

Notice of Public Meeting

The Board of Retirement

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

Tuesday, January 24, 2017, 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 Regular Board Meeting Minutes from December 6, 2016
- 4. Approval of the Consent Agenda*

4.6 Member Account Refunds

- 4.1 Disability Retirements
 Cherlene Wright
 4.2 Survivor Death Benefits
 4.3 Member Account Redeposit
 4.9 Acceptance of Semi-Annual Compliance
- 4.3 Service Retirements Certification
- 4.4 Continuances
 4.10 Approval of Resolution to Execute Contract with
 4.5 Deferred Retirements
 Segal Co. for Audit of Actuarial Services
 - 4.11 Approval of Resolution Amending Contract with Joanne Bond Coaching, LLC

5. Benefit & Actuarial Services

- 5.1 Consideration of Agenda Items, if any, removed from the Consent Agenda
- 5.2 Approval of a Resolution Adopting Cost of Living Adjustments (COLAs) for 2017
- 5.3 Educational Presentation on Generational Mortality

6. Investment Services

- 6.1 Report on Preliminary Monthly Portfolio Performance for the Period Ending December 31, 2016
- 6.2 Presentation of Private Asset Semi-Annual Performance Reports as of June 30, 2016
- 6.3 Approval of Resolution Amending the Investment Policy
- 6.4 Report on Opportunistic Credit Short List Managers
- 6.5 Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C2)

7. Board & Management Support

- 7.1 Annual Review of SamCERA's Auditor, Brown Armstrong
- 7.2 Report on Implementation of Status of SamCERA's PASS
- 7.3 Report on April 25 and 26, 2017 Board-Staff Retreat Planning
- 7.4 Report on Strategic Plan Implementation

8. Management Reports

- 8.1 Chief Executive Officer's Report
- 8.2 Assistant Executive Officer's Report

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- 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 (Confidential Under Gov. Code §54956.81 and §6254.26 see also item 6.5)
- 9. Report on Actions Taken in Closed Session
- 10. Adjournment in Memory of the Following Deceased Members:

Gober, Charlotte	November 7, 2016	Hospital
Schaff, Arlene	November 16, 2016	Probation
Green, Kathleen	November 17, 2016	Information Services
Druhan, Lois	November 20, 2016	Probation
Heymann, Gary	November 22, 2016	Mental Health
Volk, Rosemarie	November 22, 2016	Assessor/Clerk/Recorder
Hood, Mildred	November 23, 2016	Social Services
Theiss, Leonard	November 28, 2016	Planning
Reed, Emily	November 30, 2016	Human Services
Economon, Philip	December 1, 2016	Agriculture
Lewis, Sylvia	December 6, 2016	Human Services Agency
Miller, V H	December 6, 2016	Institutional Clinical Services
Leimer, Judith	December 15, 2016	Public Health
Petretto, Susan	December 24, 2016	Human Services Agency
Okita, Martha	January 5, 2017	Courts
Kennedy, Lorraine	January 6, 2017	Chope Hospital

Scott Hood, Chief Executive Officer Posted: January 18, 2017

(* 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. 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 DECEMBER 6, 2016 – REGULAR BOARD MEETING MINUTES

1612.1 Call to Order, Roll Call and Miscellaneous Business

Call to Order: Mr. Paul Hackleman, Chair, called the Regular Meeting of the Board of Retirement to order at 10:03 a.m.

Roll Call:

Present: Sandie Arnott, Mark Battey, Paul Hackleman, Kurt Hoefer, Susan Lee (for the vacant Third Seat), David Spinello, and Eric Tashman.

Excused: Ben Bowler and Shirley Tourel.

Alternates present: Alma Salas.

Staff: Scott Hood, Michael Coultrip, Brenda Carlson, Gladys Smith, Elizabeth LeNguyen, Barbara Edwards and Kristina Perez.

Consultants: Stephen Quirk, Joe Abdou and Faraz Shooshani (Verus).

1612.1.1 **Election of Board Secretary:** Mr. Hackleman reported that Trustee Natalie Kwan Lloyd, Board Secretary and Third Member of the Board of Retirement, had resigned her position at the County and is no longer serving as a Board Member. Mr. Hood read a certificate of appreciation, thanking Ms. Kwan Lloyd for her years of service on the Board. Mr. Battey, Chair of the Ad Hoc Nominating Committee, nominated Shirley Tourel as Secretary to fill the vacancy, there were no other nominations.

Action: Mr. Battey moved to elect Shirley Tourel, as Board Secretary, for the term expiring June 30, 2017. The motion was seconded by Mr. Spinello, and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

- Oral Communications from the Board: Ms. Arnott reported her attendance at the IFEBP Annual Conference in Orlando, Florida, November 12-16, 2016. Mr. Hackleman and Ms. Lee also attended the IFEBP Annual Conference. Mr. Spinello reported his attendance at the SACRS Fall Conference in Indian Wells, on November 8-11, 2016; and he also attended the NCPERS 2016 Public Safety Employees' Pension & Benefits Conference, October 23-26, In Las Vegas.
- 1612.2.2 **Oral Communications from the Public:** None.
- 1612.3.1 **Approval of Board Meeting Minutes from October 25, 2016:** Mr. Hackleman asked if there were any changes or corrections to the minutes from October 25, 2016, and none were noted.

Action: Mr. Spinello moved to approve the minutes from October 25, 2016; the motion was seconded by Mr. Hoefer and the motion carried with a vote of 6-0-1, with trustees Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, Tashman, in favor; none opposed. Ms. Arnott abstained because she was not in attendance at the October 25th meeting.

Approval of the Consent Agenda: Mr. Hackleman asked if there were any items to be removed from the Consent Agenda, and the disability application for Rebecca Nassarre was removed for discussion in closed session.

Action: Mr. Battey moved to approve the remaining items on the Consent Agenda, and the motion was seconded by Ms. Arnott. The motion carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

1610.4.1 **Disability Retirements**

- a) The Board found that LouAnn Henry is (1) permanently incapacitated for the performance of her usual and customary duties as a Rehabilitation Production Supervisor I, (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 Byron Hudson is (1) permanently incapacitated for the performance of his usual and customary duties as a Case Management/Assessment Specialist II, (2) found that his disability was the not the result of an injury arising out of and in the course of his employment and (3) granted his application for a non-service-connected disability retirement.
- c) The Board found that Alfredo Rodriguez is (1) permanently incapacitated for the performance of his usual and customary duties as a Deputy Sherriff, (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.
- d) The Board (1) accepted the proposed findings and recommendations of the Hearing Officer, John Rosenthal, (2) found that Leslie Talavera is permanently incapacitated for the performance of her usual and customary duties as a Health Benefits Analyst II, (3) found that her disability was not a result of an injury arising out of and in the course of her employment, (4) denied her application for a service-connected disability retirement and (5) granted her a non-service-connected disability retirement.
- 1612.4.2 <u>Survivor Death Benefits:</u> The Board found that Richard Alota, would have been entitled to a non-service-connected disability but has died and Claire Alota, the surviving spouse, has elected to receive an optional death allowance pursuant to Government Code § 31781.1.

1612.4.3 Service Retirements:

The Board ratified the actions as listed below for the following members regarding service retirements:

Member Name	Effective Retirement Date	Department
Borg, Abigail	September 7, 2016	Deferred from Probation
Boscono, Linda	September 13, 2016	Deferred from Assessor's
Burns, Candy	October 22, 2016	Human Resources
Bushwalter, Eliana	October 1, 2016	Family Health Services
De Leon, Florinda	October 1, 2016	Human Resources
Espinoza, Eileen	October 29, 2016	Probation
Gibson, Pamela	October 1, 2016	Human Resources
Gloudemans, Paulette	September 7, 2016	Human Services Agency
Gostisha, Sheila	October 20, 2016	Parks
Holland, Philip	September 12, 2016	Deferred from Medical Center
Humphrey, Freeman	October 1, 2016	Behavioral Health
Lake, Eufemia	October 1, 2016	Behavioral Health
Magsino, Editha	October 1, 2016	Medical Center
Magura, Melody	October 1, 2016	Sheriff's
Mar, Andy	November 1, 2016	Sheriff's
Maynard, Donald	September 30, 2016	County Manager's Office
McClain, Helen	September 24, 2016	Human Services Agency
Meyers, Beverley	September 16, 2016	Deferred from District Attorney
Noah-Bear, Nancy	September 9, 2016	Human Services Agency
Rivera, Robert	September 4, 2016	Deferred from Probation
Ruiz, Milton	September 9, 2016	Deferred from Medical Center
Simonsen, Linda	September 30, 2016	Behavioral Health

1612.4.4 Continuances:

The Board ratified the actions as listed below for the following members regarding continuances:

Survivor's NameBeneficiary of:Alota, ClaireAlota, RichardArtigues, IreneArtigues, RaymondHoll, CarolynHoll, TheodoreKinsey, JanaeLawrence, TonyaOtt, EmilyOtt, Gareth

1612.4.5 **Deferred Retirements:**

The Board ratified the actions as listed below for the following members regarding deferred retirements:

Member NameRetirement Plan TypeBixler, Jonathan D.G4, Vested - ReciprocityBols, Johannes H.G4, VestedClark, Ellen MyraG4, Vested

Colston, Charles G7, Non-vested – Reciprocity

Espera, Annie A. G4, Vested

Goyal, Dolly E.

