many of our recommended changes in asset mixes including the adoption of a CDI portfolio, private real assets, currency hedging and private credit. Our responses to questions 28-30 address what we believe will be near-term trends in asset allocation.

32) What market opportunities should SamCERA be considering?

SamCERA has been implementing opportunities as they arise throughout the year. We intend to review potential changes to the portfolio in early 2024 following an asset allocation presentation in the first quarter. Potential changes include reviewing the allocation to alternatives versus fixed income (as alternatives were put in place to diversify equities and provide some return over what fixed income was providing when short term rates were close to 0%).

33) Please provide a preliminary recommendation of what your work plan for the next 12 months should look like given SamCERA's current plan structure and long-term policy targets.

We are going to develop the 2024 work plan in December 2023. Verus will conduct an asset allocation study in 2024 and provide recommended allocation changes which align with the most recent ALM study (conducted in 2023). We also intend to work with staff in hiring a dedicated Emerging Market Debt manager which should conclude in early 2024. Verus intends to review the opportunities within fixed income relative to absolute return in the coming year.




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

December 5, 2023

Agenda Item 6.5

**TO:** Board of Retirement

**FROM:** Lilibeth Dames, Investment Analyst 

**SUBJECT:** Presentation of Private Asset Semi-Annual Performance Reports as of June 30, 2023

**Recommendation**

Accept and review Verus' semi-annual private equity and private real assets performance reports as of June 30, 2023.

**Background**

Verus provides a semi-annual private equity and private real asset performance report as of June 30<sup>th</sup> and December 31<sup>st</sup> each year.

**Discussion**

As of June 30, 2023, SamCERA's private equity portfolio had a total market value of \$394.2 million (6.6% of SamCERA's total fund). At the February 2023 board meeting, the board approved a 1% increase to Private Equity to 8.0% from 7.0%.

The private equity portfolio's net IRR since inception is 19.3%, 620 bps above the same cash flow invested in the Russell 3000 Total Return Index + 300 bps of 13.1%. For the six-month period from January 1, 2023 through June 30, 2023, SamCERA's board approved six additional commitments in private equity, totaling \$125 million. As of June 30<sup>th</sup>, SamCERA had a total of forty-three funds with \$807.3 million in committed capital across twenty-seven private equity managers.

As of June 30, 2023, SamCERA's private real assets portfolio had a total market value of \$324.3 million (5.4% of SamCERA's total fund). SamCERA's policy target to private real assets is 5.0%.

The private real assets portfolio's net IRR is 5.7%. SamCERA made two additional commitments to private real assets totaling \$45 million for the six-month period from January 1, 2023 through June 30, 2023. As of June 30, 2023, there were nineteen private asset funds in the portfolio with \$469.8 million in committed capital across fifteen private real asset managers.

Faraz Shooshani and John Nicolini will review the performance reports with the Board and be available for questions.

**Attachments**

Verus Semi-Annual Private Equity Performance Report for Period Ending 6/30/2023  
Verus Semi-Annual Private Real Assets Performance Report for Period Ending 6/30/2023



# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



**Period Ending: June 30, 2023**

Investment Performance Review

Private Markets

**San Mateo County Employees' Retirement Association**

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# Market Commentary

## DEBT RELATED

- **With HY issuance up, leveraged loan issuance declined.** In the first half of 2023, US high yield issuance at \$80.9 billion was up 25.9% compared to 1H 2022<sup>1</sup>. US leverage loan issuance volume was \$424.1 billion in 1H 2023, down 32.9% from the \$632.3 billion in 1H 2022<sup>1</sup>. In Europe, 1H 2023 new issue LBO Loan volume at \$12.8 billion was down 40.1% from the same time in 2022 and down 90.7% from \$137.7 billion peak in 2007<sup>4</sup>.
- **Spreads tightened across the board except for CCC index.** US HY Credit Index spread decreased by 167 bps or down 28.2%<sup>2</sup> versus the same period last year. BB and B index spread tightened by 141 bps and 109 bps, decreasing by 29.9%<sup>2</sup> and 16.0%<sup>2</sup> versus the same period last year. In the meantime, CCC index spread widened by 20.7%<sup>2</sup> in 1H 2023 from 1H 2022.
- **Both leverage and interest coverage of large LBOs decreased in US and Europe.** Large Corp total leverage averaged 5.3x (Debt / EBITDA) in 1H 2023 for US new issue loans, down 11.5% from 5.9x in 1H 2022<sup>3</sup>, and interest coverage averaged 2.7x (EBITDA / Cash Interest), down 28.8% from 3.8x in 1H 2022<sup>3</sup>. Due to a significant decline in loan issuance in the last 12 months, not enough observations were tracked to compile a meaningful averages for middle market for the period ending June 30, 2023. In Europe, leverage multiples decreased 8.9% to 5.4x in the first half of 2023<sup>4</sup>, down from 11.4x from peak in 2007<sup>4</sup>.

## GLOBAL

- **Private Markets dry powder increased globally.** In 1H 2023, global total dry powder was at \$2.7 trillion, up 6.0% from 1H 2022<sup>5</sup>. Global total PE ex Venture Capital dry powder was up by 6.8% to \$1.3 trillion<sup>5</sup>. Global Venture Capital dry powder was up by 2.1% to \$574.1 billion<sup>5</sup>. Global Private Debt dry powder was up by 2.2% to \$434.4 billion<sup>5</sup>.

## US PRIVATE EQUITY (BUYOUT & GROWTH)

- **Fundraising activity decreased.** In 1H 2023, US buyout firms raised \$153.0 billion, down by 13.1% from the same time prior year<sup>5</sup>. Average fund size was up 3.7%, from \$921.6 million in 1H 2022 to \$956.2 million in the first half of 2023<sup>5</sup>. US growth strategy raised \$38.9 billion, down by 6.5% from \$41.6 billion in 2021.
- **Investment activity was down.** During 1H 2023, US buyout firms invested in \$376.8 billion (+6.5% from 1H 2022) into 2,342 deals (-8.3%)<sup>5</sup>. US growth strategy raised \$41.5 billion<sup>5</sup>, down by 15.3% from \$56.8 billion of the same time last year.
- **Dry powder increased.** In the first six months of 2023, US private equity dry powder was \$853.8 billion, up by 16.7% from 1H 2022<sup>5</sup>.

# Market Commentary

- **LBO price multiples down.** As of June 30, 2023, US LBO purchase price multiple (Enterprise Value / EBITDA) was at 11.8x , a 2.6% decrease from June 30, 2022<sup>3</sup>.
- **Exit activity decreased.** During 1H 2023, US private equity firms exited 378 companies, representing \$139.8 billion in total transaction value<sup>5</sup>. This represented a 10.8% decrease in the number of exits and a 0.7% decrease in total transaction value compared to the same time last year<sup>5</sup>.

## US VENTURE CAPITAL

- **Fundraising activity dropped significantly.** US VC firms raised \$33.3 billion in the first half of 2023, a 72.6% decrease from the same time last year<sup>5</sup>. 233 funds closed in the first six months in 2023, a 43.9% decrease from 1H 2022. The average US VC fund size decreased to \$142.8 million by 51.2% versus the same period last year<sup>5</sup>.
- **Investment activity decreased.** US VC firms deployed \$85.6 billion in capital in 1H 2023, a 40.6% decrease from 1H 2022. The number of deals closed at 6,514, a 16.9% decrease from same time last year<sup>5</sup>. Average deal size decreased 28.5% from 1H 2022.
- **Dry powder increased.** In 1H 2023, US VC dry powder was at \$279.8 billion, up 27.0% from 1H 2022<sup>5</sup>.
- **Entry valuations and deal sizes mixed by stage:**
  - **Entry valuations.** Compared to June 30, 2022, the average pre-money valuations in 1H 2023 was: up 11.4% at \$4.4 million<sup>5</sup> for Angel stage, down 9.2% at \$10.5 million<sup>5</sup> for Seed stage, down 33.7% at \$39.8 million<sup>5</sup> for early-stage VC, and down 47.6% at \$55.0 million<sup>5</sup> for late-stage VC.
  - **Deal sizes.** Average investment per deal decreased to \$8.6 million, a 41.5% decrease from prior year<sup>5</sup>. Over the past 3 years, except for the Seed stage (+55.1%), the average deal size of Angel-, Early- and Late-stage investments declined by 40.3%, 3.9%, and 27.7%, respectively<sup>5</sup>.
- **Exit activity decreased significantly with smaller transactions.** US VC firms exited 471 companies in the first half of 2023, down by 25.6% from the same time last year, but up 25.3% from three years ago<sup>5</sup>. This represented \$12.0 billion in transaction value, down by 75.4% from the same period last year, and down by 73.5% from three years ago<sup>5</sup>. Largest sectors exited were Software and Commercial Products & Services.

## EX US

- **Ex-US fundraising activity was up.** In 1H 2023, ex-US fundraising increased 23.0% from the same time in 2022 to \$248.3 billion<sup>5</sup>. Fundraising in Asia decreased by 29.0% to \$138.6 billion<sup>5</sup>, while Europe was up by 50.2% to \$63.9 billion<sup>5</sup>.

# Market Commentary

- **Capital deployment decreased by VCs and Buyout managers in Europe and Asia.**
  - **In both Europe and Asia, VCs invested less capital into fewer deals.** In the first six months of 2023, number of deals closed decreased by 11.2% in Europe with 53.0% less in capital deployed at \$27.9 billion. Similar to Europe, Asian VCs invested \$5.6 billion, representing 78.9% less capital and 77.6% fewer deals than 1H 2022.
  - **Buyout deal activity and capital deployment dropped in Europe and in Asia.** In Europe, buyout firms transacted on \$321.0 billion in aggregate value (-5.7% from 1H 2022)<sup>5</sup>. Asia buyout firms invested \$1.3 billion in aggregate value (-92.6%)<sup>5</sup>.
- **Dry powder decreased ex-US.** PE dry powder outside the US decreased 3.7% to \$1.1 trillion<sup>5</sup> as of June 30, 2023. Dry powder outside the US was 3.5% less than dry powder in the US (\$1.1 trillion)<sup>5</sup>.
  - **Europe VC and buyout dry powder both down.** VC at \$56.8 billion and buyout at \$274.7 billion were down 4.2% and 15.6% from 1H 2022, respectively<sup>5</sup>.
  - **In Asia, VC and buyout dry powder decreased in parallel with US and Europe.** VC at \$204.5 billion, buyout at \$160.6 billion, down 24.3% and 21.0% from 1H 2022, respectively<sup>5</sup>.
- **Purchase price multiples increased in Europe but decreased and Asia.** As of June 30, 2023, European buyout median purchase price multiples increased 9.8% to 8.1x EBITDA from the same time last year<sup>5</sup>. Asia buyout median purchase price multiples decreased 2.9% from 5.3x EBITDA from the same time last year<sup>5</sup>.
- **Exit activity increased a bit in Europe but weakened in Asia.** Europe PE aggregate exit value amounted to \$135.7 billion in 1H 2023, a 3.0% increase from 1H 2022, while Asia PE exit value dropped by 24.1% to \$61.5 billion<sup>5</sup>.

## Notes

1. *White & Case Debt Explorer (April 10, 2023)*
  2. *Guggenheim High-Yield Bank Loan Outlook (Q1 2023)*
  3. *S&P Global US LBO Review (4Q 2022)*
  4. *S&P Global LCD European Leveraged Buyout Review (4Q 2022)*
  5. *Pitchbook (December 31, 2022)*
- \* Include Buyout, Venture Capital, Private Debt, Fund of Funds and Secondaries.  
\*\* Dry Power numbers are 6-month lag.

Investment Type	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
<b>SamCERA - Total Plan</b>			<b>100.0%</b>	<b>5,990,312</b>		
Buyout (60% +/- 20%)	4.2%	2.4%-4.8%	3.8%	226,796	187,071	413,867
Venture Capital (20%, 0%-30%)	1.4%	1.0%-1.8%	1.6%	93,738	40,005	133,743
Debt-Related/Special Situations (20% +/- 10%)	1.4%	0.6%-1.8%	1.2%	73,625	97,043	170,668
<b>Total Private Equity*</b>	<b>7.0%</b>	<b>4%-8%</b>	<b>6.6%</b>	<b>394,159</b>	<b>324,119</b>	<b>718,278</b>

### Portfolio Summary

- As of June 30, 2023, the portfolio's exposure to Private Equity was \$394,159,819 with \$240,054,878 in Buyout \$93,738,417 in Venture Capital, and \$73,625,228 in Debt-Related/Special Situations. Total market value is the current reported value of investments, excluding the remaining unfunded commitments.
  - Since initial allocation to Private Equity, SamCERA has contributed \$527,123,861 towards its Private Equity commitments, with \$335,217,749 to Buyouts, \$64,957,961 to Venture Capital, and \$126,948,151 to Debt Related. Unfunded commitments total \$324,118,822.
- The total portfolio exposure at 7.0% of plan is below the 7.0% target, effective July 1st 2022. Compared to December 31, 2022, portfolio exposure is flat. Buyout, Venture Capital, and Debt Related / Special Situations exposures remain within policy range.

### Portfolio Activity

- In 1H of 2023, SamCERA committed \$30,000,000 to CD&R XII, \$20,000,000 to Charlesbank Technology Opportunities fund II, \$10,000,000 to Eclipse V, \$20,000,000 to Genstar Capital Partners XI, \$25,000,000 to Gridiron fund V, and \$20,000,000 to MGG Structured Solutions Fund II.
- Within the last two years, SamCERA completed the sale of its interest in three funds in the secondary market: JLL Partners Fund VII, Angeles Equity Partners I, and New Enterprise Associates 14.

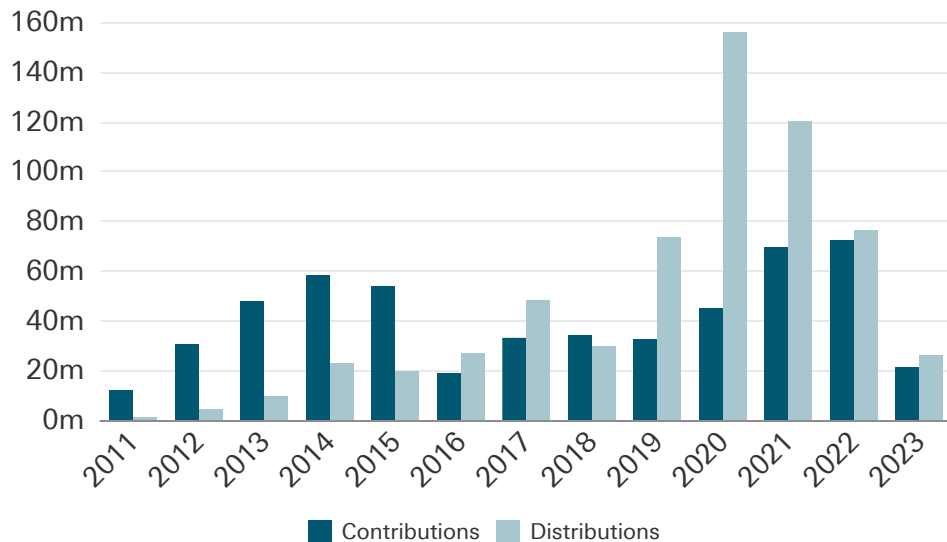
**Performance**

- The Total Private Equity portfolio’s performance, as measured by net IRR, is 19.30%, 621 bps above the same cash flow invested in Russell 3000 Total Return Index + 300 bps of 13.09%. Capital weighted average investment age of the portfolio is 5.26 years.
- The portfolio is currently valued at \$394,159,819. Together with \$612,779,397 in realized distributions, the Total Value at \$1,006,939,216 is \$479,815,355 above \$527,123,861 in total capital contributions, resulting in a total value multiple of 1.91x and a distribution multiple of 1.16x.
- Thus far in 2023, distributions have outpaced contributions at a ratio of 1.2:1.

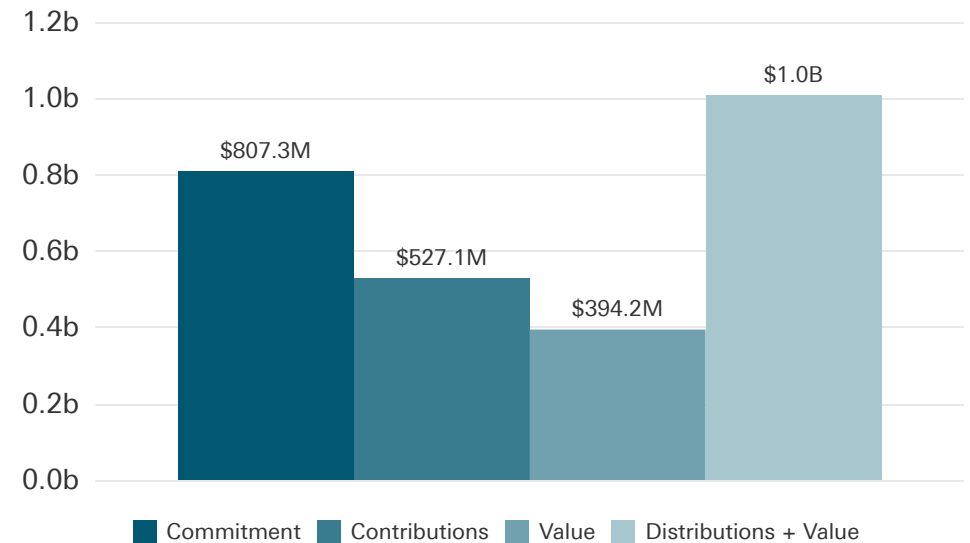
**Attribution of returns:**

- Buyouts up \$212,334,496 / 1.67x (Great Hill VI, VII and Sycamore leading), with 0.95x of called capital realized and distributed;
- Venture Capital is up \$243,658,069 / 4.04x cost (Emergence III, Great Hill VI, and General Catalyst VI leading), with 2.87x of called capital realized and distributed.
- Debt-related, up \$23,822,790 / 1.19x cost (Abry Senior Equity V, Abry Adv Sec II, and SVP Special Situations leading), with 0.61x of called capital realized and distributed.
- Within Private Equity, the current allocation of market value exposure is 60.2% to Buyout, 18.7% to Venture Capital, and 21.1% to Debt-Related/Special Situations.