G4, Vested - Reciprocity

G4, Vested - Reciprocity

G4, Vested - Reciprocity

G3, Non-vested - Reciprocity

G7, Non-vested - Reciprocity

G3/G4, Vested - Reciprocity

G3/G4, Vested - Reciprocity

Tan, Lay-Ting G4, Vested

1612.4.6 Member Account Refunds:

The Board ratified the actions as listed below for the following members regarding refunds:

Member Name Retirement Plan Type Caba, Edwin G7, Non-vested Contreras, Jesenia G7, Non-vested Ellis, Joe G5, Non-vested Espinoza, Francoise G4, Vested G7, Non-vested Flowers-Ned, Traci Grinner, Aisha G4, Non-vested Molina, Samantha G4, Non-vested Nunn, Lolita G7, Non-vested Piol, Divina G4, Non-vested

1612.4.7 Member Account Rollovers:

The Board ratified the actions as listed below for the following members regarding rollovers:

Member NameRetirement Plan TypeHyman, ElizabethS7, Non-vestedRee, SarahG7, Non-vestedStafford, KarrieG4, Non-vestedVasquez, KristyG4, Vested

1612.4.8 **Member Account Redeposit:** None.

- **Approval of Extended Service Purchase Contract:** The Board approved a two-year payment period for a redeposit of funds by David Sisneros, pursuant to Government Code Section 31652.
- Approval of Resolutions Amending Definitions of Compensation Earnable and Pensionable Compensation
 The Board approved a new non-pensionable earnings code (089) for Relocation Allowance to be effective
 October 23, 2016, and adopted the following resolutions: (1) a resolution defining compensation earnable,

pursuant to Government Code §31461 for members who are not subject to Government Code §7522.34 and (2) a resolution defining Pensionable Compensation for members who are subject to Government Code §7522.34.

- Approval of Questions for Annual Review of Brown Armstrong Accountancy Corporation: The Board reviewed and approved the "Questions for Annual Auditor Consultant Evaluation" as presented.
- 1612.5.1 **Consideration of Agenda Items, if any, removed from the Consent Agenda:** The Board adjourned into closed session at 10:10 a.m. to initially review the disability application of Rebecca Nassarre, Item 4.1, with the member present, which was removed from the Consent Agenda. The meeting reconvened at 10:30 a.m. and Ms. Carlson reported the following action by the Board:

Action: Mr. Battey made a motion to approve staff's recommendation, and found that Rebecca Nassarre is permanently incapacitated for the performance of her usual and customary duties as a Social Worker III; and found that her disability was not a result of an injury/illness arising out of and in the course of her employment and thus had denied her application for a service-connected disability; and granted her a non-service-connected disability retirement. The motion was seconded by Mr. Tashman, and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

- 1612.6.1 **Preliminary Monthly Portfolio Performance Report for the Period Ended October 31, 2016**: Mr. Coultrip discussed the preliminary monthly performance report with the Board. He reported that SamCERA's net preliminary return for October 2016 was -1.0%, while the preliminary trailing twelve-month return ending October 2016 was 4.5% net. This item was informational and for discussion only, no action was taken.
- Report on Quarterly Investment Performance Report Ended September 30, 2016: Mr. Coultrip and Mr. Quirk reviewed the quarterly report with the Board. They reviewed manager performance, market trends, election effects, and discussed details within the report. The 3rd quarter net total return for the SamCERA portfolio was 3.7%, which was 10 bps lower than the 3.8% policy benchmark return. This item was informational and for discussion only, no action was taken.
- 1612.6.3 **Report on Hedge Fund Absolute Return and Risk Parity Manager Annual Reviews:** Mr. Coultrip reported that on October 13, staff met with representatives from AQR's Global Risk Premium fund, AQR's Delta fund, and Pan Agora's Diversified Risk Multi Asset fund. He reported there were no significant concerns identified during the annual review, and directed the Board to the confidential notes in their packet for more information. This item was informational and for discussion only, no action was taken.
- Approval of Implementation Plan for the Revised Asset Allocation Policy: Mr. Coultrip and Mr. Quirk discussed details of the plan to implement the new asset allocation policy portfolio, as approved by the Board in October. A three-phase timeline was discussed, with some portions of the plan being implemented immediately, others in 3-6 months, and still others will require a multiyear implementation process. The implementation plan seeks to increase low cost passive management, terminate certain managers and convert SamCERA's investment in the S&P 500 Index to the Russell 1000 Index.

Action: Mr. Tashman moved to approve the implementation plan (alternative 2) as recommended, including the closure of investments with Barrow Hanley and Brown Advisory. The motion was seconded by Ms. Arnott, and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

Mr. Hackleman adjourned the meeting for lunch at 11:42 a.m., and reconvened at 12:15 p.m.

Approval of Proposed Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.26, see item C4): Immediately following lunch, the meeting was adjourned into closed session to discuss item 6.7, which was heard out of order. The meeting was reconvened at 12:55 p.m. and Ms. Carlson reported the following two actions taken by the Board in closed session:

Action: Mr. Battey moved to approve an investment of \$20 million in Great Hill Fund #6. The motion was seconded by Mr. Tashman and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

Action: Mr. Hoefer moved to approve an investment of up to \$10 million in ABRY Senior Equity V. The motion was seconded by Mr. Battey and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

Approval of Risk Parity Policy Benchmark Change: Mr. Coultrip explained the benefits of the proposed change in the risk parity policy benchmark, from a domestic-only balanced index to a global balanced index. He stated this would be on a go-forward basis.

Action: Mr. Tashman made a motion to approve changing the risk parity policy benchmark from a domestic-only balanced index, to a global balanced index, of 60% MSCI World/40% Global BC Aggregate. The motion was seconded by Ms. Arnott, and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

Item 7.1 was heard next, out of order.

1612.7.1 Workshop on Delegation of Investment Activities and Direction to Staff (part 2): Mr. Hood introduced the staff report and Mr. Coultrip reviewed the previous discussions on this topic that took place at the Board's October and November meetings. Board members who were not present at the previous discussions provided feedback. A comprehensive discussion followed between Board members, staff and legal counsel and included such topics as: transparency and context; expertise of consultants; expertise of Board members; fiduciary obligations and duties; oversight and monitoring; comfort levels of individual Board members with regard to delegation; the larger impact of asset allocation versus manager selection; varied approaches for different types of investment decisions; and role of the Investment Committee.

Mr. Hackleman summarized the discussion to help give direction to staff. Mr. Hackleman stated that a majority of the Board was comfortable with the "interim steps delegated approach" to the public market investments; and noted that concerns remained for some Board members regarding the process, the criteria for selection, the information provided, and the involvement of the Board in the decision-making process.

Mr. Coultrip reviewed the role of staff and the consultant in the manager selection and strategy recommendations with regard to private equity. Mr. Coultrip explained the current processes and offered alternative approaches for selection and "re-ups" of alternative and private equity investments. The Board's feedback to staff was to continue the current process, to possibly consider using another approach for "re-ups" only, and to provide context for each of the individual selections and how they fit into SamCERA's portfolio. Board members suggested that this topic be discussed in more detail at the Board-Staff retreat in April.

1612.7.1 This item was informational and for discussion only, no action was taken. (con't)

The Board meeting was adjourned for a break at 1:55 pm, and reconvened at 2:05 p.m. Item 6.6 was heard next, out of order.

Approval of Issuance of Request for Proposal for Investment Consultant Services: Mr. Coultrip reviewed the history of SamCERA's contractual relationship with Strategic Investment Solutions (SIS) since 2001, and with Verus, after the merger of SIS and Verus in 2015. He provided a timeline of actions for an RFP process that would begin in January 2017. An Ad-Hoc committee would be appointed by the Chair to assist in the selection process. Board members were asked to contact the Chair within one week if they wished to serve on the committee. The "quiet period" with no individual contact between proposers and Board members was also discussed.

Action: Mr. Battey moved to approve the issuance of a Request for Proposal for Investment Consulting Services. The motion was seconded by Ms. Arnott, and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

Approval of Resolution Amending Board's Education Policy: Mr. Battey, Chair of the Ad-Hoc Education Committee, stated that the committee had met twice, and the recommendations were the result of those meetings. Three of the four committee members were in favor of the proposed changes. Proposed amendments included: reducing the list of preapproved educational events by eliminating some events for various reasons; reducing the number of overnight trips; setting a higher bar for traveling out of state, focusing more on regional events; and requiring trustees to submit a written report of the event to be placed on the consent agenda. A suggestion to review and update the policy annually was included after the Board's discussion.

Action: Mr. Tashman moved to approve a resolution revising the Board's Education Policy. The motion was seconded by Mr. Battey. A roll call vote was taken. The motion carried by a vote of 5-2, with trustees Arnott, Battey, Hackleman, Hoefer, and Tashman, all in favor; Lee (for vacant Third Seat) and Spinello opposed.

Approval of Special Election to Fill Vacancy on the Board of Retirement: With Natalie Kwan-Lloyd's, departure from County employment and the Board, Mr. Hood explained the process for a special election to fill the vacancy in the elected Third Seat, which is for an active General Member. To allow for candidate nomination deadlines and other election requirements, March 13, 2017 was the recommended special election date.

Action: Mr. Tashman moved to approve a resolution calling for a Special Election on March 13, 2017 to fill the vacancy in the Third Seat of the Board of Retirement. The motion was seconded by Ms. Arnott and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

1612.8.1 **Chief Executive Officer's Report:** Mr. Hood noted the PAFR and the SACRS magazine were in the Board members' folders, as well as the RVK report in Drobox. He reported that the PASS project was in its final stages before "go live." He stated that the internal controls audit report showed no issues in the draft report, and he will update the Board when the final report is received; and also reported that SamCERA received a refund of overcharged fees from State Street. Mr. Hood also previewed items that would appear on next month's meeting agenda including the annual review of the auditor, and mentioned additional topics for the Board /Staff retreat.

- Assistant Executive Officer's Report: Ms. Smith reported that the Financial Knowledge Network classes have been scheduled for the spring. She noted that County HR Benefits Manager, Lisa Okada, had approached her to suggest collaborating in order to combine SamCERA classes with seminars on deferred comp for County employees. Ms. Smith reported that the Board calendar was being updated to Outlook, to be more helpful. Ms. Perez noted the list of educational events in the Board members' folders.
- 1610.8.3 **Chief Investment Officer's Report:** Mr. Coultrip reported discussions he was having with '37 Act peers about logistics and best practices to comply with the new statutory disclosure requirements, effective January 2017.
- 1610.8.4 Chief Legal Counsel's Report: Ms. Carlson reported that the Marin County Employees' Retirement Association case addressing "vested rights" of current employees, will be reviewed by the California Supreme Court, after a similar Contra Costa County Employees' Retirement Association case pending in the Court of Appeal is concluded. She reported that a settlement was reached in the Royal Bank of Scotland class action case, and SamCERA was a claimant. Ms. Carlson will give more information to the Board after the settlement process is completed. Additionally, she mentioned a new law that becomes effective in 2017, whereby the Alternate Retiree representative, (currently Ms. Salas) will be the alternate for the 8th member, as well as for other elected Trustees, the Second and Third Members, pursuant to the conditions as set forth in the statute.
 - C1 Consideration of Disability Items, if any, removed from the Consent Agenda: See report on Item 5.1 above.
 - C2 Public Employee Performance Evaluation, in accordance with Gov. Code § 54957

Title: Chief Executive Officer: The Board adjourned into closed session to discuss item C2. Ms. Carlson gave the following report:

Action: The Board met with Scott Hood to evaluate his performance in 2016. No reportable action was taken.

C3 Conference with Labor Negotiator, in Accordance with Gov. Code §54957.6

Designated Representative: Brenda B. Carlson. Employee Position: Chief Executive Officer The Board adjourned into closed session to discuss item C3. Ms. Carlson reported the following action was taken:

Action: Ms. Carlson received direction from the Board.

- C4 Approval of Proposed Alternative Investments (Confidential Under Gov. Code §54956.81 and §6254.26): See report on Item 6.7.
- Approval of Resolution Amending Agreement for Services of Chief Executive Officer (Heard after item C3): Upon reconvening into public session at 4:00 p.m., the Board took the following action:

Action: Mr. Battey moved to adopt a resolution amending the agreement for services of the CEO, to reflect an increase in salary. The motion was seconded by Mr. Tashman and carried with a vote of 7-0 with trustees Arnott, Battey, Hackleman, Hoefer, Lee (for vacant Third Seat), Spinello, and Tashman, all in favor; none opposed.

- 1610.9 **Report on Actions Taken in Closed Session:** See above.
- 1610.10 **Adjournment:** Mr. Hackleman adjourned the meeting at 4:03 p.m. in memory of the deceased members listed below.

Barberis, Mary September 24, 2016 Chope Hospital

Forsythe, Robert September 29, 2016 Sheriff's

Tolden, William	September 29, 2016	Aging & Adult Services
Ott, Gareth	October 1, 2016	Health Services
Jensen, Robert	October 7, 2016	Assessor's
Davies, Priscilla	October 9, 2016	Mental Health
Smith, Viola	October 9, 2016	Correctional Health
Souza, Irene	October 10, 2016	Chope Hospital
Lieb, Darrell	October 24, 2016	Public Works
Duwick, Joanne	October 30, 2016	Public Health
Hanners, Linda	November 4, 2016	Health & Welfare
Woodhams, Gary	November 6, 2016	Parks & Recreation
Myers, Judith	November 7, 2016	Courts
Cross, Frederick	November 19, 2016	Probation

Scott Hood Chief Executive Officer Kristina Perez

Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017 Agenda Items 4.1- 4.8

TO: Board of Retirement

FROM: Elizabeth LeNguyen, Retirement Benefits Manager

SUBJECT: Approval of Consent Agenda Items 4.1 – 4.8

4.1 Disability Retirements

a) The Board find that **Cherlene Wright** is (1) permanently incapacitated for the performance of her usual and customary duties as a Probation Officer III, (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.

4.2 Survivor Death Benefits

None

4.3 Service Retirements

The Board ratifies the actions as listed below for the following members regarding service retirements:

Member Name	Effective Retirement Date	Department
Alexander, David	November 12, 2016	Public Health
Baw, Terrance	November 17, 2016	Deferred from Medical Center
Charton, Bonnie	December 1, 2016	Aging & Adult Services
Jones-Dulin, Donna	November 5, 2016	Deferred from Human Resources
Nelson, Gerard	November 16, 2016	Information Services Dept.
Stiavetti, Robert	November 19, 2016	Public Works
Wong, Yim	December 1, 2016	Human Services Agency

4.4 Continuances

The Board ratifies the actions as listed below for the following members regarding continuances:

Survivor's Name	Beneficiary of:		
Cross, Alice	Cross, Frederick		
Lieb, Margie	Lieb, Darrell		

4.5 <u>Deferred Retirements</u>

The Board ratifies the actions as listed below for the following members regarding deferred retirements:

Member Name	Retirement Plan Type
Anderson, Elinor M.	G4, Vested
Arteaga, Lorenzo	G2/3, Vested
Bains, Himmat S.	G4, Deferred
Banuelos, Regina M.	G4, Non-Vested - Reciprocity
Davenport, Donald W.	S4, Vested
Dones, Mary Ann S.	G4, Vested
Duran, Lanelle L.	G4, Vested
De La Rocha, Dana R.	S4, Vested
Flores, Amy B.	P4, Vested - Reciprocity
Garcia, Edelzar V.	G2, Vested - Reciprocity
Green, Quimani	G4, Vested - Reciprocity
He, Xin	G7, Non-Vested - Reciprocity
Luporini, Nicole R.	P4, Vested - Reciprocity
Morales-Cruz, Erica P.	G4, Vested
Murphy, Cynthia	G2, Deferred - Reciprocity
Vite, Emie F.	G4, Vested

4.6 Member Account Refunds

The Board ratifies the actions as listed below for the following members regarding refunds:

Member Name	Retirement Plan Type
Capitola-Duran, Jodi	G7, Non-vested
Castaneda, Dalia	G7, Non-vested
Fleming, Teasha	G7, Non-vested
Mahafutau, Rossana	G4, Vested
Nyakudya, Paula	G7, Non-vested
Rillera, Clarence	G7, Non-vested
Vargas, Lauren	S7, Non-vested

4.7 Member Account Rollovers

The Board ratifies the actions as listed below for the following members regarding rollovers:

Member Name	Retirement Plan Type
Edsal, Sidney	G7, Non-vested
Moghis, Irene	G7, Non-vested
Radoc, Yolanda	G4, Non-vested

4.8 Member Account Redeposits

None

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 4.9

TO:

Board of Retirement

FROM:

Doris Ng, Retirement Investment Analyst

SUBJECT:

Semi-Annual Compliance Certification Statements for Period Ended

December 31, 2016

Staff Recommendation

Accept the semi-annual Compliance Certification Statements for SamCERA's non-alternative investment managers, as of December 31, 2016.

Background

As part of SamCERA's ongoing due diligence process, the Compliance Certification Statement is completed by each of the association's public equity, fixed income, real estate, risk parity and cash overlay investment managers on a semi-annual basis. These statements are used to update SamCERA on any firm-wide compliance issues and to provide strategic-level information regarding such things as derivatives and portfolio positioning. For investment managers whose investments are considered "alternative investment vehicles" per the California Government Section Code §6254.26, the Compliance Certification Statements are not provided in the public board packet and will be sent separately to the Board.

Discussion

The attached Compliance Certification Statements report that SamCERA's investment managers are in compliance with SamCERA's Investment Policy as of December 31, 2016. There were no reported significant developments in portfolio construction, investment approach, firm ownership or organizational structure. There were no notable issues regarding industry or regulatory actions that impact SamCERA. The managers were also requested to provide data regarding the characteristics and composition of their portfolios. No prominent issues were identified during the review. Any items that raise concern will be brought to the manager's attention and will be thoroughly vetted by staff.

Please note the Compliance Certification Statements for BlackRock and Franklin Templeton were not received in time to be included in the mailing, but will be included in the February board packet.