Cash Flows on Annual Basis as of June 30, 2023



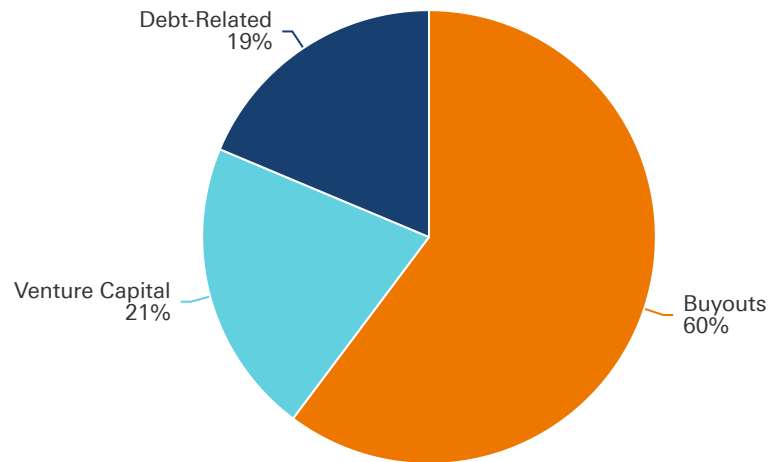
Cumulative Cash Flow and Valuation as of June 30, 2023





Investment Type	Commitment	Reported Value
Buyouts	\$497,820,000	\$237,420,347
Debt-Related	\$214,500,000	\$73,625,228
Venture Capital	\$95,000,000	\$83,114,244
<b>Total</b>	<b>\$807,320,000</b>	<b>\$394,159,819</b>

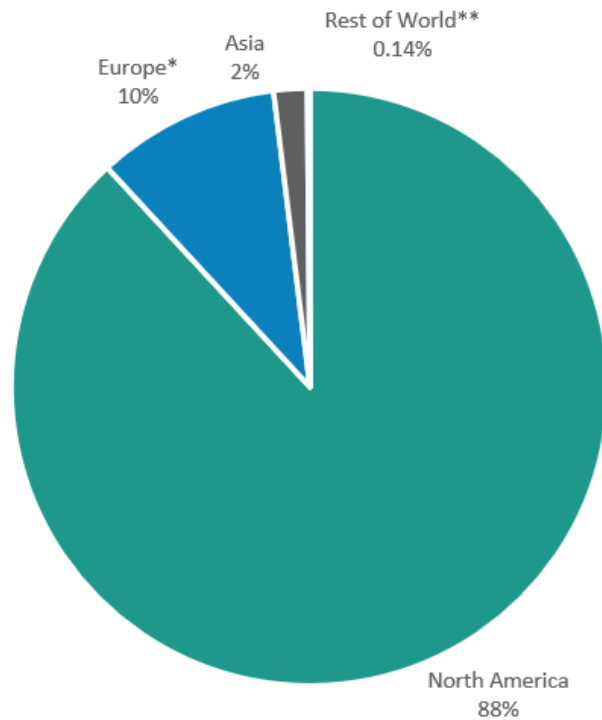
Current Exposure by Fund Type



## Portfolio Diversification by Geography

For Period Ending June 30, 2023

Geography	Current Exposure
North America	347,412,464
Europe*	39,100,654
Asia	7,134,293
Rest of World**	512,408
<b>Total Private Equity</b>	<b>394,159,819</b>

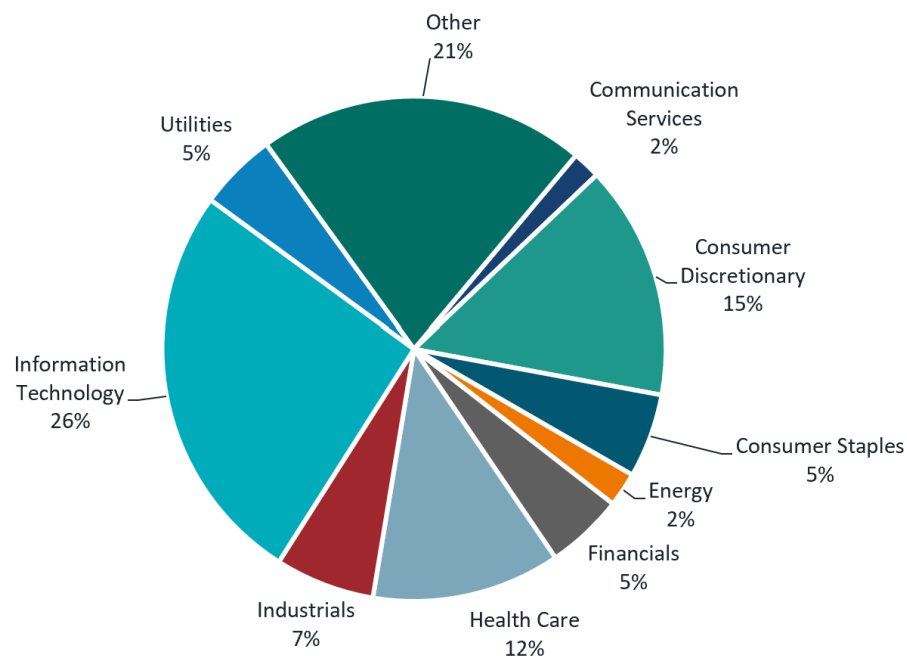


Based on the value of portfolio companies and fund reported exposures as of June 30, 2023. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

## Portfolio Diversification by GICS

For Period Ending June 30, 2023

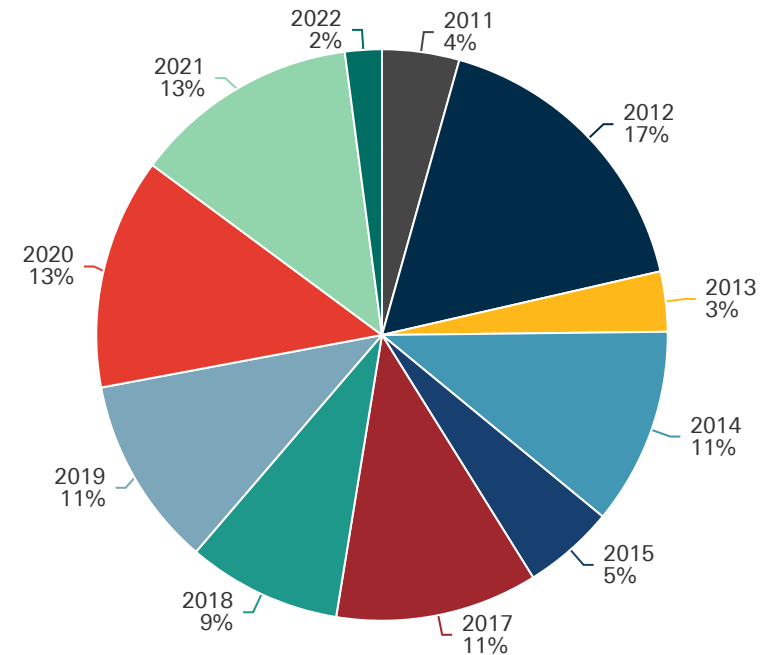
Industry	Current Exposure
Communication Services	7,094,877
Consumer Discretionary	59,123,973
Consumer Staples	21,284,630
Energy	8,671,516
Financials	19,707,991
Health Care	47,693,338
Industrials	25,226,228
Information Technology	102,481,553
Utilities	19,707,991
Other	83,167,722
<b>Total Private Equity</b>	<b>394,159,819</b>



Based on the value of portfolio companies and fund reported exposures as of June 30, 2023. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed GICS breakdown.

Vintage Year	Commitments	Reported Value
2011	\$66,000,000	\$17,205,648
2012	\$68,000,000	\$67,225,163
2013	\$35,000,000	\$13,402,648
2014	\$72,500,000	\$43,891,037
2015	\$53,000,000	\$20,385,652
2016	\$10,000,000	\$0
2017	\$37,000,000	\$45,086,291
2018	\$35,000,000	\$34,363,444
2019	\$50,000,000	\$42,454,817
2020	\$66,820,000	\$51,565,551
2021	\$114,000,000	\$50,366,516
2022	\$75,000,000	\$8,213,053
2023	\$125,000,000	\$0
<b>Total</b>	<b>\$807,320,000</b>	<b>\$394,159,819</b>

Current Exposure by Vintage Year



- **No Material exceptions to Policy**



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**Period Ending: June 30, 2023**

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## Real Assets Portfolio Performance

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## Real Assets Portfolio Diversification

4

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## Real Assets Program Update

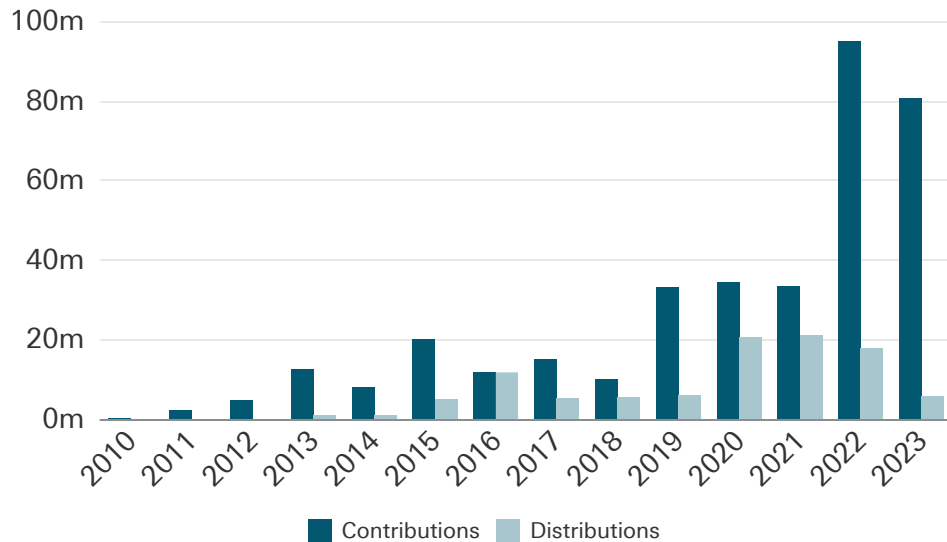
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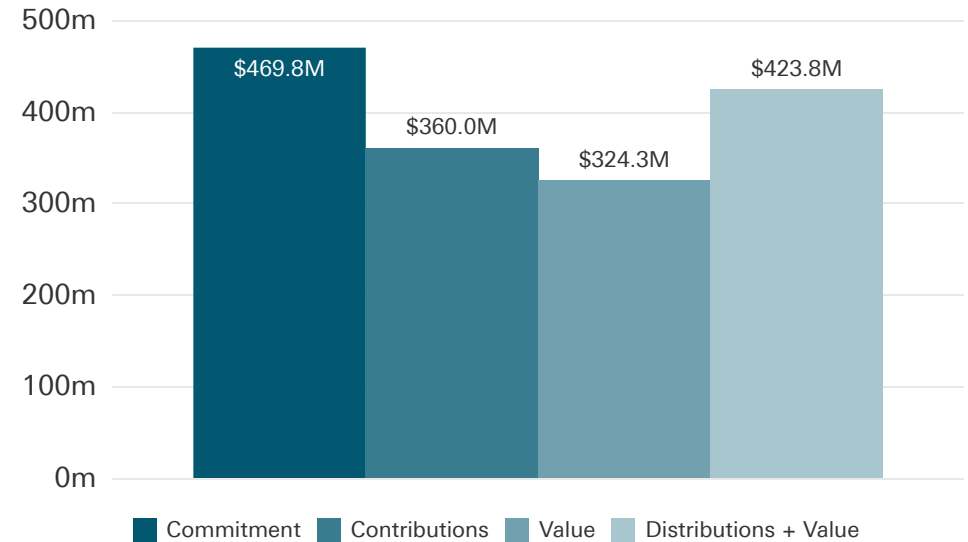
**Performance**

- The portfolio is currently valued at \$324,281,904. Together with \$99,562,282 in realized distributions, the Total Value at \$423,844,186 is \$72,840,325 above \$351,003,861 in total capital contributions, resulting in a total value multiple of 1.18x and a net IRR of 5.70%. If we exclude the investment in Sheridan, the portfolio IRR would be 9.83%
- In calendar 2022, contributions surpassed distributions at a ratio of 5.4:1. Thus far in 2023, contributions have outpaced distributions at a ratio of 14.4:1.

Cash Flows on Annual Basis as of June 30, 2023



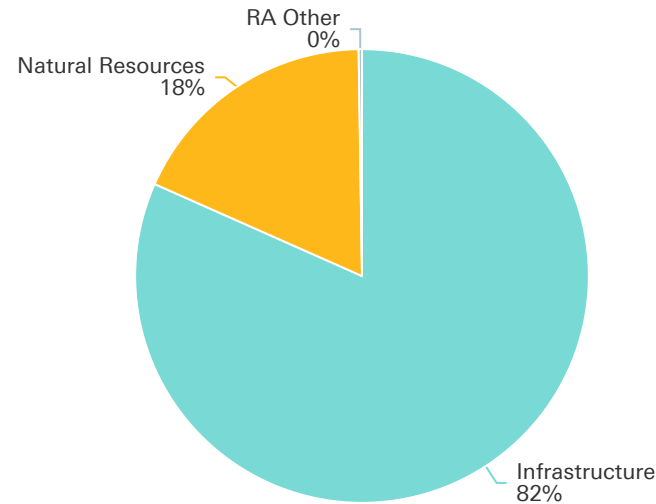
Cumulative Cash Flow and Valuation as of June 30, 2023





Investment Type	Commitment	Reported Value
Infrastructure	\$300,000,000	\$264,748,842
Natural Resources	\$119,800,000	\$58,763,312
RA Other	\$50,000,000	\$769,750
<b>Total</b>	<b>\$469,800,000</b>	<b>\$324,281,904</b>

Current Exposure by Sub-Asset Class

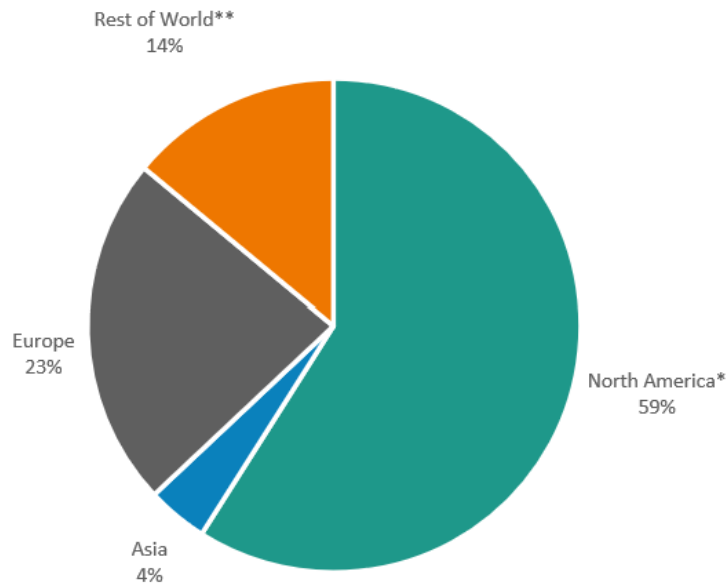


RA Other consists of Cerberus CIREP Fund VI, L.P., KSL Capital Partners VI, L.P., and Stockbridge Value Fund V, L.P.

Geography	Reported Fair Value
North America*	190,754,964
Asia	12,390,921
Europe	75,282,529
Rest of World**	45,853,490
<b>Total Portfolio</b>	<b>324,281,904</b>

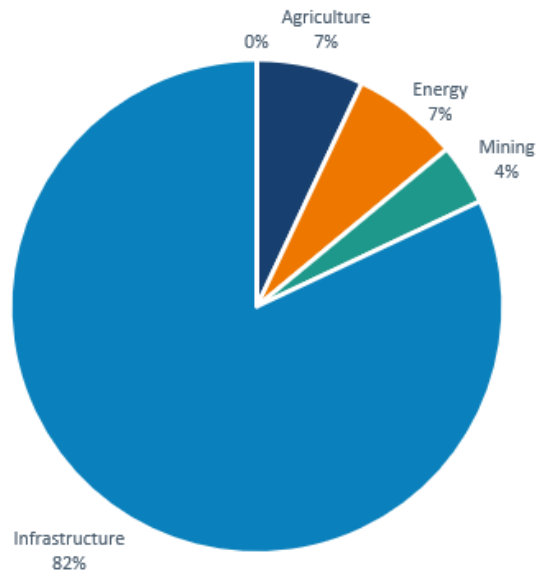
\* North America includes 100% market value from Sheridan II-B.