Attachments

Compliance Certification Statement Matrix 12-2016 Compliance Certification Statements (10)

A. Domestic Equity: QMA

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

- B. <u>International Equity Developed</u>: Baillie Gifford, Mondrian, Fidelity Institutional Asset Management (FIAM)
- C. <u>Emerging Market Equity</u>: Eaton Vance Parametric
- D. <u>Domestic Fixed Income</u>: Brown Brothers Harriman, Fidelity Institutional Asset Management (FIAM), Western Asset Management
- E. Real Estate: INVESCO
- F. <u>Cash Overlay</u>: The Clifton Group (Parametric)

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Domestic Equity					
BlackRock S&P	Pending Information				
DE Shaw		Confidential	l under California Gov. S	Section Code §6254.26	
QMA		 Dec 2016-Scott Hayward, CEO left QMA April 2017-Andrew Dyson assume CEO role 	No Concerns	No Concerns	 Largest holding, The GEO Group 0.89% Largest industry: Banks 11.06% vs. Russell 2000 bmk 11.87%
International Equity - Developed					
Baillie Gifford		No Concerns	Not Applicable	No Concerns	7.79% ADRs22.7% Emerging Markets (as of 9/30/16)
BlackRock EAFE	Pending Information				
Mondrian		No Concerns	Not Applicable	No Concerns	20.09% Emerging Markets (MIP Ltd Prtnshp)

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Fidelity Institutional Asset Management (FIAM) Select International Small Cap		 Nov 2016-Abby Johnson replaced Edward C. Johnson (retired) as FMR LLC Chairman Dec 2016 – Chris Steward, PM of strategy left. Investment Director Kevin Smith added to team Jan 2017. 	Not Applicable	No Concerns	20.21% Emerging Markets
Emerging Market Equity					
Eaton Vance Parametric		No Concerns	Not Applicable	No Concerns	 7.2% ADRs 8.2% GDRs 3.95% in Frontier Markets Vestige (include non- bbmrk holdings) – 38.9%
Domestic Fixed Income					
Angelo Gordon OWL		Confidential	l under California Gov. S	Section Code §6254.26	
Angelo Gordon STAR		Confidential	l under California Gov. S	Section Code §6254.26	

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Beach Point		Confidentia	l under California Gov. S	ection Code §6254.26	
Brigade		Confidentia	l under California Gov. S	ection Code §6254.26	
Brown Brothers Harriman		No Concerns	No Concerns	No Concerns	No Concerns
Fidelity Institutional Asset Management (FIAM) BMD Bond		 Nov 2016-Abby Johnson replaced Edward C. Johnson (retired) as FMR LLC Chairman Aug 2016-Chris Bartel named Glbl Hd of Fixed Inc Research 	No Concerns	No Concerns	 2.9% below inv grade (inv grade at purchase) 4% in Rule 144A securities
Western		No Concerns	 Largest single counterparty: BAML 2.571% of portfolio 	No Concerns	• 1.7% Rule 144A securities
Global Fixed Income					
Franklin Templeton	Pending Information				

Investment Manager	Mandate	General Compliance Issues	Derivative Instruments	Investment Manager Guidelines	Mandate Specific
Real Estate					
Invesco (U.S. Core Real Estate Fund)		 July 2016-Claiborne Johnston, Managing Dir, Client PM & Steering Committee Mbr for Fund left firm 	Not Applicable	No Concerns	No Concerns
Invesco (U.S. Value-Add Fund IV)		Confidential under California Gov. Section Code §6254.26			
Risk Parity					
AQR	Confidential under California Gov. Section Code §6254.26				
PanAgora	Confidential under California Gov. Section Code §6254.26				
Cash Overlay					
The Clifton Group (Parametric)		No Concerns	No Concerns	No Concerns	No Concerns

²¹ Total

¹⁰ Completed

³ Pending Information

⁸ Confidential

Quantitative Management Associates U.S. Small Cap Core - December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, **January 9, 2017**.

General Compliance Issues

	RECORNERS OF THE CONTROL OF THE CONT
1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? X Yes: Please explain. / No
	On October 31, 2016, after more than a decade of leadership, Scott Hayward, QMA's Chief Executive Officer (CEO), announced that he will be leaving QMA at the end of 2016 to take on a new challenge. Effective April 2017, Andrew Dyson will assume the role of CEO.
2.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒ No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
4.	Have proxy ballots been voted in accordance with the best economic interest of $SamCERA$? \boxtimes Yes / \square No: Please explain.
5.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.
[n	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No

Derivative Investments 1. Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section. We may use fully collateralized exchange-listed stock index futures or ETF's to remain fully invested. 2. If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain. N/A. We do not utilize non-exchange-listed derivatives in this strategy. 3. For non-exchange traded derivative transactions, were the counter-parties broker/dealers? ☐ Yes / ☐ No N/A. We do not currently use derivatives in your account. If Yes: a) Do the counter-parties have investment grade debt? \(\subseteq \text{Yes} / \subseteq \text{No} \) b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain. 4. For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No N/A. We do not utilize non-exchange-listed derivatives in this strategy. If Yes:

- a) Do the counter-parties have investment grade debt? Yes/ No
- b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances?

Yes/ No: Please explain.

- 5. Is individual counter-party exposure well diversified? X Yes/ No: Please explain.
 - a) What is the largest exposure to a single counter-party within the portfolio?
 - b) Please specify the name of the counter-party and the amount of exposure.
 - c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?

N/A. We do not currently, nor have we used, derivatives in your account.

6. Specify the security pricing sources used when developing portfolio market value exposures for non-exchange traded derivative positions.

N/A. We do not utilize non-exchange-listed derivatives in this strategy.

7. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Transactions for client accounts must be made through brokers (including prime brokers), futures commission merchants, and other counterparties (for example, swap counterparties) on our approved counterparty list.

Counterparties are approved by QMA's Chief Investment Officer. Criteria for approval include:

- Financial and operational stability (including, but not limited to, profitability, liquidity, financial metrics, economic factors, size, market presence, and reputation);
- Execution, clearance, and settlement capabilities; and
- Commission rates (if applicable) and other transaction costs.

In selecting a counterparty for a particular transaction, we also consider factors such as the following:

- The nature of the portfolio transaction
- The size of the transaction
- The desired timing of the trade
- The activity existing and expected in the market for the particular transaction
- Confidentiality i.e. not revealing details about our trades or trading patterns with other brokers or market participants
- The amount of capital, if any, that would be contributed by firms executing the transaction
- Administrative cooperation

A prime brokerage relationship is one that provides services such as securities lending, leveraged trade execution, and cash management. Prime brokerage services are integral for investment strategies that require short sales of equity securities. Specific criteria for prime broker selection and approval at QMA include depth of shorting availability, strong knowledge of local shorting laws, and regular shorting costs updates.

Monitoring of certain counterparties is performed on an ongoing basis by reviewing specific credit metrics such as credit spread and credit rating. Our chief investment officer and head of trading review the metrics to assess potential exposures. Other non-credit metrics reviewed by our risk management function include stock price and collateral posting activity.

Our compliance group maintains the approved counterparty list. We may set dollar exposure limits on a net basis for a counterparty. Class types and corresponding dollar limits

are directly related to the risk of the transaction, transaction collateral, and our opinion regarding the creditworthiness of the counterparty. We analyze the financial and operational stability of approved counterparties, and consider new proposed counterparties from time to time. We may add or remove counterparties from our approved list based on this ongoing review. Our trade management oversight committee, which meets periodically, reviews and assesses counterparty usage data, patterns (if any) relating to counterparty use, and other information relevant to our counterparty selection process.

8.	State if the legal and regulatory risk associated with portfolio derivative investments ha	ave
	changed over the past \underline{six} months. \square Yes: Please explain. $/ \boxtimes No$	

We do not currently, nor have we used, derivatives in your account.

Domestic Equity Portfolios (Large, Mid & Small)

1. Please state the percentage of the portfolio held in each of the following types of securities

Common Stock	92.62%
Preferred Stock	0%
Convertible Securities	0%
Cash & Equivalents	0.27%
REITs	7.11

As of 12/31/2016

2. Specify the large, mid and small capitalization exposure of the portfolios? Please specify percentages.

Large-Cap	0%
Mid-Cap	1.81%
Small-Cap	97.92%
Cash	0.27%

As of 12/31/2016

3. Specify the percentage of the portfolio that is invested in American Depository Receipts (ADR's). Also, specify the percentage of the portfolio invested in ADR securities that are 144A securities. If greater than 10%, explain why.

0%.

- 4. Does the portfolio invest in emerging and/or frontier markets?

 Yes /

 No
 - a) If **Yes**, please specify the percentage(s) of the portfolio invested in emerging and/or frontier markets.

- 5. What is the largest percentage of the portfolio represented by a single security? Specify the name of the security and percentage amount. If any securities were above 5% at the time of purchase, please list and explain why.
 - As of 12/31/2016, the largest holding in your account, The Geo Group (Cusip 36162J106) made up 0.89% of your assets.
- 6. What is the largest percentage of the portfolio represented by a single industry? Specify the industry, percentage amount and size relative to benchmark. Please specify all industries above 15%.

As of 12/31/2016, the largest industry in your portfolio was Banks, which made up 11.06% of the portfolio. By contrast the Russell 2000® Index held 11.87% in banks, which is a difference of -0.80%.

*The Russell 2000® Index is a trademark/service mark of the Frank Russell Company. Russell® is a trademark of the Frank Russell Company.

7. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

This information is not yet available. We will send it along as soon as possible.

Account	As of 12/31/2016	% of Firm AUM
US Small Cap Core		
SamCERA	\$124,347,919	
Firm		

Signed by: Brad Zenz

Dated: January 13, 2016

Name of Firm QMA (Quantitative Management Associates, LLC)

Baillie Gifford Overseas International Growth - December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday, January 9, 2017</u>.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? ∑ Yes / ☐ No: Please explain.
2.	Are SamCERA's market benchmarks in the respective asset class areas acceptable to the firm? ☑ Yes / ☐ No: Please explain.
3.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
4.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒ No
5.	Do SamCERA's guidelines require your firm to manage the portfolio significantly differently than other similar portfolios? ☐ Yes: Please explain. / ☒ No
6.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
7.	Have proxy ballots been voted in accordance with the best economic interest of SamCERA and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
8.	Have there been any investment guideline breaches during the prior 6 months? \square Yes: Please explain. $/$ \bowtie No
9.	Has the firm's insurance coverage been sustained? ☑ Yes / ☐ No: Please explain.

Investment Management Fees

1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	erivative Investments
1.	Are derivatives used in the management of the investment strategy? ☐ Yes: Please ANSWER the remaining questions in this section. ☐ No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? \square Yes / \square No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? \square Yes / \square No
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/ ☐ No: Please explain.
6.	Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure.

	c) Have there been any changes to the investment manager's list of approved counterparties over the past \underline{six} months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated SamCERA's policies? Yes / No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? $\hfill \Box$ Yes: Please explain. / $\hfill \Box$ No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in SamCERA's portfolios. Yes / No
	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? \square Yes / \square No: Please explain.
11.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? \square Yes / \square No: Please explain.
12.	Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/$ \square No
Inv	estment Manager Guidelines

1. Are portfolio holdings well-diversified, and made in liquid securities?

2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? \square Yes: Please explain. $/$ \boxtimes No
Ca	sh & Equivalents
1.	Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No
	a) If Yes, do the investments comply with the policies? Yes / No: Please explain.
In	ternational Equity Portfolios - Developed
	Specify the percentage of the portfolio held in each of the following types of securities:
1.	specify the percentage of the portions held in each of the following types of securities.
	Foreign Ordinary Shares 89.98%
	ADR's 7.79%
	Cash & Equivalents (Foreign) 1.92%
	Cash & Equivalents (Domestic) 0.31%
2.	Specify the large, mid and small capitalization exposure of the portfolios. Large-Cap 66.93% Mid-Cap 29.44% Small-Cap 3.63%
3.	Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? \boxtimes Yes / \square No: Please explain
4.	Does the portfolio invest in emerging and/or frontier markets? 🖂 Yes / 🗌 No
	 a) If Yes, please specify the percentage(s) of the portfolio invested in emerging and/or frontier markets. 22.7% of SamCERA's portfolio is invested in Emerging Markets as at 30 September 2016.
5.	Does the portfolio currently employ a currency hedging strategy? \square Yes / \boxtimes No
6.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?
	As at 30 September 2016, firm wide assets under management were \$191,634 million, whilst the ACWI ex US Focus strategy held \$8,084 million in assets, 4.2% of overall firm assets.

On the same date SamCERA's portfolio held \$220 million, comprising 2.7% of strategy assets.

We are happy to provide data as at 31 December 2016 once available.

Signed by: Kathrin Hamilton

Dated:

Dated: 01 06/2077
Name of Firm: Baillie Gifford Overseas Limited



Mondrian Investment Partners International Value – December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by **Monday, January 9, 2017**.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of SamCERA? Yes / No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☐ No
4.	Do SamCERA's guidelines require your firm to manage the portfolio significantly differently than other similar portfolios?
	Yes: Please explain. / No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. $/ \boxtimes No$
6.	Have proxy ballots been voted in accordance with the best economic interest of SamCERA and in a manner consistent with the Board's proxy policies? Yes / No: Please explain.
7.	Have there been any investment guideline breaches during the prior 6 months? Yes: Please explain. / No
8.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.

Investment Management Fees

1.	institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
	In accordance with the terms of Clause 2.2 of the investment management agreement, during the term of the agreement, Mondrian has not agreed to charge any other institutional client an effective fee lower than the fees charged to SamCERA for an account substantially similar to the SamCERA assets in terms of size, investment objectives and guidelines and degree of services provided.
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
6.	Is individual counter-party exposure well diversified? \(\subseteq \text{Yes} / \subseteq \text{No: Please explain.} \)

	 a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated SamCERA's policies?
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/$ \square No
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment.
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in <i>SamCERA's</i> portfolios. Yes / No a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain.
11.	Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? Yes / No: Please explain.
12.	Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
13.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
14.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past $\underline{\sin}$ months. \square Yes: Please explain. $/ \square$ No

In	vestment Man	nager Guidelines			
1.	Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.				
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No				
Ca	ash & Equival	ents			
1.	. Does the firm directly invest in short term fixed income investments? \(\subseteq \text{Yes} / \subseteq \text{No} \)				
	a) If Yes , do	the investments comply with the	e policies? Yes /	☐ No: Please explain.	
Int	ternational Eq	uity Portfolios - Developed			
1.	. Specify the percentage of the portfolio held in each of the following types of securities.				
	Γ	Foreign Ordinary Shares	78.76%		
	Ī	ADR's	0%		
	1	MIP Limited Partnership	20.09%		
		Cash & Equivalents (Foreign)	0.65%		
		Cash & Equivalents (Domestic)	0.5%		
2.	Specify the lan	rge, mid and small capitalization	exposure of the porti	folios.	
		T C > 111	00.050/		
		Large-Cap>11bn	80.95%		
		Mid-Cap 3.5bn – 11bn	14.66%		
		Small-Cap<3.5bn	2.94%		
3.		onitoring the country, currency, lio? X Yes / No: Please ex		selection risks associated	
4.	Does the portf	folio invest in emerging and/or fr	ontier markets? 🛛 Y	Yes / 🗌 No	
	a) If Yes, pl	ease specify the percentage(s)	of the portfolio inve	ested in emerging and/or	

The portfolio gains exposure to emerging markets through the Mondrian Emerging Markets Equity Fund, L.P. As at 31 Dec 2016, the portfolio held 20.09% in this

5. Does the portfolio currently employ a currency hedging strategy?

Yes /

No

frontier markets

Fund.

Whilst the portfolio may utilize currency hedging strategies, there were no open positions at 31 December 2016.

6. What proportion of total AUM do the assets in this product make-up of the firm? 8.1%* What size does SamCERA's account comprise of total product assets? 3.5%* *these are preliminary year end numbers

Signed by: Dated:

John L Barrett 9 January 2017

Name of Firm: Mondrian Investment Partners Limited

Fidelity Institutional Asset Management SISC

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, January 9, 2017.

Select International Small Cap Plus.

1

Firm Name	Fidelity Institutional Asset Management Trust Company (FIAMTC)
Product Name	FIAM Select International Small Cap Plus
Asset Class	International Equity
Respondent/Contact	Melissa Boissy, Senior Account Executive
Address	900 Salem Street, Smithfield, RI 02917
Telephone	401-292-7816
Email Address	Melissa.boissy@fmr.com

Ge	eneral Compliance Issues
1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
\boxtimes	Yes: Please explain. / ☐ No
	ce the last Compliance Certification statement, the following material senior leadership and investment team sonnel changes have taken place at FIAM and Fidelity:
	 In November 2016, Edward C. Johnson, 3d retired as Chairman of FMR LLC, Fidelity's parent company. Abby Johnson Chief Executive Officer of Fidelity, assumed the role of Chairman of FMR LLC. As Chairman and Chief Executive Officer, Abby will have responsibility for the management of all FMR LLC businesses.
	 Chris Steward, an Institutional Portfolio Manager in support of the Select International Small Cap Plus strategy left the firm in December 2016 and Investment Director Kevin Smith, who has worked closely with the investment team since inception of the strategy, was formally added to the team in January 2017.
2.	Have there been any changes in the firm's investment approach?
	Yes: Please explain. / ⊠ No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm?
	Yes: Please explain. / ☐ No
volu	om time to time, in the normal course of its business, the Firm may receive inquiries (including subpoenas and untary requests for information) from regulatory authorities or law enforcement. A regulator may conduct an onsite amination or may commence an investigation.



The Firm does not make public comment about such inquiries, examinations or investigations unless, and until, a regulatory body initiates enforcement proceedings. To the extent the Firm's securities affiliates have been sanctioned, fined, or cited by the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), or any other regulatory body, any such sanction, fine or citation has been disclosed in its affiliates' Forms BD and/or Forms ADV in accordance with the requirements of such forms.

	Yes / No: Please explain.
	Has the firm's insurance coverage been sustained? Yes / ☐ No: Please explain.
lην	restment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours?
	☐ Yes: Please explain. / ⊠ No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy?
	☐ Yes: Please ANSWER the remaining questions in this section.☐ No: Please SKIP the remaining questions in this section.
2.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated?
	☐ Yes / ☐ No: Please explain.
3.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers?
	If Yes:
	a) Do the counter-parties have investment grade debt?
	☐ Yes/ ☐ No
	b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances?
	☐ Yes/ ☐ No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)?
	☐ Yes / ☐ No



	If Yes:
	a) Do the counter-parties have investment grade debt?
	☐ Yes/ ☐ No
	b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances?
	☐ Yes/ ☐ No: Please explain.
5.	Is individual counter-party exposure well diversified?
	Yes/ ☐ No: Please explain.
	a) What is the largest exposure to a single counter-party within the portfolio?
	b) Please specify the name of the counter-party and the amount of exposure.
	c) Have there been any changes to the investment manager's list of approved counter-parties ove the past <u>six</u> months?
6.	Specify the security pricing sources used when developing portfolio market value exposures for non-exchanged traded derivative positions.
7.	Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.
8.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past <u>six</u> months.
	Yes: Please explain. / No
ln۱	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified, and made in liquid securities?
\boxtimes	Yes / ☐ No: Please explain.
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities
П	Yes: Please explain. / ⊠ No



International Equity Portfolios - Developed

1. Specify the percentage of the portfolio held in each of the following types of securities

Foreign Ordinary Shares	98.2%
ADR's	0%
Cash & Equivalents (Foreign)	0%
Cash & Equivalents (Domestic)	1.8%

2. Specify the large, mid and small capitalization exposure of the portfolios.

The Select International Small Cap Plus portfolio's market capitalization allocation as of December 31, 2016 is provided in the table below. Please note the data provided excludes cash.