\*\* Rest of World includes Australia, Chile, Senegal, DRC, and Burkina Faso.



Based on the value of portfolio companies and fund reported exposures as of June 30, 2023. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

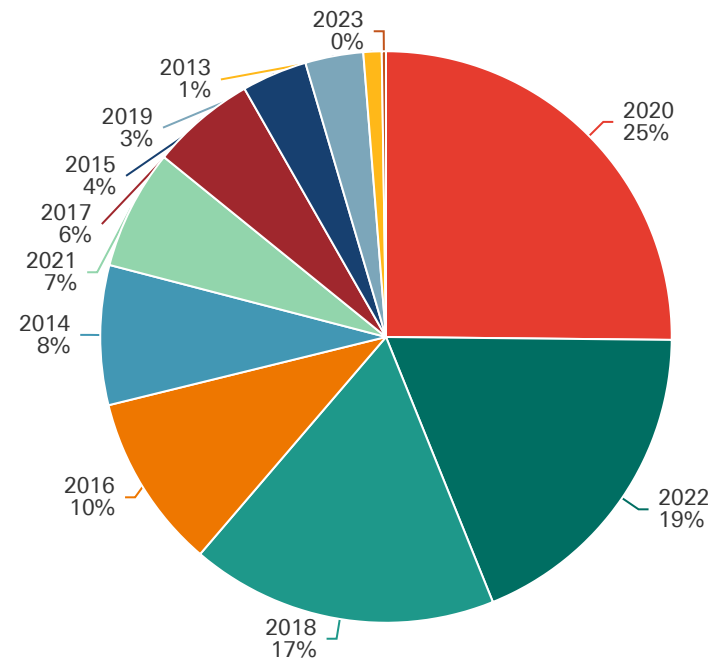
Investment Type	Commitment	Current Exposure
Agriculture	15,000,000	23,955,148
Energy	49,800,000	22,113,312
Mining	55,000,000	12,694,852
Infrastructure	300,000,000	264,748,842
RA Other	50,000,000	769,750
<b>Total Portfolio</b>	<b>469,800,000</b>	<b>324,281,904</b>



Based on the value of portfolio companies and fund reported exposures as of June 30, 2023. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

Vintage Year	Commitments	Reported Value
2010	\$20,000,000	\$0
2013	\$10,000,000	\$3,347,000
2014	\$35,000,000	\$25,599,973
2015	\$10,000,000	\$11,984,484
2016	\$25,000,000	\$32,081,400
2017	\$29,800,000	\$19,179,430
2018	\$50,000,000	\$56,330,211
2019	\$25,000,000	\$10,636,909
2020	\$85,000,000	\$81,595,056
2021	\$45,000,000	\$21,998,225
2022	\$60,000,000	\$60,759,466
2023	\$75,000,000	\$769,750
<b>Total</b>	<b>\$469,800,000</b>	<b>\$324,281,904</b>

Current Exposure by Vintage Year



- Deal flow for SamCERA has been robust as a result of re-up opportunities. Since year end, SamCERA has made commitments of \$25M to LS Power Fund V, \$30M to Cerberus CIREP Fund VI, and \$20M to KSL Capital Partners Fund VI. We expect deal flow for SamCERA to remain plentiful as more re-up opportunities come to market in the next six months.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
Board of Retirement

December 5, 2023

Agenda Item 7.1

**TO:** Board of Retirement

**FROM:** Gladys Smith, Assistant Executive Officer



**SUBJECT:** Annual Review of Independent Auditor, Brown Armstrong

**Recommendation**

Accept the annual performance report of Brown Armstrong Accountancy Corporation.

**Background**

Each year an evaluation is conducted of SamCERA's independent auditor. The evaluation consists of three parts: (1) A survey completed by trustees, staff and the auditor; (2) the auditor's responses to approved questions; and (3) a discussion at the Board meeting to present the results of the responses.

**Discussion**

This year's annual survey was completed by eight Board members and four staff members. Brown Armstrong received high ratings overall from both the Board and staff for the services they provided to SamCERA. The ratings ranked from above average to high.

Ashley Green will be available to respond to any questions or comments regarding her firm's audit services.

**Attachment**

Brown Armstrong Questionnaire Response  
New Client List 2023  
Inactive Clients 2023

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

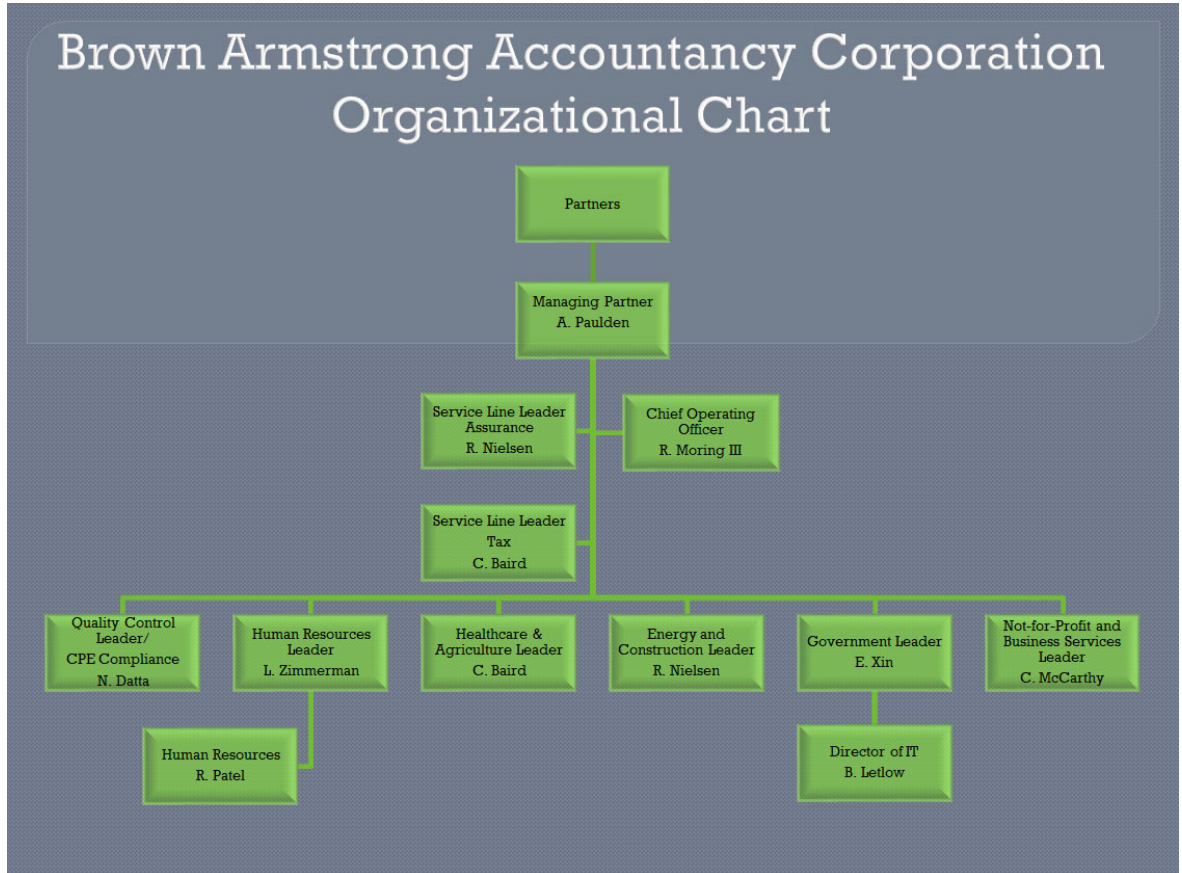
**Questions for Annual Auditor Consultant Evaluation**

Please provide information about the following events and activities and whether they occurred during Fiscal Year 2022-23.

**Organizational Update**

- 1) Provide an update on your firm's organization, with particular emphasis on changes to your management structure over the past twelve months. All significant changes should be accompanied by an explanation. An updated organizational chart should accompany this response.

[See organizational chart below.](#) During the year, effective 6/30/2023 Thomas Young, Partner retired. Rosalva Flores resigned as Chief Operating Officer effective 10/13/2023 and Rich Moring III was promoted internally to Chief Operating Officer effective 10/31/2023.



- 2) Update all significant personnel changes or expected changes to the "SamCERA Team." [There were no significant changes in personnel during the year and this is the last year in our contract.](#)
- 3) Has your firm or any of its employees been involved in regulatory or litigation actions related to your business in the past twelve months? [No](#)

- 4) Has a peer review been performed on any of your firm's audit products? If yes, discuss the review and the findings. Any material findings or recommendations must be accompanied by an explanation.

Our latest peer review was performed in the fiscal year ending 2022 and there were no material findings or recommendations.

- 5) Are any of your operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted. No

- 6) Please describe how your firm monitors and manages cyber security risks as they relate to confidential SamCERA data/information.

Our policy is that all confidential information is exchanged via secured, encrypted communications (see <https://support.citrix.com/article/CTX208317> for more details on our file transfer service). Internally our client data is stored on servers in a locked server room with a discrete alarm system. Servers are kept updated and patched against security vulnerabilities and reside behind a network firewall with an Intrusion Protection System. Data on employee computers is protected by Microsoft's BitLocker encryption system and Sentinel One antimalware. Employee passwords must comply with industry standard complexity requirements and change quarterly. Employee's computers and their M365 accounts are protected by DUO Multi-factor Authentication. Additionally, we do quarterly security training for all employees to keep them up to date on the most recent attack vectors and exploits. We're also implementing a SOC (Security Operations Center) monitoring service on our computers to proactively find any potential problems in our system so we can attempt to address them before they become a problem.

Has your firm experienced any problems with cyber security in the past 18 months?

Yes, our security system detected a breach in June 2023, we responded by locking down the system to address the vulnerability and our investigation has indicated that none of SamCERA's information was affected.

What is your cyber security breach policy?

We have an extensive first draft of a cyber security breach policy that we are in the process of refining with the help of a contracted Managed Service Provider.

What procedures do you have in place for a cyber security breach?

We will be following this outline of procedures:

- Make an initial assessment.
- Communicate the incident.
- Contain the damage and minimize the risk.
- Identify the type and severity of the compromise.



- Protect evidence.
- Notify external agencies, if appropriate.
- Recover systems.
- Compile and organize incident documentation.
- Assess incident damage and cost.
- Review the response and update policies

### **Client Update**

- 7) What is your firm's philosophy and current policy regarding new business?  
We engage only new clients that have the highest ethical standards, and only after we are certain we can provide high quality, timely service. Any potential clients will be subject to review and due diligence of our Audit Marketing Committee.
- 8) Please list all clients gained or lost in the past eighteen months.  
See attached.

### **Outlook Beyond Fiscal Year 2022-23**

- 9) What issues are other clients concerned with regarding products, services, education and governance that your staff has not addressed with SamCERA?  
Nothing SamCERA hasn't already implemented or considered.
- 10) Should SamCERA be made aware of significant changes that your clients are making?  
Nothing SamCERA hasn't already implemented or considered.
- 11) Relative to your expertise, what trends are occurring in the retirement industry that SamCERA should be tracking?  
Nothing SamCERA hasn't already implemented or considered.

### **Conclusion**

- 12) How can SamCERA better assist you in accomplishing the goals it has established for your firm?  
We have a very good relationship with SamCERA and continued feedback about resources we use and communication about staff service will be helpful in accomplishing our goals established.
- 13) How can we better utilize your firm's capabilities?  
We provide continuing education for our clients and our staff about new Governmental Accounting Standards established. SamCERA could take advantage of the resources and training for a reduced cost of attending we

provide to all clients. We typically have our continuing education scheduled in January and May/June. We will provide more information once the agendas have been established.

As always if there is any specialized testing you would like to see performed we can perform agreed upon procedures, if necessary.

14) Is there any information that would be timely pursuant to SamCERA's annual review? **None noted.**

15) What audit related changes should SamCERA consider that were not mentioned in your audit or audit presentation?

As mentioned in the discussion at the presentation you can establish an audit committee entrance meeting to go over the scope of services the auditor will provide and discuss any concerns the committee has or further considerations on certain participant testing they would like to see addressed.

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
10/2/2023 SCOTTSDALE	321 GANG, LLC	77627.002	Paulden 002
10/2/2023 BAKERSFIELD	618 VENTURES LLC	79987.001	Baird 018
3/10/2023 BAKERSFIELD	AARDVARK HOLDINGS LLC, A NEVADA LLC	00210.001	McCarthy 067
2/13/2023 MARINA DEL REY	ABBOT KINNEY BOULEVARD ASSOCIATION	00258.001	Moring III 257
8/10/2023 ELK GROVE	ABED, LUTFI & RIMAH	00211.001	McCarthy 067
8/1/2023 BAKERSFIELD	ACKER, JOE & LINDSAY	00740.001	Baird 018
5/12/2023 BAKERSFIELD	AIMES CONSULTING, INC	03100.002	Nielsen 022
5/12/2023 BAKERSFIELD	AIMES HOMES, INC	03100.001	Nielsen 022
2/8/2023 SAN FRANCISCO	ALLEN, BARBARA	03380.001	Baird 018
6/29/2022 LANCASTER	ANTELOPE VALLEY FAIR ASSOCIATION (TAX	03549.007	Young 012
10/4/2022 BAKERSFIELD	APEX MEDICAL CLINICS, PC	03835.001	McCarthy 067
7/25/2023 TEHACHAPI	APPLING, VICTORIA	03868.001	McCarthy 067
8/23/2023 NORTHRIDGE	ARIZONA HEALTH ADVANTAGE, INC	04725.001	Xin 011
5/12/2023 BAKERSFIELD	AS ONE, INC	03100.003	Nielsen 022
6/10/2022 FRESNO	BACHIR, SIMON & MOLLY	07906.001	Ragus-Wines 228
5/2/2022 TACOMA	BACKYARD ADU LLC	07901.001	Moring III 257
2/21/2023 BAKERSFIELD	BAIRD, KEN & ONETA	07918.001	Baird 018
6/7/2023 BAKERSFIELD	BAKERSFIELD CABINETS AND WOODWORK	07971.001	Nielsen 022
5/5/2022 FAIRFIELD	BANSAL PSYCHIATRIC INC	08022.002	McCarthy 067
4/13/2023 BAKERSFIELD	BARCA, LYNETTE	08042.001	Nielsen 022
8/2/2022 BAKERSFIELD	BEALES, RONALD	09088.001	McCarthy 067
8/30/2023	BERRY PETROLEUM CORPORATION	11463.001	Baird 018
6/19/2023 SHAFTER	BLAND, CHANCE & ADRIANA	11315.001	McCarthy 067
2/10/2023 LAGUNA BEACH	BOBSAC LLC	11532.001	Paulden 002
3/10/2023 MCFARLAND	BOWMAN BROTHERS, LLC	11874.001	McCarthy 067
1/16/2023 SANTEE	BOWMAN FARMS, INC, RICHARD	11872.001	McCarthy 067
1/16/2023 SANTEE	BOWMAN, KYLE & ABBY	11849.001	McCarthy 067
5/2/2023 BAKERSFIELD	BRANSON RENTALS, CHRIS	12000.001	Zimmerman 079
3/24/2023 BAKERSFIELD	BRENNAN, TRISHA	12047.001	Nielsen 022
2/8/2023 BAKERSFIELD	BUCKLEY ROAD LLC	13695.001	McCarthy 067