	Weight (%)
10b to 20b	0.9
5b to 10b	9.0
2b to 5b	39.0
1b to 2b	27.8
0.5b to 1b	13.1
0.2b to 0.5b	7.1
Below 0.2b	1.0
N/A	0.5

3.	Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio?
\boxtimes	Yes / ☐ No: Please explain
4.	Does the portfolio invest in emerging and/or frontier markets?
\boxtimes	Yes / No
	a) If Yes, please specify the allocation of the portfolio invested in emerging and/or frontier markets
	The portfolio invests in emerging markets. As of December 31, 2016, the portfolio's allocation to emerging markets was 20.21%
5.	Does the portfolio currently employ a currency hedging strategy?
	Yes / ⊠ No



6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

As of December 31, 2016, the SamCERA Select International Small Cap Plus account represents approximately 7.2% of the assets in the Select International Small Cap Plus strategy and less than 1% of total FIAM assets.

Signed by:

Dated: January 9, 2017

Melissa Baissy

Name of Firm: Fidelity Institutional Asset Management



Eaton Vance Parametric Emerging Markets Core Fund – December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, **January 9, 2017**.

General Compliance Issues

1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
2.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \bowtie No
4.	Have proxy ballots been voted in accordance with the best economic interest of SamCERA? Yes / No: Please explain.
	Please provide a copy of your firm's proxy policy to Investments@samcera.org .
5.	Has the firm's insurance coverage been sustained? X Yes / No: Please explain.
Inv	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.

2.	Has the fund e	engaged in	short selling	, use of	leverage	or margin	and/or	investments	in
	commodities?								
	Yes: Please	explain. /	⊠ No						

International Equity Portfolios - Emerging

1. Specify the percentage of the portfolio held in each of the following types of securities:

Foreign Ordinary Shares	83.8%
ADR's	7.2%
GDR's	8.2%
Derivatives	0%
Cash & Equivalents (Foreign)	0.4%
Cash & Equivalents (Domestic)	0.3%

2. Specify the large, mid and small capitalization exposure of the portfolios.

Market Cap (USD x 1,000,000	Weight
>50,000	5.10%
15,000 – 50,000	11.37%
7,500 – 15,000	13.26%
1,500 – 7,500	45.35%
750 – 1,500	14.51%
400 – 750	6.34%
<400	4.07%

3. Specify the allocation to frontier markets and to non-benchmark holdings in the portfolio (list both by country).

- 4. Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? X Yes / No: Please explain.
- 5. Does the portfolio currently employ a currency hedging strategy? \(\subseteq\) \(\neq\) \(\neq\) \(\neq\)
- 6. What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?

AUM of this product on 12/31/16 was \$213.8mm USD, while the firm AUM was approximately \$178B which makes the proportion of this product 0.12%. Also as of 12/31/16 SAMCERA consisted of 8,011,840.765 shares worth \$74,641,305 or 34.9722% of this product.

Signed by: Randall Hegarty, Chief Compliance Officer

Dated: January 9, 2017

Name of Firm: Parametric Portfolio Associates

Brown Brothers Harriman Inflation Indexed Securities - December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by **Monday, January 9, 2017**.

General Compliance Issues

1.	Has the firm acted as a fiduciary and invested its assets for the sole benefit of $SamCERA$? \boxtimes Yes / \square No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? \square Yes: Please explain. / \boxtimes No
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☐ No
4.	Do <i>SamCERA's</i> guidelines require your firm to manage the portfolio significantly differently than other similar portfolios? ☐ Yes: Please explain. / ☒ No
5.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \boxtimes No
	From time to time BBH becomes involved in litigation and regulatory matters typical of similar service providers in the industry. BBH currently has no pending litigation or regulatory matters that would materially affect its ability to provide the services requested.
5.	Have there been any investment guideline breaches during the prior 6 months? ☐ Yes: Please explain. / ☐ No
7.	Has the firm's insurance coverage been sustained? ✓ Yes / ✓ No: Please explain.

Investment Management Fees

1. Is *SamCERA*'s investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours?

	☐ Yes: Please explain. / ⊠ No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with <i>SamCERA's</i> investment policies? Yes / No: Please explain.
3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.
	BBH did not enter into any non-exchange traded derivatives in the past 6 months.
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	Not applicable.
	If Yes : a) Do the counter-parties have investment grade debt? Yes/ No No No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? \square Yes / \square No
	Not applicable.
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/ ☐ No: Please explain.
6.	Is individual counter-party exposure well diversified? Yes/ No: Please explain.
	Not applicable.

a) What is the largest exposure to a single counter-party within the portfolio? Not applicable.b) Please specify the name of the counter-party and the amount of exposure. Not applicable.

		over the past <u>six</u> months? Not applicable.
7.		te the investment purposes for a derivative investment consistent with the four purposes ted $SamCERA's$ policies? \boxtimes Yes / \square No: Please explain.
	,	Has the firm developed any new purposes for derivative investments? \square Yes: Please plain. $/ \boxtimes No$
8.		et all limited allocation derivative investments individually and the percentage of the rtfolio's assets represented by each investment.
	W	e have not invested in "limited allocation derivative investments" in the SamCERA portfolio.
	a)	State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. Not applicable.
	b)	State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain. We have not invested in "limited allocation derivative investments" in the SamCERA portfolio.
9.		te if any restricted derivative investments are held in $SamCERA's$ portfolios. Yes / \boxtimes No
		If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.		r derivative investments with allocation limits, has the firm tested and measured these restments' sensitivities to changes in key risk factors? Yes / No: Please explain.
		t applicable. We have not invested in "limited allocation derivative investments" in the mCERA portfolio.
11.		ve all derivative investments been made in a manner consistent with the derivative restment process specified in the policy statement? Xes / No: Please explain.
12.	-	ecify the security pricing sources used when developing portfolio market value exposures limited allocation derivatives.

We have not invested in "limited allocation derivative investments" in the SamCERA portfolio.

c) Have there been any changes to the investment manager's list of approved counter-parties

13. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

BBH uses two derivative instruments in its Inflation Indexed Strategy, U.S. Treasury futures and foreign exchange forward contracts. U.S. Treasury futures are utilized in what we refer to as a long breakeven position, where an expected increase in breakeven inflation rates is targeted through a relative overweight to long maturity U.S. TIPS. The futures provide a hedge against the additional real rate duration associated with this position. In the SamCERA portfolio, U.S. Treasury futures are also utilized to maintain the duration of the TIPS portfolio consistent with that of the Barclay's Aggregate Index. Foreign exchange forward contracts are utilized to mitigate the currency risk associated with tactical positions in non-U.S. inflation linked debt.

U.S. Treasury futures are among the most liquid investments and because they are exchange traded are not subject to counterparty risk. The foreign exchange market is highly liquid with several trillion dollars of currency traded daily and a wide variety of active market participants worldwide. Within the foreign exchange market, the currencies of the forwards used in the SamCERA portfolio (EUR and GBP versus USD) are among the most actively traded.

Hedging activity or use of forward currency contracts may reduce the risk of loss from currency revaluations, but also may reduce or limit the opportunity for gain and involves counter party risk, which is the risk that the contracting party will not fulfill its contractual obligation to deliver the currency contracted for at the agreed upon price. Because typically no money changes hands at the outset of a forward currency contract, the counter party risk is limited to the profit or loss on the contract, it is not the notional value of the contract.

14. State if the legal and regulatory risk associated with portfolio derivative investments have

	changed over the past \underline{six} months. \square Yes: Please explain. $/ \square$ No
In	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified, and made in liquid securities? Xes / No: Please explain.
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? \square Yes: Please explain. $/ \boxtimes No$
C	ash & Equivalents
1.	Does the firm directly invest in short term fixed income investments? \square Yes / \boxtimes No
	a) If Yes, do the investments comply with the policies? Yes / No: Please explain.

Domestic Fixed Income Portfolios

1. State the percentage of the portfolio held in each of the following types of securities

Certificates of Deposit	%
Commercial Paper	%
Other high grade short-term securities	%
U.S. Government & Agency securities	100%
Corporate Bonds	%
Mortgage and asset-backed securities	%
Yankee bond securities	%

2.	Is the firm monitoring the country, currency, sector and security selection risks associated with its portfolio? \boxtimes Yes / \square No: Please explain
3.	Does the firm conduct horizon analysis testing? \square Yes / \boxtimes No: Please explain
4.	Are any holdings below investment grade? Yes / No
	a) If Yes , why are they held in the portfolio?
5.	Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio? \square Yes / \boxtimes No
	a) If Yes , please specify the bond issue and percentage amount.
6.	What percentage of the portfolio is held in Rule 144A securities?
	0% as of December 31, 2016.
7.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
	a) If Yes , please specify the name of the industry, percentage amount and size relative to benchmark.
8.	What proportion of total AUM do the assets in this product make-up of the firm? What size

As of November 30, 2016, BBH U.S. TIPS strategy assets made up 7.3% of BBH total AUM and

does SamCERA's account comprise of total product assets?

the SamCERA account was 1.6% of BBH U.S. TIPS strategy assets.

Signed by: John Ackler, CFA
Dated: January 2017

Name of Firm Brown Brothers Harriman & Co.

Fidelity Institutional Asset Management U.S. Core Bonds

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, January 9, 2017.

Broad Market Duration.

1

Firm Name	Fidelity Institutional Asset Management Trust Company (FIAMTC)
Product Name	FIAM Broad Market Duration
Asset Class	Investment Grade Fixed Income
Respondent/Contact	Melissa Boissy, Senior Account Executive
Address	900 Salem Street, Smithfield, RI 02917
Telephone	401-292-7816
Email Address	Melissa.boissy@fmr.com

Ge	eneral Compliance Issues
1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel?
	⊠ Yes: Please explain. / ☐ No
	nce the last Compliance Certification statement, the following material senior leadership changes have taken place at AM and Fidelity:
	 In November 2016, Edward C. Johnson, 3d retired as Chairman of FMR LLC, Fidelity's parent company. Abby Johnson Chief Executive Officer of Fidelity, assumed the role of Chairman of FMR LLC. As Chairman and Chief Executive Officer, Abby will have responsibility for the management of all FMR LLC businesses.
	 In August 2016, Chris Bartel, who was previously Head of Global Equity Research for the FMR Co. Equity division, was named Global Head of Fixed Income Research, succeeding David Hamlin.
2.	Have there been any changes in the firm's investment approach?
	☐ Yes: Please explain. / ⊠ No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm?
	☐ Yes: Please explain. / ☐ No
vol	om time to time, in the normal course of its business, the Firm may receive inquiries (including subpoenas and untary requests for information) from regulatory authorities or law enforcement. A regulator may conduct an onsite amination or may commence an investigation.