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
7/21/2023 BAKERSFIELD	BUFFALO CAPITAL LLC	07997.003	Nielsen 022
6/26/2023 LAGUNA BEACH	BYPASS TRUST UNDER THE TEITSWORTH F	79708.001	Paulden 002
3/16/2023 BAKERSFIELD	C BECK SERVICE, LLC	09150.003	Nielsen 022
2/21/2023 BAKERSFIELD	CADMUS, MILLIE B	14025.001	McCarthy 067
2/16/2023 BAKERSFIELD	CAL DATA ANALYTICS LLC	14310.001	Baird 018
8/11/2022 SACRAMENTO	CALIFORNIA ASSO. OF PUBLIC AUTHORITIE	14440.001	Green 040
8/1/2023 BAKERSFIELD	CALIFORNIA CARDIOVASCULAR INSTITUTE	14463.001	Paulden 002
2/10/2023 SAN FRANCISCO	CALIFORNIA MEDICAL INNOVATION INC	14530.001	McCarthy 067
6/9/2022 FRESNO	CALIFORNIA SURGICAL MEDICAL CLINICS IN	14570.001	Ragus-Wines 228
4/17/2023 BAKERSFIELD	CARDWELL, NICOLE	14798.001	Moring III 257
12/12/2022 BAKERSFIELD	CASTERLINE, SUSAN	14971.001	Moring III 257
5/9/2022 BAKERSFIELD	CDZ BASEBALL	13962.001	Paulden 002
12/7/2022 BAKERSFIELD	CENTRAL CALIFORNIA CONSTRUCTION, INC	16009.001	Baird 018
3/9/2023 BAKERSFIELD	CESARE FARMS LLC	16014.001	Paulden 002
6/26/2023 SACRAMENTO	CIVIL JUSTICE ASSOCIATION OF CALIFORNI	16189.001	Green 040
12/20/2022 TEHACHAPI	CLARKE, SEAN & TARA	16228.001	Moring III 257
1/9/2023 WESTLAKE VILLAGE	COMMUNE FUND IV, LLC	17636.001	Datta 024
1/9/2023 WESTLAKE VILLAGE	COMMUNE FUND V, LLC	17638.001	Datta 024
10/27/2022 WESTLAKE VILLAGE	COMMUNE MAR VISTA INVESTORS, LLC	17642.001	Datta 024
10/27/2022 WESTLAKE VILLAGE	COMMUNE VTA INVESTMENTS, LLC	17647.001	Datta 024
4/18/2023 SANTA ROSA	CONOVER, JAMES & ANN	18691.001	Moring III 257
1/25/2023 BAKERSFIELD	CREATIVE REALTY MORTGAGE INC	19887.001	Baird 018
5/11/2023 BAKERSFIELD	CRESTMONT LOFT (REVIEW)	19780.002	Nielsen 022
3/31/2023 BAKERSFIELD	CRIDER CONSTRUCTION, INC.	19889.001	Roberts 107
2/16/2023 BAKERSFIELD	CRONJAGER, JAMES & MARIA	20100.001	Baird 018
11/29/2022 WILTON	DAGENAIS, PAUL & NATALIE HOOVER	21691.001	McCarthy 067
2/9/2023 BAKERSFIELD	DAMO, ANTHONY & SARAH	21721.001	Baird 018
3/1/2023 LOS ANGELES	DANCE CAMERA WEST	21725.001	McCarthy 067
3/29/2023 BAKERSFIELD	DAUTERIVE, DON & CAROLYN	21750.001	Baird 018
3/15/2023 BAKERSFIELD	DEASON, DALANI	22121.001	Nielsen 022

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
10/3/2023 BAKERSFIELD	DELANO, JUNIUS MORRILL JR	22330.001	Baird 018
8/23/2022 RIDGECREST	DESERT TORTOISE PRESERVE (TAX)	23255.002	McCarthy 067
4/5/2023 OREGON CITY	DOMINGUEZ, JOE	24149.001	McCarthy 067
8/30/2022 SAN FRANCISCO	DONALDSON, BARBARA	24150.001	Baird 018
10/3/2022 HUNTINGTON BEACH	DOWNCHEZ ENERGY INC.	24182.001	McCarthy 067
10/3/2022 HUNTINGTON BEACH	DOWNS, JASON & SARAH	24180.001	McCarthy 067
9/11/2023 SANTA MONICA	DRMAC CORP	24310.001	Baird 018
10/30/2023 REDWOOD CITY	DSIGNED BY PREETI MOVIE, LLC	21665.001	McCarthy 067
6/7/2022 SACRAMENTO	DUTRA FAMILY, LLC, DIANE	24571.001	Paulden 002
10/25/2022 BAKERSFIELD	EL CINCO FARMS CO.	25722.001	McCarthy 067
2/20/2023 BAKERSFIELD	ENERGY PARTNERS, LLC	25813.001	Baird 018
10/6/2022 BAKERSFIELD	ESTILL FAMILY TRUST	25882.001	Paulden 002
8/22/2022 BAKERSFIELD	FAHIL, RAZAN	26683.001	McCarthy 067
2/21/2023 BAKERSFIELD	FIELDS, LILIANA	27035.001	Paulden 002
2/21/2023 BAKERSFIELD	FLAJOLE, JUDITH	27930.001	Baird 018
5/17/2022 SANTA BARBARA	FOSTER, SEAN & DEBORAH	28329.001	Moring III 257
10/12/2022 BAKERSFIELD	FRANZ, ANTHONY	28843.002	Moring III 257
7/13/2023 BAKERSFIELD	FRIESEN, CARSON	29039.003	Baird 018
7/13/2023 BAKERSFIELD	FRIESEN, MASON	29039.004	Baird 018
9/1/2022 PHELAN	FURLONG, IAN	29024.001	Baird 018
9/1/2022 RIVERSIDE	GARCIA, ALYSSA	29907.002	Moring III 257
12/28/2022 TEHACHAPI	GARRETT, RICHARD & SHANDRA	29920.001	Nielsen 022
1/23/2023 BAKERSFIELD	GERECKE, CASH	30072.004	Baird 018
1/23/2023 BAKERSFIELD	GERECKE, CHANCE	30072.003	Baird 018
1/23/2023 BAKERSFIELD	GERECKE, COOPER	30072.002	Baird 018
1/23/2023 BAKERSFIELD	GERECKE, DEREKE & TAMMIE	30072.001	Baird 018
11/18/2022 RIVERSIDE	GIBSON, MARY LIVING TRUST UTD 06-24-201	30711.001	Moring III 257
3/9/2023 BAKERSFIELD	GILCHRIST, KATHLEEN	30760.001	Baird 018
10/13/2023 TEHACHAPI	GONZALEZ, HECTOR	32450.001	Nielsen 022
6/8/2023 BAKERSFIELD	GR8HERITAGE LLC	32588.001	Nielsen 022

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
3/22/2023 SHAFTER	GRACILIANO, SUZANNA & JUAN JR	32605.001	McCarthy 067
4/10/2023 FAIRFIELD	GRAPEVINE ENERGY, LLC	32780.001	Baird 018
6/26/2023 LAGUNA BEACH	GST EXEMPT MARITAL TRUST UNDER THE T	79706.001	Paulden 002
6/26/2023 LAGUNA BEACH	GST NONEXEMPT MARITAL TRUST UNDER T	79707.001	Paulden 002
12/14/2022 BAKERSFIELD	GUEVARA, JOSE M AND MAGDALENA	33700.001	McCarthy 067
6/22/2022 ROSEVILLE	HANS, HARLIV	34477.001	McCarthy 067
4/14/2023 HOUSTON	HARGIS FAMILY TRUST, THE	34530.002	McCarthy 067
4/14/2023 HOUSTON	HARGIS TRUST, THE	34530.003	McCarthy 067
9/12/2023 BAKERSFIELD	HARGRAVES, KELLY	34546.001	McCarthy 067
12/14/2022 BAKERSFIELD	HAZARD, EDWARD S.	35402.001	Nielsen 022
8/11/2023 BAKERSFIELD	HIGHLAND HIGH SCHOOL APS BOOSTER CL	35473.001	Baird 018
10/4/2023 BAKERSFIELD	HOFFMANN HOSPICE OF THE VALLEY	35443.003	Datta 024
2/9/2023 BOISE	HOLCOMB, SHAINA	35556.001	McCarthy 067
11/29/2022 WILTON	HOOVER, NATALIE MD, A PROFESSIONAL C	36340.001	McCarthy 067
3/27/2023 FAIRFIELD	HORIZON ENERGY GLOBAL CORPORATION	36383.001	Baird 018
4/10/2023 FAIRFIELD	HORIZON ENERGY PARTNERS, LLC (TAX)	36382.002	Baird 018
10/10/2022 STOCKTON	HOSPICE OF SAN JOAQUIN (TAX)	36390.002	McCarthy 067
9/7/2023 BAKERSFIELD	HOYT ENERGY, LLC (AUP)	36570.002	Nielsen 022
7/26/2023 SALT LAKE CITY	HUBBARD, IRISHIA	36586.001	McCarthy 067
3/24/2023 SIMI VALLEY	HUGGINS, SETH & DEE DEE	36590.001	Baird 018
6/19/2023 SHAFTER	IKONDIUM DESIGN, LLC	36851.001	McCarthy 067
5/11/2022 EL CENTRO	IMPERIAL COUNTY FILM COMMISSION	36855.001	Nielsen 022
2/21/2023 NEWPORT	INDIGO IRON CONSTRUCTION COMPANY LL	32712.001	Moring III 257
8/15/2023 RANCHO CORDOVA	INDUSTRIAL ELECTRONIC SYSTEMS, INC	32714.001	McCarthy 067
5/9/2022 RIVERSIDE	INLAND EMPIRE UNITED WAY - AUDIT	82571.003	Xin 011
5/9/2022 RIVERSIDE	INLAND EMPIRE UNITED WAY - TAX	82571.004	McCarthy 067
5/9/2022 RIVERSIDE	INLAND SOUTHERN CALIFORNIA 211+ - TAX	82571.005	McCarthy 067
5/9/2022 RIVERSIDE	INLAND SOUTHERN CALIFORNIA UNITED WA	82571.006	McCarthy 067
3/30/2023 RANCHO CUCAMONGA	JALALI, YASAMAN	38501.001	McCarthy 067
3/23/2023 ROCKLIN	JAO, RODELL & TOBA ADINA-JAO	38700.001	McCarthy 067

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
9/26/2023 BAKERSFIELD	JIMINEZ, ESTATE OF MARY	25853.002	McCarthy 067
12/14/2022 BAKERSFIELD	JOSE'S ORNAMENTAL SUPPLY INC	39660.001	McCarthy 067
6/12/2023 BAKERSFIELD	JOSE'S ORNAMENTAL SUPPLY PROPERTIES	33700.002	McCarthy 067
7/22/2022 CAMARILLO	K & E THERAPY, INC.	40175.001	Roberts 107
8/30/2022 FALLBROOK	KBL FRANCHISE CONSULTANTS, LLC	42261.001	Paulden 002
6/20/2022 BAKERSFIELD	KCSOS PROJECTS	42470.010	Xin 011
10/14/2022 BAKERSFIELD	KED3 REAL ESTATE, LLC	42264.001	Baird 018
8/23/2022 BAKERSFIELD	KERN COUNTY HISPANIC COMMISSION (TAX	42431.002	Nielsen 022
6/20/2022 BAKERSFIELD	KERN COUNTY HUMAN SERVICES DEPT.	42470.012	Xin 011
12/28/2022 BAKERSFIELD	KERN COUNTY KENNEL CLUB, INC.	42433.001	McCarthy 067
3/1/2023 BAKERSFIELD	KERN PRECISION EXCAVATION LLC	42905.001	McCarthy 067
8/3/2022 BAKERSFIELD	KETTLEMAN LAND, LLC	43340.001	Baird 018
3/7/2023 BAKERSFIELD	KING, TRYSTIN	43705.001	McCarthy 067
3/15/2023 SHERWOOD	KNICKERBOCKER, BRADFORD TRUST DTD 1	44500.002	Baird 018
3/15/2023 SHERWOOD	KNICKERBOCKER, CALVIN ANDREW TRUST	44501.001	Baird 018
3/15/2023 SHERWOOD	KNICKERBOCKER, CHARLES REAGAN TRUS	44502.001	Baird 018
3/15/2023 SHERWOOD	KNICKERBOCKER, NATHAN OLIVER TRUST	44503.001	Baird 018
3/15/2023 SHERWOOD	KNICKERBOCKER, RYAN WILLIAM TRUST	44504.001	Baird 018
2/7/2023 BAKERSFIELD	KRE FUND LLC	46550.001	Nielsen 022
3/22/2023 BAKERSFIELD	KRUGER, KEVIN & TRICIA	46959.001	McCarthy 067
3/15/2023 BAKERSFIELD	LA COSTA COURT VENTURES PROPERTY, L	47041.001	McCarthy 067
1/1/2023 GLENDDORA	LA VERNE NURSERY INC	47040.001	McCarthy 067
1/1/2023 GLENDDORA	LA VERNE NURSERY LLC	47038.001	McCarthy 067
10/30/2023 RIVERSIDE	LARSEN ESTATE OF MICHELLE	47324.001	Moring III 257
2/6/2023 BAKERSFIELD	LELAND SUBTRUST, PAMELA	47497.001	Krausse 005
2/6/2023 UPPER MARLBORO	LEWIS, DANA	47798.001	McCarthy 067
8/9/2023 SAN FRANCISCO	LIBERANDUM TECHNOLOGIES, INC	47840.001	McCarthy 067
7/18/2022 NEWPORT BEACH	LIMELIGHT MANAGEMENT CONSULTING LLC	47900.001	Paulden 002
3/15/2023 BAKERSFIELD	LOCH FERN COURT VENTURE PROPERTY, L	48801.001	McCarthy 067
10/2/2023 TEHACHAPI	LOPEZ, ELISA	48934.001	McCarthy 067

**Brown Armstrong Accountancy Corporation**  
**Client List**  
**Active Date From 5/1/2022 To 10/31/2023**

Active Date Client City	Client Sort Name	Client Num.Eng	Primary Partner
9/5/2023 BAKERSFIELD	LOPEZ, PABLO & MONICA	48940.001	McCarthy 067
4/17/2023 BAKERSFIELD	LYONS EXEMPTION TRUST	50050.001	McCarthy 067
3/7/2023 OXNARD	MACIAS, MARIO & KAREN	50330.001	Baird 018
8/21/2023 SANTA MONICA	MACPHERSON ERM JV ABANDONMENT TRU	50395.003	Baird 018
8/21/2023 SANTA MONICA	MACPHERSON RMIII LLC ABANDONMENT TR	50395.004	Baird 018
6/27/2022 BODFISH	MARSHMAN, STEVEN	50932.001	Baird 018
1/25/2023 HUNTINGTON BEACH	MCCUTCHEN COMMERCE CENTER OWNER'	51755.001	Roberts 107
3/23/2023 LAS VEGAS	MCGREGOR, TAMARA	51765.001	Moring III 257
10/10/2022 UKIAH	MENDOCINO CERA (DRAFTING)	52273.002	Green 040
8/4/2022 BAKERSFIELD	MENDONCA, JOEY & SHARI	52272.001	McCarthy 067
3/7/2023 BAKERSFIELD	MIDWAY SUNSET INVESTORS LLC	52780.001	Baird 018
11/18/2022 BAKERSFIELD	MOBILE DOCKING SOLUTIONS LLC	54200.001	Paulden 002
8/21/2023 SANTA MONICA	MOC LLC RMU PARTICIPANT ABANDONMEN	50395.005	Baird 018
1/25/2023 BAKERSFIELD	MODERN CARE STRATEGIES LLC	54213.001	Baird 018
12/7/2022 BELGRADE	MOLOCK RESIDENTIAL, INC	54245.002	Nielsen 022
12/7/2022 LANCASTER	MOLOCK RESIDENTIAL, INC.	54245.001	Nielsen 022
8/1/2023 NEWPORT	MOODY MOON RIDGE LLC	54380.001	Moring III 257
6/7/2023 BAKERSFIELD	MORALES, RODRIGO & JORDAN	54414.001	Nielsen 022
4/10/2023 FAIRFIELD	MOUNTAIN VIEW RESOURCES, LLC	55595.001	Baird 018
6/2/2022 RIVERSIDE	MULLINS, RUBY J RVOC TR	57044.004	Moring III 257
5/2/2023 BAKERSFIELD	NATIVE OIL PRODUCERS AND EMPLOYEES	57230.001	Nielsen 022
9/1/2023 BAKERSFIELD	NELSON-BURKERT, LINDSAY	13717.001	Moring III 257
9/16/2022 BAKERSFIELD	NOLASCO, JONATHAN	57668.001	Moring III 257
3/27/2023 SAN FRANCISCO	NOSAVAN, INTHAVYVANH	22101.002	McCarthy 067
10/6/2023 BAKERSFIELD	NUNEZ, VICTOR & KATIE	57886.001	Paulden 002
2/3/2023 HANFORD	OLIVAS AND COMPANY LLC	59369.001	Paulden 002
7/21/2023 RANCHO CORDOVA	ON DEMAND INC	59381.001	McCarthy 067
2/13/2023 BAKERSFIELD	ORENDER, DANNY & LESLIE	59400.001	McCarthy 067
10/6/2022 VENTURA	OSBORN, MICHAEL & MARY	59458.001	Paulden 002
10/6/2022 BAKERSFIELD	OSBORN, PATRICK	59460.001	Paulden 002