The Firm does not make public comment about such inquiries, examinations or investigations unless, and until, a regulatory body initiates enforcement proceedings. To the extent the Firm's securities affiliates have been sanctioned, fined, or cited by the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), or any other regulatory body, any such sanction, fine or citation has been disclosed in its affiliates' Forms BD and/or Forms ADV in accordance with the requirements of such forms.

4.	Has the firm's insurance coverage been sustained?
lην	restment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours?
	☐ Yes: Please explain. / ⊠ No
De	erivative Investments
1.	Are derivatives used in the management of the investment strategy?
	☑ Yes: Please ANSWER the remaining questions in this section.☑ No: Please SKIP the remaining questions in this section.
2.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated?
	∑ Yes / □ No: Please explain.
3.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers?
	∑ Yes / □ No
	If Yes:
	a) Do the counter-parties have investment grade debt?
	⊠ Yes/ □ No
	b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances?
	⊠ Yes/ ☐ No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)?
	⊠ Yes / □ No
	If Yes:
	a) Do the counter-parties have investment grade debt?
	⊠ Yes/ □ No



an Mateo County Employees	' Retirement Association	I Compliance	Certification	Statement
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) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital protect against potential adverse market circumstances?	to
		☑ Yes/ ☐ No: Please explain.	
5.	ls i	lividual counter-party exposure well diversified?	
\boxtimes	Yes	☐ No: Please explain.	
	a)	hat is the largest exposure to a single counter-party within the portfolio?	
	b)	lease specify the name of the counter-party and the amount of exposure.	
	c)	ave there been any changes to the investment manager's list of approved counter-parties one past <u>six</u> months?	ve
6.		ify the security pricing sources used when developing portfolio market value exposures for no anged traded derivative positions.	n-
		icing & Cash Management Services (FPCMS) utilizes a combination of sources for derivatives pricing. Wal kers are our primary sources for swaps. Bloomberg is our primary pricing source for futures.	
7.	dis	de a statement regarding the liquidity of the derivative investments. Provide a general statements in the legal and regulatory risks associated with the portfolio manager's investments in atives.	∍nt
ext	ensiv	tive instruments used in the portfolio are liquid. Given the minimum role they play in the portfolio and research conducted by the Counterparty Risk Team and the large team of in-house and external lawyers ese efforts, we feel the legal and regulatory risks are minimal.	
8.		if the legal and regulatory risk associated with portfolio derivative investments have changed the past $\underline{\bf six}$ months.	
	Yes	Please explain. / 🖂 No	
ln۱	/estr	ent Manager Guidelines	
1.	Are	ortfolio holdings well-diversified, and made in liquid securities?	
\boxtimes	Yes	☐ No: Please explain.	
2.	Ha	he firm engaged in short selling, use of leverage or margin and/or investments in commodities	;
	Yes	Please explain. / 🖂 No	



Domestic Fixed Income Portfolios

1. State the percentage of the portfolio held in each of the following types of securities:

Certificates of Deposit	%
Commercial Paper	%
Other High Grade Short-term securities	0.1%
U.S. Government & Agency securities	39.7%
Corporate Bonds	36.0%
Mortgage- and asset-backed securities	24.2%
Yankee bond securities	%

2.	Does the firm conduct horizon analysis testing?
	Yes / ☐ No: Please explain.
3.	Are any holdings below investment grade?
	Yes / No
	a) If Yes, why are they held in the portfolio?
	As of December 31, 2016, 2.9% of holdings in the portfolio were below investment grade. Purchased as investment grade, these holdings have been downgraded due to increased leverage or other fundamental credit criteria. We still feel they hold relative value, although we are monitoring these securities closely.
4.	Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio?
	Yes / ⊠ No
	a) If Yes , please specify the bond issue and percentage amount.
5.	What percentage of the portfolio is held in Rule 144A securities?
	4.0% as of December 31, 2016
6.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account.
	Yes / ⊠ No
	a) If Yes, please specify the name of the industry, percentage amount and size relative to benchmark.
7.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?
As	of December 31, 2016, the SamCERA Broad Market Duration pool account represents <1% of the assets in the

Broad Market Duration strategy and less than 1% of total FIAM assets.



Signed by:

Dated: January 9, 2017

Melissa Baissy

Name of Firm: Fidelity Institutional Asset Management



Western Asset Management Total Return Unconstrained - December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

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General Compliance Issues

1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Yes: Please explain. / No	
2.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / ☒No	
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? ☐ Yes: Please explain. / ☒No	
4.	Has the firm's insurance coverage been sustained? Yes / No: Please explain.	
Inv	vestment Management Fees	
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No	
Derivative Investments		
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.	
2.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain.	
3.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers?	

	⊠ Yes / □ No
	 If Yes: a) Do the counter-parties have investment grade debt? ∑ Yes/ ∑ No b) Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? ∑ Yes/ ∑ No: Please explain.
4.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? Yes / No
	 If Yes: a) Do the counter-parties have investment grade debt? ∑ Yes/ ☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ∑ Yes/ ☐ No: Please explain.
5.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? 2.571% b) Please specify the name of the counter-party and the amount of exposure. BAML – 43,496,407.65 MV as of 12/31/16 c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months? No material changes within derivative counterparties with one exception. Added R.J. O'Brien & Associates LLC for exchange traded F&O only.

6. Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.

The pricing sources used for derivatives will vary depending on the derivative instrument and clearing method. For example, for exchange traded instruments such as futures, Bloomberg is used to receive the settlement price from the exchange the derivative contract is traded on. For OTC derivatives which are cleared, Western Asset will receive the valuations from the exchange the derivative is cleared. For non-cleared OTC derivatives, Western Asset's primary pricing vendor is Markit. The Firm will consider secondary sources such as Bloomberg swap models, mark-to-market counter party statements or internal model methodology if Markit does not cover an OTC derivative instrument. Western Asset has a formal pricing policy, which outlines the pricing process in greater detail and is provided in Appendix A.

7. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Western Asset's management style focuses on adding incremental value without taking on excessive risk. To ensure that the Firm's use of derivative instruments is consistent with this

investment philosophy, Western Asset has developed the following guidelines—listed below along with a brief description of their rationale—which form the basis of every decision to employ derivatives in the Firm's investment portfolios:

- The duration contribution of derivatives will not bring the portfolio's duration outside the portfolio's specific duration band.
- Where a portfolio enters into forward foreign exchange contracts the aggregate underlying exposure of the portfolio attained through such contracts shall not exceed 100% of the portfolio's market value.
- A portfolio's gross exposure to forward foreign exchange contracts shall not exceed 50% with any single counterparty and net exposure shall not exceed 25% with any single counterparty. Net exposure is defined as the value (in account base currency terms) of open forward foreign exchange purchase contracts less forward foreign exchange sale contracts. Gross exposure is defined as the value (in account base currency terms) of open forward foreign exchange purchase contracts plus forward foreign exchange sale contracts.
- The net notional exposure to index and credit default swaps will count at their full notional value as exposure to the underlying asset. Concentration limits for a particular name or asset class will apply based on the net sum of its cash and derivative security holdings.
- Short (written) options positions will always be covered, either with current security holdings, other options or futures positions. Mortgage derivatives with significant short option characteristics will not exceed 5% of the portfolio, and will generally be a) offset by positions in other mortgage derivatives (e.g., floaters and inverse floaters), or b) offset by other portfolio positions (e.g., IOs and long duration bonds).
- Futures and options contracts will be limited to liquid instruments actively traded on major exchanges or, if over-the-counter, executed with major dealers.
- Swap contracts are considered over-the-counter contracts between two parties and have counterparty credit risk different from exchange traded derivatives. Western Asset tries to limit its counterparty risk by executing swaps with the strongest financial counterparties. The vast majority of these counterparties are rated is A- or better. In addition, collateral agreements will be in place to trigger margin movement whenever the current mark-to-market amount to be paid or received by either counterparty exceeds a threshold amount.

Finally, under no circumstances will the derivative positions change the characteristics of the portfolio so that it violates any guideline set forth in the Investment Management Agreement.

8.	State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past \underline{six} months. \square Yes: Please explain. $/ \boxtimes$ No
Inv	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified, and made in liquid securities? Yes / No: Please explain.
2.	Has the firm engaged in short selling, use of leverage or margin and/or investments in commodities? Yes: Please explain. / No

1. State the percentage of the portfolio held in each of the following types of securities

*December 31, 2016 factsheet to be provided.