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11/8/2022 LEBEC	PACIFIC COAST FOREST PRODUCTS, INC.	78718.002	Ragus-Wines 228
3/15/2023 BAKERSFIELD	PAGE, BEATRICE	60748.001	McCarthy 067
8/17/2022 SHAFTER	PARK PLACE SPECIAL EVENTS FOUNDATIO	61558.001	Baird 018
4/3/2023 KIHEI	PAYA LLC	61661.001	Baird 018
6/14/2023 BAKERSFIELD	PEREZ, JONNY	32588.002	Nielsen 022
1/12/2023 BAKERSFIELD	PERFORMANCE PROPERTY MANAGEMENT	61760.001	Nielsen 022
3/23/2023 BOSCAWEN	PETERSON, NOLI & AUDREY	61818.001	McCarthy 067
9/5/2023 BAKERSFIELD	PFETTSCHER, SUSAN	61893.001	Baird 018
10/2/2023 BAKERSFIELD	POTTER, MARILYN	63359.001	McCarthy 067
3/10/2023 BAKERSFIELD	PRIEST, RICK AND HEIDI	63599.001	Nielsen 022
11/7/2022 VISALIA	PROTEUS, INC. (403b)	63670.003	Baird 029
8/23/2022 VISALIA	PROTEUS, INC. (TAX)	63670.002	McCarthy 067
10/31/2023 BAKERSFIELD	PURPOSE DRIVEN FOUNDATION	64313.001	McCarthy 067
5/6/2022 BAKERSFIELD	R&D RHODES FAMILY LIMITED PARTNERSHI	82748.008	Zimmerman 079
3/22/2023 BAKERSFIELD	RAMOS, JACKELYN	66895.004	Moring III 257
6/30/2023	REUSE	29016.001	No Selection 0
6/30/2023	RE-USE	82818.001	No Selection 0
6/30/2023	RE-USE	82821.001	No Selection 0
1/10/2023 RIVERSIDE	RIVERSIDE COUNTY - PFA SCO	70625.021	Zimmerman 079
10/25/2023 RIVERSIDE	RIVERSIDE COUNTY TRANSPORTATION CO	70593.044	Xin 011
10/25/2023 RIVERSIDE	RIVERSIDE COUNTY TRANSPORTATION CO	70593.045	Xin 011
9/5/2023 TEHACHAPI	RIZZO, ANTHONY & LINDSEY	70652.001	McCarthy 067
9/5/2023 TEHACHAPI	RIZZO'S DRILLING SOLUTIONS	70653.001	McCarthy 067
7/19/2023 BAKERSFIELD	RM CONSTRUCTION	54414.002	Nielsen 022
6/7/2023 BAKERSFIELD	RM CONSTRUCTION DESIGN & BUILD, LLC	64317.001	Nielsen 022
7/19/2023 SURPRISE	ROBINSON, LOUISE	70994.001	McCarthy 067
10/6/2022 BAKERSFIELD	SAFLEY, MARY	73578.001	Baird 018
4/13/2023 BAKERSFIELD	SALAZAR, ROBERT & PATRICIA	73568.001	Nielsen 022
8/28/2023 SAN BERNARDINO	SAN BERNARDINO COUNTY TRANS AUTHOR	73940.002	Xin/Zimmerman 326
8/28/2023 SAN BERNARDINO	SAN BERNARDINO COUNTY TRANS AUTHOR	73940.001	Xin/Zimmerman 326
6/15/2022 BAKERSFIELD	SANCHEZ, NATALIE	74019.001	Moring III 257

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8/1/2023 BAKERSFIELD	SANCHEZ, NELLY	74016.001	Roberts 107
7/8/2022 SAN JOSE	SANTA CLARA COUNTY BSCC SB-81	74052.001	Young 012
4/3/2023 BAKERSFIELD	SCHROEDER AND SONS LLC	74190.001	McCarthy 067
4/3/2023 BAKERSFIELD	SCHROEDER, RYAN	74189.001	McCarthy 067
6/7/2023 BAKERSFIELD	SCOTTIE'S POWER SUPPLY LLC	74187.001	Nielsen 022
9/23/2022 WOODCLIFF LAKE	SENTINEL CONSULTING, LLC	74470.001	Moring III 257
3/7/2023 LATHROP	SIDHWA, A PROFESSIONAL CORPORATION,	77537.001	McCarthy 067
3/7/2023 LATHROP	SIDHWA, FEROZE	77535.001	McCarthy 067
1/10/2023 BAKERSFIELD	SIKOLA, SAM	77622.001	Zimmerman 079
3/9/2023 BAKERSFIELD	SKYRIDE UNLIMITED INCORPORATED	78070.001	McCarthy 067
4/6/2023 SANTA MONICA	SMITH, OTTO PORTER	78170.001	Baird 018
10/13/2022 VAN NUYS	SMITH, PREMILA	78172.001	Baird 018
7/22/2022 VENTURA	SMITH, STUART & KIMBERLY	78183.001	Roberts 107
8/15/2023 SANTA BARBARA	SODERMAN SUSAN FAMILY COUNSELING IN	77618.001	Baird 018
10/2/2023 ROYAL OAK	SODIUS, INC	77627.001	Paulden 002
10/2/2023 BAKERSFIELD	SOLANSEVAN, LLC	77635.001	Ragus-Wines 228
10/4/2022 BAKERSFIELD	SRIVASTAVA, SHAKTI DAYAL & SHWETA AG	78355.001	McCarthy 067
8/11/2022 BAKERSFIELD	ST. FRANCIS SCHOOL FOUNDATION, INC.	78365.001	McCarthy 067
2/21/2023 BAKERSFIELD	STAMPER, BRYN	78270.001	Baird 018
3/21/2023 TUCSON	STEPHENS IRREVOCABLE TRUST DTD 04-09	78632.002	McCarthy 067
4/5/2023 BAKERSFIELD	STEPHENS, DAVID & NICOLE	78633.001	Nielsen 022
11/8/2022 BAKERSFIELD	STORM, EDDY & STORMY	78718.001	Ragus-Wines 228
6/7/2023 BAKERSFIELD	STRUCTURE DESIGN & BUILD, INC	78797.001	Nielsen 022
11/21/2022 BAKERSFIELD	SUNLIGHT CAPITAL, INC.	79231.001	Moring III 257
8/4/2022 LADERA RANCH	SUNSET APARTMENTS	79230.003	Young 012
11/22/2022 BAKERSFIELD	SURF THRU, INC	79307.001	Nielsen 022
9/1/2022 PHELAN	TECHNOLOGY IN PRACTICE	79631.001	Baird 018
2/22/2023 LAGUNA BEACH	TEITSWORTH FAMILY TRUST DATED 7/29/88	79705.001	Paulden 002
2/22/2023 LAGUNA BEACH	TEITSWORTH, SANDRA E.	79700.001	Paulden 002
7/3/2023 BAKERSFIELD	THE CENTER FOR SEXUALITY & GENDER DI	29996.002	McCarthy 067

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9/1/2023 BAKERSFIELD	THE MAIN ASCENT LLC	13717.002	Moring III 257
8/9/2023 NORTH HIGHLANDS	TLC MEDTRANSPORTATION, LLC	80800.001	McCarthy 067
2/16/2023 BAKERSFIELD	TORBERT, KEVIN	81145.001	Baird 018
8/18/2022 SANTA ROSA	TREE HUGGER CONTAINERS, LLC	81608.001	Moring III 257
2/21/2023 BAKERSFIELD	TREMAINE, SHAWN & STACIE	81610.001	Baird 018
7/26/2022 VISALIA	TULARE COUNTY REGIONAL TRANSIT AGEN	82136.012	Datta 024
3/23/2023 BOSCAWEN	UNITY REI	82467.001	McCarthy 067
2/13/2023 MERRIMACK	UNLOCKED HOME PROJECT LLC	82480.001	McCarthy 067
7/26/2023 BAKERSFIELD	VAQUERO ENERGY INC 401K PLAN	82759.003	Nielsen 022
4/17/2023 VENTURA	VENTURA COUNTY SB863 AUDIT	82801.001	Xin 011
10/18/2023 MIAMI	VOLT MOBILE INC	82933.001	McCarthy 067
10/25/2022 BAKERSFIELD	VOLUNTEER CENTER OF KERN COUNTY, IN	82932.001	McCarthy 067
4/3/2023 PAHRUMP	WALKER, TRACEY SUE	83038.001	Paulden 002
9/22/2023 BAKERSFIELD	WDC BIOTECH FUND I	83121.001	Paulden 002
9/22/2023 BAKERSFIELD	WDC CREDIT FUND	83122.001	Paulden 002
10/3/2022 BAKERSFIELD	WDC ENERGY II GREEN RIVER LLC	83128.001	Paulden 002
9/22/2023 BAKERSFIELD	WDC QUALIFIED CREDIT FUND	83123.001	Paulden 002
10/3/2022 BAKERSFIELD	WDC RONDO, LLC	83129.001	Paulden 002
9/22/2023 BAKERSFIELD	WDC SPACE X	83124.001	Paulden 002
10/10/2022 BAKERSFIELD	WDC TECHNOLOGY FUND I, LLC	83127.001	Paulden 002
1/3/2023 BAKERSFIELD	WEBDELL, CPA, THOMAS	83126.001	Krausse 005
3/22/2023 BAKERSFIELD	WERNHART, JOHANN J RESIDUAL TRUST	83202.001	Baird 018
11/8/2022 LEBEC	WEST COAST FOREST & CINDER PRODUCT	78718.003	Ragus-Wines 228
2/10/2023 TEHACHAPI	WIGHT, BRETT & DIANE	83819.001	McCarthy 067
2/9/2023 BAKERSFIELD	WILSON, MARK	84114.001	McCarthy 067
1/1/2023 GLENDDORA	WILSON, RICHARD & TERUMI	84160.001	McCarthy 067
6/24/2022 BAKERSFIELD	WRENCH IT AUTO REPAIR	85422.001	McCarthy 067
2/2/2023 BAKERSFIELD	YONAKI, EIKO	85620.001	McCarthy 067
10/18/2023 BAKERSFIELD	YOUNG, RYAN M	85630.001	Paulden 002
4/6/2023 AUSTIN	YOUR CREDIT CORNER, LLC	85790.001	Moring III 257

**Brown Armstrong Accountancy Corporation**

**Client List**

**Active Date From 5/1/2022 To 10/31/2023**

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Active Date	Client Sort Name	Client Num.Eng	Primary Partner
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GrandTotal:

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**Report Parameters**  
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REPORT NAME: New Client List  
FIRM NAME: Brown Armstrong Accountancy Corporation

**Brown Armstrong Accountancy Corporation**  
**InActive Client List**  
**InActive Date From 5/1/2022 To 10/31/2023**

InActive Date	Client Sort Name	Client Name	Client Num.Eng	Primary Partner
6/1/2022	5 TKACS, LLC	5 TKACS, LLC	80482.001	Paulden 002
10/27/2023	ABA PROPERTIES, LLC	ABA PROPERTIES, LLC	00207.001	Paulden 002
2/10/2023	ACTION EVALUATION, INC	ACTION EVALUATION, INC	01028.001	McCarthy 067
6/14/2023	ALEXANDER, CLIFTON	CLIFTON ALEXANDER	85081.002	Moring III 257
6/1/2022	ALEXANDER, JERRY	JERRY ALEXANDER	03367.001	Paulden 002
8/22/2022	ALLIANCE AGAINST FAMILY VIOLENCE (TAX)	ALLIANCE AGAINST FAMILY VI	11065.004	Young 012
8/9/2022	ALTAMIRA LABOR SERVICE, INC	ALTAMIRA LABOR SERVICE, IN	03421.001	Flores 015
2/8/2023	ALVIDREZ FOUNDATION, CHIEF STEVE	CHIEF STEVE ALVIDREZ FOUN	03419.001	Baird 018
2/8/2023	AMAN FARMS	AMAN FARMS	03414.001	Baird 018
10/10/2023	AMERS, JACOB & ASHLEY	JACOB & ASHLEY AMERS	03433.001	Moring III 257
3/30/2023	ANGELINI REVOCABLE LIVING TRUST DTD 0	ANGELINI REVOCABLE LIVING	03499.001	Baird 018
6/1/2022	ANGULO, FERNANDO & VALERIE	FERNANDO & VALERIE ANGUL	03546.001	Paulden 002
9/28/2023	ANTELOPE VALLEY EAST KERN WATER AGE	ANTELOPE VALLEY EAST KERN	03537.001	Young 012
6/14/2023	ARELLANO, JESSICA	JESSICA ARELLANO	04051.001	Moring III 257
3/15/2023	B&K BL INVESTMENTS, LLC	B&K BL INVESTMENTS, LLC	07806.001	Baird 018
2/23/2023	BACHIR, SIMON & MOLLY	SIMON & MOLLY BACHIR	07906.001	Ragus-Wines 228
9/16/2022	BACKYARD ADU LLC	BACKYARD ADU LLC	07901.001	Moring III 257
6/1/2022	BAKERSFIELD RENEWABLE FUELS, LLC	BAKERSFIELD RENEWABLE FU	07937.001	Nielsen 022
10/10/2023	BALDERRAMA, BENJAMIN JR	BENJAMIN BALDERRAMA JR	08009.001	Moring III 257
9/18/2023	BANSAL PSYCHIATRIC INC	BANSAL PSYCHIATRIC INC	08022.002	McCarthy 067
10/10/2023	BANSAL, RAGHUNATH & INDU GOYAL	RAGHUNATH BANSAL & INDU G	08022.001	McCarthy 067
2/10/2023	BEDI, SUNAYANA	SUNAYANA BEDI	09127.001	McCarthy 067
6/1/2022	BERRY ESTATE, JUSTIN KNUTE	JUSTIN KNUTE BERRY ESTATE	11461.001	McCarthy 067
2/10/2023	BERRY, JUSTIN KNUTE	JUSTIN KNUTE BERRY	11462.001	McCarthy 067
12/25/2022	BETHLEHEM CENTER	BETHLEHEM CENTER	71099.091	Young 012
1/6/2023	BIG CRUSH FARMING, LLC	BIG CRUSH FARMING, LLC	11086.001	Nielsen 022
6/1/2022	BKRF HCP, LLC	BKRF HCP, LLC	11255.001	Nielsen 022
6/1/2022	BKRF OCB, LLC	BKRF OCB, LLC	11260.001	Nielsen 022
6/1/2022	BKRF OCP, LLC	BKRF OCP, LLC	11265.001	Nielsen 022
3/20/2023	BLACKBURN, MILDRED J	MILDRED J BLACKBURN	11296.001	McCarthy 067
2/10/2023	BOESCH, ROSS & JULIE	ROSS & JULIE BOESCH	11537.001	McCarthy 067
6/1/2022	BROWN, MICHAEL	MICHAEL BROWN	12993.003	Baird 018
2/21/2023	BUD'S BRAKE & WHEEL PARTS, INC	BUD'S BRAKE & WHEEL PARTS,	13699.001	Baird 018
6/1/2022	CADY, BRUCE D & PAULA A	BRUCE D & PAULA A CADY	14018.001	Paulden 002
2/10/2023	CALCOM ASSET MANAGEMENT, LLC	CALCOM ASSET MANAGEMENT	14335.010	McCarthy 067
2/10/2023	CALCOM ENERGY HOLDINGS, LLC	CALCOM ENERGY HOLDINGS,	14335.001	McCarthy 067
7/12/2022	CALIFORNIA DEPARTMENT OF TECHNOLOG	CALIFORNIA DEPARTMENT OF	14467.001	Xin 011
11/15/2022	CALIFORNIA SURGICAL MEDICAL CLINICS IN	CALIFORNIA SURGICAL MEDIC	14570.001	Ragus-Wines 228
4/18/2023	CALP, SUSAN	SUSAN CALP	14547.001	Baird 018
2/10/2023	CANAL ENERGY S14, LLC	CANAL ENERGY S14, LLC	14335.011	McCarthy 067
2/10/2023	CANAL ENERGY S23, LLC	CANAL ENERGY S23, LLC	14335.012	McCarthy 067
2/10/2023	CANAL ENERGY, LLC	CANAL ENERGY, LLC	14335.009	McCarthy 067
4/17/2023	CANALEZ, ALEXIS	ALEXIS CANALEZ	30151.002	Baird 018
6/1/2022	CAPITAL ISLAND PROPERTIES, LLC	CAPITAL ISLAND PROPERTIES,	17494.001	McCarthy 067
7/12/2022	CARPINTERIA VALLEY WATER DISTRICT	CARPINTERIA VALLEY WATER	14795.001	Nielsen 022
10/10/2023	CASTEEN, CAROLE	CAROLE CASTEEN	14951.001	McCarthy 067
4/20/2023	CASTEEN, PAULA	PAULA CASTEEN	14946.002	McCarthy 067
4/20/2023	CASTERLINE, SUSAN	SUSAN CASTERLINE	14971.001	Moring III 257
6/14/2023	CATES, COLBY	COLBY CATES	16183.002	Moring III 257
12/25/2022	CATHOLIC COMMUNITY OF ST. JUDE & OUR	CATHOLIC COMMUNITY OF ST.	71099.002	Flores 015
6/14/2023	CAUSEY-BOYKIN, CONSTANCE	CONSTANCE CAUSEY-BOYKIN	71100.001	Moring III 257
1/31/2023	CECIL, MICHAEL & SUSAN	MICHAEL & SUSAN CECIL	16006.001	Baird 018
3/20/2023	CENTERPOINT INVESTMENT GROUP, INC.	CENTERPOINT INVESTMENT G	16010.001	Baird 018
4/20/2023	CHEN, ALLEN	ALLEN CHEN	16146.001	Paulden 002
12/25/2022	CHRIST THE KING	CHRIST THE KING	71099.003	Flores 015
12/25/2022	CHRIST THE KING MISSION	CHRIST THE KING MISSION	71099.092	Flores 015
2/10/2023	CHRISTENSEN PUBLICATIONS	CHRISTENSEN PUBLICATIONS,	16181.001	McCarthy 067
6/1/2022	CONWAY, PHYLLIS	PHYLLIS CONWAY	18703.001	Paulden 002
10/10/2023	CORTEZ, ALEX & CASIE	ALEX & CASIE CORTEZ	19501.001	McCarthy 067

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InActive Date	Client Sort Name	Client Name	Client Num.Eng	Primary Partner
4/20/2023	DELAY, ALLEN D	ALLEN D DELAY	22323.001	Paulden 002
7/19/2023	DESERT HAVEN ENTERPRISES, INC.	DESERT HAVEN ENTERPRISES	23801.001	Nielsen 022
6/12/2023	DESERT HAVEN ENTERPRISES, INC. 401(k) P	DESERT HAVEN ENTERPRISES	23801.002	Nielsen 022
1/23/2023	DICKENS, D.D.S., INC	BRADLEY L. DICKENS, D.D.S., I	23478.001	Paulden 002
4/20/2023	DISETH, GENE	GENE DISETH	23600.001	Zimmerman 079
12/25/2022	DIVINE MERCY MISSION	DIVINE MERCY CATHOLIC CHU	71099.093	Flores 015
10/10/2023	DUNBAR, POLLIE	POLLIE DUNBAR	24518.001	Moring III 257
6/26/2023	DUNLAP, MICHAEL	MICHAEL DUNLAP	24533.001	Moring III 257
7/12/2022	EASTERN KERN AIR POLLUTION CONTROL	EASTERN KERN AIR POLLUTIO	25517.001	Young 012
9/18/2023	EHSAN, AMIRPASHA	AMIRPASHA EHSAN	25682.001	Roberts 107
9/18/2023	EHSAN, AMIRPASHA M.D., INC.	AMIRPASHA EHSAN M.D., INC.	25681.001	Roberts 107
6/1/2022	EL PUEBLO MARKET	EL PUEBLO MARKET	25728.001	Flores 015
1/23/2023	ELITE HOME DEVELOPERS	ELITE HOME DEVELOPERS, LL	25745.001	Paulden 002
2/20/2023	FAHIL, RAMI & REEM	RAMI & REEM FAHIL	26679.001	McCarthy 067
4/3/2023	FAKHREDDINE, ALI	ALI FAKHREDDINE	26663.001	Baird 018
8/22/2022	FAMILY F.O.C.U.S. CORPORATION	FAMILY F.O.C.U.S. CORPORATI	26680.001	Young 012
8/22/2022	FAMILY F.O.C.U.S. CORPORATION (TAX)	FAMILY F.O.C.U.S. CORPORATI	26680.002	Young 012
2/10/2023	FF ENERGY HOLDINGS, LLC	FF ENERGY HOLDINGS, LLC	14335.005	McCarthy 067
6/1/2022	FIDDLER, KATHERINE	KATHERINE FIDDLER	27020.002	Krausse 005
6/1/2022	FIDDLER, KIMBERLY	KIMBERLY FIDDLER	27020.003	Krausse 005
6/1/2022	FOWLER, JOHN & ROXANNE	JOHN & ROXANNE FOWLER	28532.001	McCarthy 067
4/20/2023	FOWLER, KENNETH & DARLENE	KENNETH & DARLENE FOWLER	28531.001	McCarthy 067
2/21/2023	FRANK, CARL & ANNA	CARL & ANNA FRANK	28829.001	Baird 018
6/10/2022	FRESNO CSA NO. 18, COUNTY OF	COUNTY OF FRESNO CSA NO.	29031.007	Xin 011
6/10/2022	FRESNO CSA NO. 51, COUNTY OF	COUNTY OF FRESNO CSA NO.	29031.022	Xin 011
6/10/2022	FRESNO WATERWORKS DISTRICT NO. 18, C	COUNTY OF FRESNO - WATER	29031.032	Xin 011
3/23/2023	FRIESEN, DARYL	DARYL FRIESEN	29042.002	Baird 018
8/17/2023	G W TURLOCK LEASING, LLC	G W TURLOCK LEASING, LLC	34229.001	Baird 018
10/10/2023	GARCIA, SALVADOR M.	SALVADOR M. GARCIA	29882.001	Krausse 005
2/10/2023	GARLOC ENERGY, LLC	GARLOC ENERGY, LLC	14335.013	McCarthy 067
8/31/2022	GATCHELL DRILLING, LLC	GATCHELL DRILLING, LLC	29991.001	Baird 018
8/17/2023	GATCHELL DRILLING, LLC (POST-BANKRUPT	GATCHELL DRILLING, LLC (POS	29991.002	Baird 018
6/1/2022	GCE HOLDINGS ACQUISITIONS, LLC	GCE HOLDINGS ACQUISITIONS	30020.001	Nielsen 022
6/1/2022	GCE OPERATING COMPANY, LLC	GCE OPERATING COMPANY, LL	30025.001	Nielsen 022
6/1/2022	GIL, JIMMY & KIMBERLY	JIMMY & KIMBERLY GIL	30745.001	McCarthy 067
12/25/2022	GOOD SHEPHERD (VISALIA)	GOOD SHEPHERD (VISALIA)	71099.005	Young 012
4/4/2023	GORMAN, KENNY	KENNY GORMAN	32571.001	Baird 018
3/23/2023	GUTIERREZ, EDDIE & DORA	EDDIE & DORA GUTIERREZ	34224.001	Baird 018
10/10/2023	HALL ADMINISTRATIVE TRUST, HARVEY L.	HARVEY L. HALL ADMINISTRATI	34514.001	Paulden 002
4/20/2023	HAN, JACK & DAN KONG	JACK HAN & DAN KONG	34463.001	McCarthy 067
4/20/2023	HANISH, BESS	BESS HANISH	34470.001	Roberts 107
2/21/2023	HAPPY WHOLE YOU, INC.	HAPPY WHOLE YOU, INC.	34555.001	Baird 018
7/12/2022	HATHAWAY LLC	HATHAWAY LLC	034590.001	Nielsen 022
4/20/2023	HATTEN, JOHN & THERESA	JOHN & THERESA HATTEN	34600.001	Paulden 002
4/20/2023	HATTEN, SEAN	SEAN HATTEN	34600.002	Paulden 002
8/22/2022	HERNANDEZ FARM LABOR, LLC	MARIA HERNANDEZ FARM LAB	35376.002	Flores 015
8/22/2022	HERNANDEZ LABOR CONTRACTING, MARIA	MARIA HERNANDEZ LABOR CO	35376.001	Flores 015
4/13/2023	HESS, DEBORAH	DEBORAH HESS	35417.001	Baird 018
1/19/2023	HETZNER M.D. INCORPORATED	HETZNER M.D. INCORPORATE	35419.001	Thornburgh 010
10/4/2023	HOFFMANN HOSPICE OF THE VALLEY	HOFFMANN HOSPICE OF THE V	35443.003	Datta 024
9/25/2023	HOLBROOK, JOSH	JOSH HOLBROOK	35547.001	Baird 018
12/25/2022	HOLY FAMILY (KINGSBURG)	HOLY FAMILY (KINGSBURG)	71099.004	Flores 015
12/25/2022	HOLY ROSARY	HOLY ROSARY	71099.006	Flores 015
12/25/2022	HOLY SPIRIT	HOLY SPIRIT	71099.007	Flores 015
12/25/2022	IMMACULATE HEART OF MARY	IMMACULATE HEART OF MARY	71099.008	Flores 015
7/14/2023	INDIAN WELLS VALLEY GROUND WATER AU	INDIAN WELLS VALLEY GROUN	32711.001	Young 012
12/25/2022	INFANT JESUS OF PRAGUE MISSION	INFANT JESUS OF PRAGUE MIS	71099.094	Flores 015
5/10/2023	INLAND EMPIRE UNITED WAY - TAX	INLAND EMPIRE UNITED WAY -	82571.004	McCarthy 067
5/10/2023	INLAND SOUTHERN CALIFORNIA 211+ - TAX	INLAND SOUTHERN CALIFORNI	82571.005	McCarthy 067

**Brown Armstrong Accountancy Corporation**  
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InActive Date	Client Sort Name	Client Name	Client Num.Eng	Primary Partner
5/10/2023	INLAND SOUTHERN CALIFORNIA UNITED WA	INLAND SOUTHERN CALIFORNI	82571.006	McCarthy 067
7/12/2022	INTERNATIONAL TEST SOLUTIONS, INC.	INTERNATIONAL TEST SOLUTI	37666.001	Nielsen 022
1/6/2023	JAG PROPERTY MANAGEMENT, LLC	JAG PROPERTY MANAGEMENT	32031.002	Nielsen 022
10/19/2022	JOHNSON, MARIE & JASON	MARIE & JASON JOHNSON	39822.001	Nielsen 022
6/1/2022	JOHNSTON, DOUGLAS	DOUGLAS JOHNSTON	39681.002	Baird 018
6/1/2022	JONES FAMILY TRUST	JONES FAMILY TRUST	39829.001	McCarthy 067
2/10/2023	JSP ENERGY, LLC	JSP ENERGY, LLC	14335.014	McCarthy 067
2/8/2023	KERN COUNTY BASQUE C	KERN COUNTY BASQUE CLUB	42423.001	Baird 018
1/30/2023	KERN DERMATOLOGY MED	KERN DERMATOLOGY MEDICA	42872.001	Baird 018
6/2/2022	KERN INTERNATIONAL INVESTMENTS, LLC	KERN INTERNATIONAL INVEST	42894.001	Baird 018
6/14/2023	KHAN, AMER & HORIYA AMEEN	AMER KHAN & HORIYA AMEEN	43902.001	Moring III 257
6/14/2023	KILLMAN, JACOB	JACOB KILLMAN	43560.002	Moring III 257
6/14/2023	KILLMAN, WILLIAM & MINDI	WILLIAM & MINDI KILLMAN	43560.001	Moring III 257
2/10/2023	KJD ENERGY, LLC	KJD ENERGY, LLC	14335.015	McCarthy 067
10/10/2023	LA ROCHE, DAVID & JE	DAVID & JERIE LA ROCHE	47035.001	McCarthy 067
2/10/2023	LARAMIDE ENERGY, LLC	LARAMIDE ENERGY, LLC	14335.016	McCarthy 067
4/20/2023	LELAND IRR TR 091688, BESS	BESS LELAND IRR TR 091688	47489.001	Krausse 005
3/20/2023	LEVEL ONE FUNDING, L	LEVEL ONE FUNDING, LP	47791.001	Nielsen 022
6/1/2022	LIDGETT, RABAE	RABAE LIDGETT	47861.001	Paulden 002
2/21/2023	LLDW, LLC	LLDW, LLC	48405.001	Baird 018
7/5/2022	LOPEZ, PAUL & NATASHA	PAUL & NATASHA LOPEZ	48942.001	Baird 018
4/17/2023	LORENGER, MIKE W	MIKE W LORENGER	48952.001	Baird 018
9/9/2022	LOVE, BARBARA	BARBARA LOVE	48013.001	Baird 018
1/30/2023	MACDUFF, MICHAEL A. & CHRISTINE R.	MICHAEL A. & CHRISTINE R. MA	50290.001	Baird 018
9/21/2023	MACKINNON GROUP, INC.	THE MACKINNON GROUP, INC.	50394.001	McCarthy 067
2/10/2023	MACKINNON, KADEN	KADEN MACKINNON	50392.002	McCarthy 067
2/10/2023	MACKINNON, KEVIN	KEVIN MACKINNON	50392.001	McCarthy 067
10/17/2023	MACPHERSON ENERGY CORP	MACPHERSON ENERGY CORP	50395.001	Baird 018
10/17/2023	MACPHERSON OIL COMPA	MACPHERSON OIL COMPANY	50400.001	Baird 018
10/17/2023	MACPHERSON OIL COMPANY, LLC	MACPHERSON OIL COMPANY,	50399.001	Baird 018
9/15/2022	MADDEN, DANIEL & JODY	DANIEL & JODY MADDEN	50430.001	Nielsen 022
9/20/2023	MARIN COUNTY TRANSIT DISTRICT	MARIN COUNTY TRANSIT DIST	50882.001	Nielsen 022
3/15/2023	MARTINEZ TESTING SER	MARTINEZ TESTING SERVICE, I	50951.001	Baird 018
2/10/2023	MBGL ENERGY HOLDINGS, LLC	MBGL ENERGY HOLDINGS, LLC	14335.004	McCarthy 067
4/11/2023	MCCLAIN, JOSH	JOSH MCCLAIN	51750.001	Moring III 257
2/10/2023	MEHTA, PRUTHA	PRUTHA MEHTA	52213.001	McCarthy 067
4/20/2023	MILLER, MICHAEL & ABIGAIL RATTAY	MICHAEL MILLER & ABIGAIL RA	53546.001	Nielsen 022
6/14/2023	MODELO, STEPHANIE	STEPHANIE MODELO	54204.001	Moring III 257
12/7/2022	MOLOCK RESIDENTIAL, INC	MOLOCK RESIDENTIAL, INC	54245.002	Nielsen 022
4/11/2023	MULLINS, MELISSA	MELISSA MULLINS	57045.001	Moring III 257
4/20/2023	MURRIN LIVING TRUST, JULIAN MICHAEL	JULIAN MICHAEL MURRIN LIVIN	50949.001	Roberts 107
1/17/2023	NAPA VALLEY TRANSPORTATION AUTHORIT	NAPA VALLEY TRANSPORTATI	57196.001	Nielsen 022
6/1/2022	NIKZAD, MIKE	MIKE NIKZAD	57649.001	McCarthy 067
12/25/2022	OUR LADY OF GUADALUP (MENDOTA)	OUR LADY OF GUADALUPE (ME	71099.010	Flores 015
12/25/2022	OUR LADY OF GUADALUPE (DELANO)	OUR LADY OF GUADALUPE (DE	71099.009	Flores 015
12/25/2022	OUR LADY OF LA VANG	OUR LADY OF LA VANG	71099.011	Flores 015
12/25/2022	OUR LADY OF LOURDES (CALIFORNIA CITY)	OUR LADY OF LOURDES (CALIF	71099.012	Flores 015
12/25/2022	OUR LADY OF LOURDES (CORCORAN)	OUR LADY OF LOURDES (COR	71099.013	Flores 015
12/25/2022	OUR LADY OF MERCY/ST. PATRICK	OUR LADY OF MERCY/ST. PAT	71099.014	Flores 015
12/25/2022	OUR LADY OF MT. CARMEL	OUR LADY OF MT. CARMEL	71099.015	Flores 015
12/25/2022	OUR LADY OF PERPETUAL HELP (BAKERSFI	OUR LADY OF PERPETUAL HEL	71099.016	Flores 015
12/25/2022	OUR LADY OF PERPETUAL HELP (BISHOP)	OUR LADY OF PERPETUAL HEL	71099.017	Flores 015
12/25/2022	OUR LADY OF PERPETUAL HELP (CLOVIS)	OUR LADY OF PERPETUAL HEL	71099.018	Flores 015
12/25/2022	OUR LADY OF SORROWS	OUR LADY OF SORROWS	71099.019	Flores 015
12/25/2022	OUR LADY OF THE ASSUMPTION MISSION	OUR LADY OF THE ASSUMPTIO	71099.095	Flores 015
12/25/2022	OUR LADY OF THE SIERRA	OUR LADY OF THE SIERRA	71099.020	Flores 015
12/25/2022	OUR LADY OF THE SNOWS MISSION	OUR LADY OF THE SNOWS MIS	71099.021	Flores 015
12/25/2022	OUR LADY OF THE SNOWS, YOSEMITE VALL	OUR LADY OF THE SNOWS, YO	71099.022	Flores 015
12/25/2022	OUR LADY OF VICTORY	OUR LADY OF VICTORY	71099.023	Flores 015

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2/10/2023	OWC ENERGY HOLDINGS, LLC	OWC ENERGY HOLDINGS, LLC	14335.003	McCarthy 067
12/25/2022	PARISH	PARISH	71099.099	Flores 015
3/22/2023	PASADENA CHAMBER OF COMMERCE (TAX)	PASADENA CHAMBER OF COM	61633.002	Vandermade 062
2/10/2023	PATEL, RAVI	RAVI PATEL	61650.003	McCarthy 067
9/25/2023	PHILLIPS, ANTHONY &	ANTHONY & KAYCEE PHILLIPS	61999.001	Baird 018
4/20/2023	PHILLIPS, SCOTT	SCOTT PHILLIPS	61905.001	McCarthy 067
4/20/2023	POON, BLAYNE	BLAYNE POON	63289.002	Paulden 002
4/3/2023	POWERS, JAMES & SUNMI YI	JAMES POWERS & SUNMI YI	63370.001	Baird 018
10/10/2023	PRENDEZ, BRIAN & DEBORAH	BRIAN & DEBORAH PRENDEZ	63604.001	Moring III 257
2/10/2023	QAL ENERGY, LLC	QAL ENERGY, LLC	14335.017	McCarthy 067
2/10/2023	QOA ENERGY, LLC	QOA ENERGY, LLC	14335.018	McCarthy 067
6/1/2022	RANEY, ESTATE OF RUTH PAULDEN	ESTATE OF RUTH PAULDEN RA	67901.001	Paulden 002
6/14/2023	REISERT, KATHY	KATHY REISERT	70073.001	Moring III 257
9/12/2022	RICHGROVE ELEMENTARY (2013)	RICHGROVE ELEMENTARY SC	70340.002	Flores 015
8/9/2022	RICHLAND SCHOOL DISTRICT PROPOSITION	RICHLAND SCHOOL DISTRICT	70341.001	Flores 015
4/14/2023	RINCON, BRAULIO	BRAULIO RINCON	70520.001	Ragus-Wines 228
4/14/2023	RINCON, MILKA LARA	MILKA LARA-RINCON	70520.002	Ragus-Wines 228
3/22/2023	RISE SAN LUIS OBISPO COUNTY	RISE SAN LUIS OBISPO COUNT	70526.001	Nielsen 022
4/20/2023	ROBERTSON, ROBERT A, REVOCABLE TRUS	ROBERT A ROBERTSON REVO	70982.001	McCarthy 067
4/20/2023	ROBINSON, DANI	DANI ROBINSON	70990.001	Roberts 107
12/25/2022	ROMAN CATHOLIC BISHOP OF FRESNO	ROMAN CATHOLIC BISHOP OF	71099.001	Flores 015
2/23/2023	RYAN, PATRICIA	PATRICIA RYAN	17243.002	Moring III 257
12/25/2022	SACRED HEART (BAKERSFIELD)	SACRED HEART (BAKERSFIELD)	71099.024	Flores 015
12/25/2022	SACRED HEART (DOS PALOS)	SACRED HEART (DOS PALOS)	71099.025	Flores 015
12/25/2022	SACRED HEART (EXETER)	SACRED HEART (EXETER)	71099.026	Flores 015
12/25/2022	SACRED HEART (FRESNO)	SACRED HEART (FRESNO)	71099.027	Flores 015
12/25/2022	SACRED HEART (LINDSAY)	SACRED HEART (LINDSAY)	71099.028	Flores 015
12/25/2022	SACRED HEART (MERCED)	SACRED HEART (MERCED)	71099.029	Flores 015
12/25/2022	SACRED HEART (PLANADA)	SACRED HEART (PLANADA)	71099.030	Flores 015
4/17/2023	SAFLEY, CHEYENNE	CHEYENNE SAFLEY	73572.001	Baird 018
12/25/2022	SAN CLEMENTE MISSION PARISH	SAN CLEMENTE MISSION PARI	71099.031	Flores 015
9/18/2023	SAN DIEGO FACILITY MAINTENANCE, INC.	SAN DIEGO FACILITY MAINTEN	73591.001	McCarthy 067
6/14/2023	SANCHEZ, NATALIE	NATALIE SANCHEZ	74019.001	Moring III 257
7/12/2022	SANTA BARBARA METROPOLITAN TRANSIT	SANTA BARBARA METROPOLIT	74040.001	Nielsen 022
5/11/2023	SANTA CRUZ - DEPARTMENT OF JUS	COUNTY OF SANTA CRUZ - DE	74055.009	Zimmerman 079
5/11/2023	SANTA CRUZ - OES/OCJP, CO - CAFR	COUNTY OF SANTA CRUZ - OE	74055.008	Zimmerman 079
12/25/2022	SANTA ROSA	SANTA ROSA	71099.032	Flores 015
12/25/2022	SHAVER LAKE COMMUNITY CHAPEL STATIO	SHAVER LAKE COMMUNITY CH	71099.096	Flores 015
2/8/2023	SHEPPARD, GLORIA	GLORIA SHEPPARD	74660.001	Baird 018
12/25/2022	SHRINE OF OUR LADY OF FATIMA	SHRINE OF OUR LADY OF FATI	71099.033	Flores 015
12/25/2022	SHRINE OF OUR LADY OF GUADALUPE CO-P	SHRINE OF OUR LADY OF GUA	71099.034	Flores 015
12/25/2022	SHRINE OF OUR LADY OF MIRACLES	SHRINE OF OUR LADY OF MIRA	71099.035	Flores 015
12/25/2022	SHRINE OF ST. THERESE	SHRINE OF ST. THERESE	71099.036	Flores 015
6/26/2023	SIEMENS, ALAYA	ALAYA SIEMENS	77546.001	Moring III 257
6/1/2022	SMITH, REBEKAH E.	REBEKAH E. SMITH	78188.002	Paulden 002
2/24/2023	SOMBRERO INVESTMENTS, LLC	SOMBRERO INVESTMENTS, LL	78206.001	Baird 018
1/24/2023	SOUTHWEST CONTRACTORS	SOUTHWEST CONTRACTORS, I	78220.001	Paulden 002
1/24/2023	SOUTHWEST CONTRACTORS (REVIEW)	SOUTHWEST CONTRACTORS, I	78220.003	Paulden 002
12/25/2022	ST. AGNES MISSION	ST. AGNES MISSION	71099.097	Flores 015
12/25/2022	ST. ALOYSIUS	ST. ALOYSIUS	71099.037	Flores 015
12/25/2022	ST. ALPHONSUS	ST. ALPHONSUS	71099.038	Flores 015
12/25/2022	ST. ANN (RIDGECREST)	ST. ANN (RIDGECREST)	71099.039	Flores 015
12/25/2022	ST. ANN (RIVERDALE)	ST. ANN (RIVERDALE)	71099.040	Flores 015
12/25/2022	ST. ANNE'S CATHOLIC CHURCH	ST. ANNE'S CATHOLIC CHURC	71099.041	Flores 015
12/25/2022	ST. ANTHONY	ST. ANTHONY	71099.042	Flores 015
12/25/2022	ST. ANTHONY CLARET	ST. ANTHONY CLARET	71099.043	Flores 015
12/25/2022	ST. ANTHONY OF PADUA (FRESNO)	ST. ANTHONY OF PADUA (FRE	71099.044	Flores 015
12/25/2022	ST. ANTHONY OF PADUA (REEDLEY)	ST. ANTHONY OF PADUA (REE	71099.045	Flores 015
12/25/2022	ST. AUGUSTINE	ST. AUGUSTINE	71099.046	Flores 015



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12/25/2022	ST. BRIGID	ST. BRIGID	71099.047	Flores 015
12/25/2022	ST. CATHERINE OF SIENA	ST. CATHERINE OF SIENA	71099.048	Flores 015
12/25/2022	ST. CHARLES BORROMEO	ST. CHARLES BORROMEO	71099.098	Flores 015
12/25/2022	ST. COLUMBA	ST. COLUMBA	71099.049	Flores 015
12/25/2022	ST. ELIZABETH	ST. ELIZABETH	71099.050	Flores 015
12/25/2022	ST. ELIZABETH ANN SETON	ST. ELIZABETH ANN SETON	71099.051	Flores 015
12/25/2022	ST. FRANCES CABRINI (HURON)	ST. FRANCES CABRINI (HURON)	71099.052	Flores 015
12/25/2022	ST. FRANCES CABRINI (WOODLAKE)	ST. FRANCES CABRINI (WOODL	71099.053	Flores 015
12/25/2022	ST. FRANCIS OF ASSISI	ST. FRANCIS OF ASSISI	71099.054	Flores 015
12/25/2022	ST. GENEVIEVE	ST. GENEVIEVE	71099.055	Flores 015
12/25/2022	ST. HELEN	ST. HELEN	71099.056	Flores 015
12/25/2022	ST. ISIDORE THE FARMER	ST. ISIDORE THE FARMER	71099.057	Flores 015
12/25/2022	ST. JOACHIM	ST. JOACHIM	71099.058	Flores 015
12/25/2022	ST. JOHN THE EVANGELIST (TIPTON)	ST. JOHN THE EVANGELIST (TI	71099.059	Flores 015
12/25/2022	ST. JOHN THE EVANGELIST (WASCO)	ST. JOHN THE EVANGELIST (W	71099.060	Flores 015
12/25/2022	ST. JOHN'S CATHEDRAL	ST. JOHN'S CATHEDRAL	71099.061	Flores 015
12/25/2022	ST. JOSEPH (AVENAL)	ST. JOSEPH (AVENAL)	71099.062	Flores 015
12/25/2022	ST. JOSEPH (BAKERSFIELD)	ST. JOSEPH (BAKERSFIELD)	71099.067	Flores 015
12/25/2022	ST. JOSEPH (FIREBAUGH)	ST. JOSEPH (FIREBAUGH)	71099.063	Flores 015
12/25/2022	ST. JOSEPH (LOS BANOS)	ST. JOSEPH (LOS BANOS)	71099.064	Flores 015
12/25/2022	ST. JOSEPH (MARIPOSA)	ST. JOSEPH (MARIPOSA)	71099.065	Flores 015
12/25/2022	ST. JOSEPH (SELMA)	ST. JOSEPH (SELMA)	71099.066	Flores 015
12/25/2022	ST. JUDE	ST. JUDE WOFFORD	71099.068	Flores 015
12/25/2022	ST. JUDE THADDEUS (LIVINGSTON)	ST. JUDE THADDEUS (LIVINGS	71099.070	Flores 015
12/25/2022	ST. JUDE THADDEUS (EARLIMART)	ST. JUDE THADDEUS (EARLIMA	71099.069	Flores 015
12/25/2022	ST. LUCY	ST. LUCY	71099.071	Flores 015
12/25/2022	ST. MALACHY	ST. MALACHY	71099.072	Flores 015
12/25/2022	ST. MARY (BUTTONWILLOW)	ST. MARY (BUTTONWILLOW)	71099.073	Flores 015
12/25/2022	ST. MARY (CUTLER)	ST. MARY (CUTLER)	71099.074	Flores 015
12/25/2022	ST. MARY (SANGER)	ST. MARY (SANGER)	71099.075	Flores 015
12/25/2022	ST. MARY (TAFT)	ST. MARY (TAFT)	71099.076	Flores 015
12/25/2022	ST. MARY (VISALIA)	ST. MARY (VISALIA)	71099.077	Flores 015
12/25/2022	ST. MARY OF THE DESERT	ST. MARY OF THE DESERT	71099.078	Flores 015
12/25/2022	ST. MARY OF THE MIRACULOUS MEDAL	ST. MARY OF THE MIRACULOU	71099.079	Flores 015
12/25/2022	ST. MARY QUEEN OF APOSTLES	ST. MARY QUEEN OF APOSTLE	71099.080	Flores 015
12/25/2022	ST. PATRICK	ST. PATRICK	71099.081	Flores 015
12/25/2022	ST. PAUL	ST. PAUL	71099.082	Flores 015
12/25/2022	ST. PAUL CATHOLIC NEWMAN CENTER	ST. PAUL CATHOLIC NEWMAN	71099.083	Flores 015
12/25/2022	ST. PAUL THE APOSTLE	ST. PAUL THE APOSTLE	71099.084	Flores 015
12/25/2022	ST. PETER PRINCE OF APOSTLES	ST. PETER PRINCE OF APOSTL	71099.085	Flores 015
12/25/2022	ST. PHILIP THE APOSTLE	ST. PHILIP THE APOSTLE	71099.086	Flores 015
12/25/2022	ST. RITA	ST. RITA	71099.087	Flores 015
12/25/2022	ST. THERESE	ST. THERESE	71099.088	Flores 015
12/25/2022	ST. THOMAS THE APOSTLE (ARVIN)	ST. THOMAS THE APOSTLE (AR	71099.089	Flores 015
12/25/2022	ST. THOMAS THE APOSTLE (VISALIA)	ST. THOMAS THE APOSTLE (VI	71099.090	Flores 015
2/15/2023	STEELE, NATALIE	NATALIE STEELE	78590.001	Nielsen 022
2/10/2023	STEWART DIVERSIFIED	STEWART DIVERSIFIED	78675.001	McCarthy 067
6/1/2022	STEWART, ERIC L. & P	ERIC L. & PAMELA M. STEWART	78678.001	McCarthy 067
4/20/2023	STEWART, SCOTT & JENNIFER	SCOTT & JENNIFER STEWART	78676.001	Ragus-Wines 228
8/9/2023	SUMMITT, STEPHEN	STEPHEN SUMMITT	79003.001	Baird 018
5/16/2023	SWAFFORD M.D., INC., ALBERT R.	ALBERT R. SWAFFORD M.D., IN	79322.001	Baird 018
8/9/2023	SWAFFORD, ALBERT R.	ALBERT R. SWAFFORD	79319.001	Baird 018
8/31/2022	TEMBLOR GATCHELL, LLC	TEMBLOR GATCHELL, LLC	79892.001	Baird 018
8/31/2022	TEMBLOR LOS ALAMOS, LLC	TEMBLOR LOS ALAMOS, LLC	79891.001	Baird 018
8/17/2023	TEMBLOR LOS ALAMOS, LLC (POST-BANKRU	TEMBLOR LOS ALAMOS, LLC (P	79891.002	Baird 018
8/31/2022	TEMBLOR PETROLEUM COMPANY, LLC	TEMBLOR PETROLEUM COMPA	79672.001	Baird 018
8/17/2023	TEMBLOR PETROLEUM COMPANY, LLC (POS	TEMBLOR PETROLEUM COMPA	79672.002	Baird 018
9/25/2022	THE MADDEN HOUSE, INC.	THE MADDEN HOUSE, INC.	50430.002	Nielsen 022
6/1/2022	TKAC JON & WENDY	JON & WENDY TKAC	80498.001	Paulden 002

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6/1/2022	TKAC HOLDING CORP.	TKAC HOLDING CORP.	80481.001	Paulden 002
6/1/2022	TKAC TRUST, GABRIELLE NICOLE	GABRIELLE NICOLE TKAC TRU	80498.004	Paulden 002
6/1/2022	TKAC TRUST, WESTON BERNARD	WESTON BERNARD TKAC TRU	80498.005	Paulden 002
6/1/2022	TKAC, WESTON	WESTON TKAC	80498.003	Paulden 002
4/20/2023	TOBIAS, SAMUEL	SAMUEL TOBIAS	80930.005	Paulden 002
2/23/2023	TOP LEVEL MANAGERS,	TOP LEVEL MANAGERS, L.L.C.	81140.001	Nielsen 022
11/15/2022	TRANQUIL WATERS GUIDANCE CENTER (TA	TRANQUIL WATERS GUIDANCE	79655.002	McCarthy 067
9/16/2022	TRIANGLE RENOVATIONS LLC	TRIANGLE RENOVATIONS LLC	81748.001	Moring III 257
8/9/2022	TRUITT OILFIELD MAIN 401K AUDIT	TRUITT OILFIELD MAINTENANC	81785.002	Flores 015
2/16/2023	UNICORN PROPERTIES LLC	UNICORN PROPERTIES LLC	82460.001	Paulden 002
9/8/2023	UPTAMIN LLC	UPTAMIN LLC	82486.001	Baird 018
9/25/2023	VALENCIA, JESSE & GISELA	JESSE & GISELA VALENCIA	82596.001	Baird 018
8/22/2022	VALLEY STRONG CREDIT UNION 401K	VALLEY STRONG CREDIT UNIO	42900.002	Flores 015
2/10/2023	VALLEY VOICES	VALLEY VOICES	82700.001	McCarthy 067
6/1/2022	VAN HORN, MADISON	MADISON VAN HORN	85752.001	Baird 018
8/24/2022	VAN HORN, MATHEW & M	MATHEW & MARY L. VAN HORN	82750.001	Baird 018
4/20/2023	VAUGHAN, JUSTIN PATRICK QUINONES	JUSTIN PATRICK QUINONES VA	82788.001	Ragus-Wines 228
4/20/2023	VAUGHAN, JUSTIN PATRICK QUINONES 201	JUSTIN PATRICK QUINONES VA	82784.001	Ragus-Wines 228
3/20/2023	VENABLE, CAROLINE	CAROLINE VENABLE	82811.001	McCarthy 067
6/1/2022	WATSON, WESTON	WESTON WATSON	83163.001	Zimmerman 079
4/20/2023	WELDON, TYLER & ANTOINETTE	TYLER & ANTOINETTE WELDO	83182.001	Paulden 002
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - AUP	WESTERN RIVERSIDE COUNTY	83212.002	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - AUP	WESTERN RIVERSIDE COUNTY	83212.003	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - BANNI	WESTERN RIVERSIDE COUNTY	83212.004	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - BEAU	WESTERN RIVERSIDE COUNTY	83212.005	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - CALIM	WESTERN RIVERSIDE COUNTY	83212.006	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - CANY	WESTERN RIVERSIDE COUNTY	83212.007	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - CITY O	WESTERN RIVERSIDE COUNTY	83212.018	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - CORO	WESTERN RIVERSIDE COUNTY	83212.008	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - EASTV	WESTERN RIVERSIDE COUNTY	83212.009	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - HEME	WESTERN RIVERSIDE COUNTY	83212.010	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - JURUP	WESTERN RIVERSIDE COUNTY	83212.011	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - LAKE	WESTERN RIVERSIDE COUNTY	83212.012	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - MENIF	WESTERN RIVERSIDE COUNTY	83212.013	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - MORE	WESTERN RIVERSIDE COUNTY	83212.014	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - MURRI	WESTERN RIVERSIDE COUNTY	83212.015	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - NORC	WESTERN RIVERSIDE COUNTY	83212.016	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - PERRI	WESTERN RIVERSIDE COUNTY	83212.017	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - SAN J	WESTERN RIVERSIDE COUNTY	83212.019	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - TEME	WESTERN RIVERSIDE COUNTY	83212.020	Xin 011
5/11/2023	WESTERN RIVERSIDE COUNTY RCA - WILDO	WESTERN RIVERSIDE COUNTY	83212.021	Xin 011
4/7/2023	WHITE, JONATHAN J. & MONICA W.	JONATHAN J. & MONICA W. WH	83312.001	Baird 018
4/7/2023	WHITE, MAISY	MAISY WHITE	83312.003	Baird 018
4/7/2023	WHITE, WINFIELD	WINFIELD WHITE	83312.002	Baird 018
6/1/2022	WOMAN'S CLUB OF BAKERSFIELD	WOMAN'S CLUB OF BAKERSFIE	85201.001	McCarthy 067
7/25/2023	WORTHINGTON, ESTATE OF BEVERLY C	ESTATE OF BEVERLY C WORT	85400.001	Baird 018
5/11/2023	WRCRCA - COUNTY OF RIVERSIDE - EDA	WRCRCA - COUNTY OF RIVERS	83212.025	Xin 011
5/11/2023	WRCRCA - COUNTY OF RIVERSIDE - FLOOD	WRCRCA - COUNTY OF RIVERS	83212.023	Xin 011
5/11/2023	WRCRCA - COUNTY OF RIVERSIDE - REGION	WRCRCA - COUNTY OF RIVERS	83212.022	Xin 011
5/11/2023	WRCRCA - COUNTY OF RIVERSIDE - TLMA	WRCRCA - COUNTY OF RIVERS	83212.024	Xin 011
8/16/2022	XS TRAVELS INC, dba ELITE SAFETY & SUPP	XS TRAVELS INC, dba ELITE SA	85498.001	Nielsen 022
10/10/2023	YOUNG, ANTHONY	ANTHONY YOUNG	85638.001	McCarthy 067
2/10/2023	YOUNGER, MILTON M. &	MILTON M. & BETTY L. YOUNGE	85750.001	McCarthy 067
8/9/2022	YOUTH UPRISING 401K PLAN	YOUTH UPRISING 401K PLAN	85825.001	Flores 015
10/11/2022	ZARD, REX	REX ZARD	85875.001	Baird 018

**GrandTotal:**

**Brown Armstrong Accountancy Corporation**  
**InActive Client List**  
**InActive Date From 5/1/2022 To 10/31/2023**

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InActive Date	Client Sort Name	Client Name	Client Num.Eng	Primary Partner
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**Report Parameters**  
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REPORT NAME: Inactive Clients  
FIRM NAME: Brown Armstrong Accountancy Corporation

FILTERED BY:

InActive Date BETWEEN '5/1/2022' AND '10/31/2023'

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
Board of Retirement

December 5, 2023

Agenda Item 7.2

**TO:** Board of Retirement

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



**SUBJECT:** 2024 Board-Staff Retreat Topics

**Recommendation**

Provide direction for staff regarding the topics and schedule for the March 26, 2024, Board-Staff Retreat.

**Background**

The annual Board retreat is scheduled for March 26, 2024. The Board assists on setting the topics to be addressed at the retreat and provides input regarding the proposed presenters. This agenda item gives trustees its first opportunity to discuss retreat topics. We will bring this item back to the Board again prior to finalizing the agenda.

**Discussion**

The Board has approved a start time of 8:30 a.m. for March 26th and we are proposing this one-day retreat to occur in addition and after the regular Board meeting. The retreat portion would have 4 major topics and time for discussion between topics.

Some suggested topics are included in the following list:


- High level-look at the economy
- Deep Dive into the portfolio
- Energy Security
- Inflation- "Higher for Longer"
- Cybersecurity
- Artificial Intelligence (AI)

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

December 5, 2023

Agenda Item 7.3

**TO:** Board of Retirement

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

**SUBJECT:** Trustee's Special Request to Attend an Educational Event

**Recommendation**

Approve the following requests by a Board of Retirement trustee who has submitted special requests to attend two educational events.

**Background**

The request for approval to attend these conferences was initially placed on the agenda at the Board's October 31st meeting. In light of questions that Board members may have regarding the conferences and the fact that requestor was unable to attend the October 31st meeting, this item was rescheduled for the Board's December 5th meeting.

SamCERA's Education Policy has a list of educational programs and activities under Section 2(B) that are approved by the Board of Retirement. If a trustee would like to attend a training/conference not specified under Section 2(B), the trustee must submit a *Board of Retirement Trustee Special Request to Attend Education Event Form* answering the following questions listed under Section 3(D) of the policy:

1. Are the conference topics of current interest and importance and related to issues facing SamCERA?
2. Have reports from previous attendees been favorable regarding the content of the conference and the continuing value of future attendance?
3. Will the conference meet the educational needs of the attendee?
4. Can similar education be received from an already approved provider or that provider's on-line resources?
5. Does the cost of the event and overnight travel justify the benefits particularly if the conference is out of California?
6. How many overnight trips has the Board member attended and/or is planning on attending this fiscal year?

**Discussion**

Elaine Orr has requested to attend the Women in Private Equity Summit from March 4-6, 2024 in Phoenix, AZ and the Milken Institute Global Conference from May 5-8, 2024 at The Beverly Hilton, Beverly Hills, CA.

**Attachments**

Trustee's Special Request to Attend an Educational Event Form (2) – Elaine Orr

**BOARD OF RETIREMENT TRUSTEE SPECIAL REQUEST TO ATTEND EDUCATION EVENT**

Use this form to request to attend an education activity not authorized in Section 2B of the Education Policy.

Trustee Name: Elaine Orr  
Event Title: Milken Institute Global Conference  
Date of Event: May 5-8, 2024  
Event Sponsor: Milken Institute

1.) Are the conference topics of current interest and importance and related to issues facing SamCERA?  
(In addition to your written response, please attach the event agenda.)

Yes. This is an established event for  
institutional allocators, leaders in business  
public health and more on regional & global issues.  
2023 agenda: milkeninstitute.org/events/global-conference-

2.) How will the conference meet your educational needs? (Is the program appropriate for your expertise/experience level, and are the courses addressing subject areas that you need?) 2023/program

Convenes experts in multiple sectors,  
economics and investing.

3.) Can similar education be received from an already approved provider from section 2B (or SACRS/ CALPRS) or that provider's online resources? (If yes, explain why attendance at this conference is necessary. If no, how did you verify this?)  Yes  No

Access to ~~the~~ those thought leaders at  
the top of their game addressing urgent issues  
- aging, workplace, climate -

4.) Why does the cost of the event and overnight travel justify the benefits, particularly if the conference is out of California?

- Registration is complimentary.
- Event is in California. Only hotel fees requested. I can cover my own air travel.

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5.) Is the event sponsored by marketing companies, investment managers or other potential service providers? (Check the agenda for any sponsors of events, meals, etc.)  Yes  No  Not Sure

6.) How many non-SACRS/CALAPRS events overnight trips have you attended or are you planning to attend this fiscal year? (Please list events.)

2024 - possibly Fall SACRS. unless  
calendar conflicts.

non SACRS events = plan to attend 2 in 2024

Milken  
Wine  
~ PSE

7.) Have reports from previous attendees been favorable regarding the content of the conference and the continuing value of future attendance?  Yes  No  Not Sure

8.) Any other information about the event that the Board should know?

CIO of CalSTRS - speaker in 2023

CIO of Dallas Employees Retirement Fund - also  
2023 speaker

and more

**BOARD OF RETIREMENT TRUSTEE SPECIAL REQUEST TO ATTEND EDUCATION EVENT**

Use this form to request to attend an education activity not authorized in Section 2B of the Education Policy.

Trustee Name: Elaine Orr

Event Title: Women in RE Summit

Date of Event: march 4-6, 2024

Event Sponsor: With Intelligence

1.) Are the conference topics of current interest and importance and related to issues facing SamCERA?  
(In addition to your written response, please attach the event agenda.)

Private equity is a material driver of  
returns.

Program:

2.) How will the conference meet your educational needs? (Is the program appropriate for your expertise/experience level, and are the courses addressing subject areas that you need?)

I have attended Women in RE since 2014  
while an allocator at Silicon Valley Community  
Foundation. I have been invited as

3.) Can similar education be received from an already approved provider from section 2B (or SACRS/ CALPRS) or that provider's online resources? (If yes, explain why attendance at this conference is necessary. If no, how did you verify this?)  Yes  No

Deeper and broader exposure to funders  
and allocators.

4.) Why does the cost of the event and overnight travel justify the benefits, particularly if the conference is out of California?



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There is no comparable premier event.

This is the first time ever being held outside CA.

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5.) Is the event sponsored by marketing companies, investment managers or other potential service providers? (Check the agenda for any sponsors of events, meals, etc.)  Yes  No  Not Sure

6.) How many non-SACRS/CALAPRS events overnight trips have you attended or are you planning to attend this fiscal year? (Please list events.)

Two: this one & Milken Institute May 2024

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7.) Have reports from previous attendees been favorable regarding the content of the conference and the continuing value of future attendance?  Yes  No  Not Sure

8.) Any other information about the event that the Board should know?

Recommend investment staff attend in future  
or even this one in 2024.


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

December 5, 2023

Agenda Item 7.4

**TO:** Board of Retirement

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

**SUBJECT:** Review of the Board's Education Policy

**Recommendation**

Reaffirm the Board's Education Policy.

**Background**

The Board approved the current Education Policy in December 2016, with revisions in December 2017 to reference the Board's ethics and anti-harassment training requirements. Since December 2017, the Board has reviewed the education policy each year, but no further substantive revisions have been adopted. The policy before the Board today is substantially the same as the policy reaffirmed in December 2021. The policy continues to reflect the following core principles as stated by the Board's Ad Hoc Education Policy Committee in 2016:

- **Fiduciary:** Education must be consistent with the Board's fiduciary responsibilities.
- **Prudent:** Exercising good judgment/decision making; understanding that the Board is entrusted with the Retirement Fund.
- **Relevant:** Education must be relevant to Trustees' responsibilities and to individual experience and background.
- **Focus:** Training/conference should focus on education not marketing
- **Cost Effective:** Board should apply the same discipline to Board travel/education as it does to all SamCERA expenses. Each Board member shall make every effort to obtain his or her education within California.
- **Optics/Perception:** Location and perception of luxury are important. Board member education should be obtained in a cost-efficient manner in order to minimize costs wherever possible, recognizing that multiple education providers provide similar educational opportunities.

**Discussion**

The Policy authorizes each Trustee to attend all of the following each fiscal year:

- Unlimited number of conferences and education programs within the Bay Area; and
- Any program sponsored by the State Association of County Retirement Systems (SACRS) and the California Association of Public Retirement Systems (CALAPRS) wherever located; and

- Up to two (2) approved out-of-Bay Area educational events requiring overnight stays.

The two approved out-of-Bay Area educational events requiring overnight stays can be from the following list of providers:

- International Foundation of Employee Benefit Plans (IFEBP)
- Wharton investment management programs
- Chartered Financial Analyst (CFA) Institute
- National Conference on Public Employee Retirement Systems (NCPERS)
- Institutional Limited Partner Association (ILPA) Institute (Educational Programs)

This list is subject to annual review and revision by the Board. Requests to attend an event not on the above list can be made by a Trustee by completing a form that is placed on the regular agenda for approval.

### **Attachments**

Education Policy

# San Mateo County Employees' Retirement Association

## BOARD OF RETIREMENT EDUCATION POLICY

### SECTION 1. BOARD MEMBER EDUCATION IS REQUIRED

- A. **Fiduciary Duty.** Consistent with the Board's fiduciary responsibility to discharge its duties with respect to the system with care, skill, prudence, and diligence, the Board acknowledges the vital importance of making informed judgments on all matters which come before it and has determined that educational activities help provide the Board with knowledge and skills to make such informed decisions. Board members come to the Board with differing backgrounds, knowledge, and expertise and have a duty to receive the education that best fits their needs. Board member education should develop the individual knowledge of the Board members and, in turn, improve the knowledge of the Board as whole so that it may discharge its fiduciary duties.
- B. **Minimum Required Hours of Training.** Each Board member shall receive a minimum of 24 hours of Board member education in the topics listed in Section 3(A) within the first two years of assuming office and for every subsequent two-year period the Board member continues to hold membership, in accordance with Government Code §31522.8.
- C. **Posting of Policy and Board Member Compliance.** Staff shall maintain a record of Board member compliance with this policy, and both this policy and an annual report on Board member compliance will be posted on the Board's website which shall reflect the education completed for the prior fiscal year or calendar, depending upon when the Board member's term commences, in accordance with Government Code §31522.8.
- D. **Timely Report by Board Member of Educational Participation.** Following a Board member's participation in an educational activity, such Board member shall submit a summary written report on the content of that educational activity for inclusion on the Consent Agenda at the next regularly scheduled Board meeting. The written summary shall substantially reflect the information contained in the attached sample report.

## SECTION 2 COST EFFECTIVE EDUCATION

- A. **Limit for Attendance at Overnight Out-Of-Bay Area Educational Events.** Board member education should be obtained in a cost-efficient manner, minimizing costs wherever possible. Every Board member is authorized to attend conferences and education programs within the Bay Area, as well as programs sponsored by the State Association of County Retirement Systems (SACRS) and the California Association of Public Retirement Systems (CALAPRS). In addition, every Board member is authorized to attend up to two (2) approved out-of-Bay Area educational events requiring overnight stays per fiscal year. Board members shall make every effort to obtain their education within California in light of the fact that multiple education providers provide similar educational opportunities. As a general matter, Board members should not attend educational activities that conflict with regularly scheduled Board meetings.
- B. **Travel Expenses.** Travel expenses incurred by a Board member for education are subject to reimbursement by SamCERA in accordance with this policy and the Board's "Policy For Reimbursement of Travel and Other Official Expenses For Trustees and Staff." Any international travel by a Board member must be placed on the Board's regular agenda for the Board's pre-approval. Costs for attendance at educational events that are not consistent with both policies will not be subject to reimbursement without Board approval.
- C. **Education through Electronic Means.** The Board further encourages members to participate to the fullest extent possible in approved taped and/or electronically-delivered educational opportunities.
- D. **Education Given by SamCERA Staff and Consultants.** Training provided by or arranged by the Chief Executive Officer, Chief Investment Officer, Chief Legal Counsel, and other SamCERA staff, the Board's Medical Advisor, Actuary, Investment Consultant, and Investment Managers shall satisfy the required education for the subject matters presented at such training and the required educational hours for the length of the training.
- E. **Education from Publications.** Board members may count up to three hours towards their biannual education requirement by reading Pensions & Investments, the Public Retirement Journal, and/or the Wall Street Journal.
- F. **Education from Onsite Visits.** Board members may count up to three hours towards their biannual education requirement by accompanying staff on onsite visits to potential or existing investment consultants, managers, or other SamCERA providers. Visits outside of the Bay Area requiring an overnight stay will count as an approved trip in accordance with Section 2(A).

### SECTION 3. APPROVED EDUCATIONAL TOPIC AREAS AND PROGRAMS

A. **Educational Topic Areas.** Appropriate topics for Board member education shall include two hours of Ethics Training consistent with Government Code §53234, and two hours of Anti-Harassment Training consistent with Government Code §53237.1 in a manner approved by the Chief Legal Counsel and, in accordance with Government Code §31522.8, and may include but is not limited to, the following topics:

- (1) Fiduciary responsibilities
- (2) Ethics
- (3) Pension fund investments and investment program management
- (4) Actuarial matters
- (5) Pension funding
- (6) Benefits administration
- (7) Disability evaluation
- (8) Fair hearings
- (9) Pension fund governance
- (10) New board member orientation

B. **Approved Educational Programs and Activities.** In addition to the SACRS and CALAPRS conferences and educational programs referenced in Section 2(A), a Board member's attendance at and/or viewing or listening of recordings of one or more programs listed below shall satisfy the required education for the subject matters presented at such programs and the required educational hours for the length of the program. This list of programs is subject to annual review by the Board and shall be revised as determined by the Board.

- (1) International Foundation of Employee Benefit Plans (IFEBP)
- (2) Wharton investment management programs
- (3) Chartered Financial Analyst (CFA) Institute
- (4) National Conference on Public Employee Retirement Systems (NCPERS)
- (5) Institutional Limited Partner Association (ILPA) Institute (Educational Programs)

C. **Recommended Education for New Board members.** As part of a new Board member's orientation, staff will provide a recommended educational plan that best suits the Board member's educational needs for the member's first term.

D. **Special Request to attend Education Event.** In considering each request to attend a specified educational activity that is not listed in Section 2(B), the Board will consider if the overnight travel is appropriate and consistent with the intent of this policy and shall consider items such as:

- (1) Are the conference topics of current interest and importance and related to issues facing SamCERA?
- (2) Have reports from previous attendees been favorable regarding the content of the conference and the continuing value of future attendance?
- (3) Will the conference meet the educational needs of the attendee?
- (4) Can similar education be received from an already approved provider or that provider's on-line resources?
- (5) Does the cost of the event and overnight travel justify the benefits particularly if the conference is out of California?
- (6) How many overnight trips has the Board member attended and/or is planning on attending this fiscal year?

#### **SECTION 4. EDUCATIONAL EXPENSES FOR STAFF**

The Chief Executive Officer is authorized to approve the participation and associated travel of the Chief Executive Officer and staff in educational activities to the extent that the Chief Executive Officer finds that such participation will contribute to the staff member's ability to perform the staff member's duties and the budget provides funds for such activities.