Treasury	%
Agency	%
Inflation-Linked	%
Mortgage-Backed	%
Asset-Backed	%
Investment-Grade Credit	%
High-Yield Credit	%
Bank Loan	%
Non-US	%
EM Government	%
EM Local Currency	%
EM Corporate	%
Cash & Equivalents	%
Total	%

2. Does the firm conduct horizon analysis testing? Xes / No: Please explain.

Western Asset's investment management team estimates horizon excess returns under various market scenarios, including best, worst and likely cases. Particular attention is paid to diversifying strategies under each scenario. The horizon for risk management is the same as that for investment management, as the risk effort is closely integrated into the investment process. The firm's tracking error model calculates predicted tracking errors based on 18 months of historical data. Western Asset also generates scenario analysis results daily for representative accounts. These results estimate horizon durations given various interest rate shocks. The horizon is generally instantaneous as Western Asset evaluates one day extreme movements in rates for duration hedging purposes. The Firm's systems allow for any time horizon and can output a wide array of horizon performance or analytics related statistics.

3.	Excluding U. S. Government and Agency bond holdings, did any individual bond issue represent more than 5% of the market value of the portfolio? \square Yes / \boxtimes No
	a) If Yes, please specify the bond issue and percentage amount.
4.	What percentage of the portfolio is held in Rule 144A securities? 1.70%
5.	At the time of purchase, was there any single industry which represented more than 15% of the market value of the account. \square Yes / \boxtimes No
	a) If Yes, please specify the name of the industry, percentage amount and size relative to benchmark.
6.	What proportion of total AUM do the assets in this product make-up of the firm? What size does SamCERA's account comprise of total product assets?
	December 31, 2016 AUM information is not available at this time.
	As of November 30, 2016, Western Asset's Total Return Unconstrained (TRU) Bond product makes up 1.2% of Firmwide AUM, and SamCERA's account comprises 2.1% of total TRU Bond product assets.
	gned by: The Matt Hillier
Da	ted: 1/9/2017

Name of Firm: Western Asset

Western Asset Total Return Unconstrained (TRU) Bond, LLC*



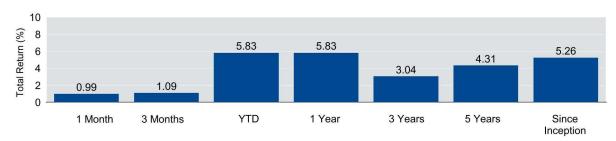
Fact Sheet as of 12/31/2016

OBJECTIVES

The Total Return Unconstrained (TRU) Bond Fund's investment objective is to maximize long-term total return, consistent with prudent investment management. In seeking to achieve its investment objective, the Fund will invest all or substantially all of its assets available for investment in the Fund's Master Fund, which has an investment objective that is consistent with that of the Fund. The Master Fund is organized as an exempted company under the laws of the Cayman Islands and may accept investments from other investors, including other funds. Western Asset serves as the investment adviser and subadviser, respectively, of the Fund and the Master Fund.

PERFORMANCE

Western Asset Total Return Unconstrained (TRU) Bond, LLC*



The performance calculation reflects the deduction of administrative and custodian fees. The impact of advisory fees on the performance is not reflected in this calculation. The maximum advisory fee charged by Western Asset is 60 bps. Returns shown would be lower if the impact of the advisory fee was included. Returns for periods greater than one year are annualized.

STATISTICS	FUND	
Inception Date	7/1/2004	
Total Net Assets (\$)	1,658,402,399	
Net Asset Value (\$)	18.960	
Cash Flow Yield (%)	5.09	
Yield To Worst (%)	4.88	
Average Life (years)	9.66	
Duration (years)	2.49	
Spread Duration (years)	1.13	
Convexity	3.42	

	Market Value
QUALITY EXPOSURE	FUND (%)
AAA	11.62
AA	6.10
A	21.92
BBB	25.35
BB	12.32
В	9.28
CCC	1.94
Below CCC	0.32
Not Rated	6.28
Cash & Cash Equivalents	4.88
Total	100.00

SECTOR EXPOSURE	Market Value FUND (%)
Treasury	3.31
Agency	0.33
Inflation-Linked	1.91
Mortgage-Backed	23.07
Asset-Backed	6.00
Investment-Grade Credit	19.14
High-Yield Credit	8.16
Bank Loan	6.85
Non-US	10.25
S&P 500 Index	0.01
EM Government	3.03
EM Local Currency	7.49
EM Corporate	5.58
Cash & Cash Equivalents	4.88
Total	100.00

Duration Contribution FUND	Spread Duration Contribution FUND
0.16	-2.81
0.01	0.01
0.24	0.00
0.75	1.09
0.05	0.33
1.68	1.65
0.29	0.04
0.01	0.14
-1.79	0.05
0.00	0.00
0.24	0.23
0.47	0.02
0.37	0.36
0.03	0.02
2.49	1.13



December 2016

Fact Sheet as of 12/31/2016

Fact Sheet

DURATION ALLOCATION	Market Value FUND (%)
0-1	28.57
1-3	11.34
3-5	13.37
5-7	17.50
7-10	15.52
10-15	7.47
15+	6.23
Total	100.00

AVERAGE LIFE ALLOCATION	Market Value FUND (%)
0-1	9.78
1-3	15.00
3-5	13.28
5-7	14.57
7-10	28.66
10-15	4.35
15+	14.38
Total	100.00

CREDIT SUB-SECTOR EXPOSURE	Market Value FUND (%)
Finance	11.08
Utility	0.89
Industrial	20.47
Municipal	0.47
Non-Corporate	3.08
Bank Loan	6.85
CDX	-0.36
Other	0.26
Total	42.75

Duration Contribution FUND	
0.78	
0.07	
1.44	
0.05	
0.24	
0.01	
0.00	
0.00	
2.58	

Spread Duration Contribution FUND
0.79
0.06
1.40
0.05
0.23
0.14
-0.25
0.00
2.42

CREDIT SUB-SECTOR ¹ QUALITY EXPOSURE	Market Value FUND (%)
AAA	0.31
AA	1.48
A	8.06
BBB	14.81
BB	9.27
В	7.04
CCC	1.10
Below CCC	0.00
Not Rated	0.67
Total	42.75

Duration Contribution
FUND
0.04
0.15
0.84
1.05
0.35
0.13
0.02
0.00
0.00
2.58

Spread
Duration Contribution
FUND
0.04
0.16
0.81
1.05
0.39
0.19
0.02
0.00
-0.24
2.42

MORTGAGE-BACKED SUB-SECTOR EXPOSURE	Market Value FUND (%)		
GNMA	0.58		
FNMA	2.29		
FHLMC	0.61		
CMBS	10.64		
Non-Agency MBS	8.95		
MBS Index Swap	-0.01		
Total	23.06		
NON-AGENCY	Market Value		
EXPOSURE ²	FUND (%)		

Dura	ion Contribut	OII
	FUND	
	0.03	
	0.09	
	0.03	
	0.49	
	0.10	
	0.00	
	0.75	

Spread
Duration Contribution
FUND
0.03
0.10
0.03
0.54
0.38
0.00
1.09

Prime	3.92	
Alt-A	1.35	Т
Subprime	1.95	
Option ARM	1.73	
Total	8.95	

^{*}Previously referenced as Western Asset Absolute Return Strategy, L.L.C.

Fact Sheet as of 12/31/2016

Western Asset Total Return Unconstrained (TRU) Bond, LLC*



- ¹ Quality Exposure is a measure of a bond issuer's ability to repay interest and principal in a timely manner. The credit ratings shown are based on each portfolio security's rating as provided by Standard and Poor's, Moody's Investors Service and/or Fitch Ratings, Ltd. And typically range from AAA (highest) to D (lowest), or an equivalent and/or similar rating. For this purpose, if two or more of the agencies have assigned differing ratings to a security, the highest rating is used. Securities that are unrated by all three agencies are reflected as such. The credit quality of the investments in the portfolio does not apply to the stability or safety of the portfolio. These ratings are updated monthly and may change over time. Please note, the portfolio itself has not been rated by an independent rating agency.
- ² Includes Asset-Backed Securities and notional value of ABX where held.

Data may not sum to total due to rounding. All investments involve risk, including loss of principle. Fixed-income securities involve interest rate, credit, inflation, and reinvestment risks; and possible loss of principle. As interest rates rise, the value of fixed-income securities falls. Additional risks and information regarding fees, expenses and tax considerations are more fully described in the Confidential Offering Memorandum, which must precede or accompany this material. Please read the Offering Memorandum carefully before investing.

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Invesco Core Real Estate - U.S.A., L.P.- December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of SamCERA's investment managers on a semi-annual basis. These statements must be e-mailed to SamCERA's office (Investments@samcera.org) by Monday, January 9, 2017.

General Compliance Issues

1.	Are SamCERA's market benchmarks in the respective asset class areas acceptable to the firm? X Yes / No: Please explain.
2.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? Firm Departure: Claiborne Johnston, Managing Director, Client Portfolio Manager Yes: Please explain. / X No
3.	Have there been any changes in the firm's investment approach? ☐ Yes: Please explain. / X☐ No
4.	Have there have been any industry or regulatory disciplinary actions taken against the firm? Yes: Please explain. / X No
5.	Has the firm's insurance coverage been sustained? X Yes / No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule higher than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / X No
In	vestment Manager Guidelines
1.	Are portfolio holdings well-diversified? X 🗌 Yes / 🗌 No: Please explain.
2.	Has the firm used leverage? X Yes: Please explain. / No Yes. The maximum leverage for the Fund is 35%. As of September 30, 2016, the Fund's leverage was 25.9%.

Ca	Cash & Equivalents		
1.	Does the firm directly invest in short term fixed income investments? Yes / X No		
	a) If Yes, do the investments comply with the policies?		
Re	al Estate Portfolios		
1.	Is the portfolio diversified as to region, property type, industry, and economic base? X □ Yes / □ No		
	a) If No, do the investments comply with the policies?		
2.	Is the portfolio achieving a total time-weighted rate of return, net of fees, which equals or exceeds, the NFI ODCE index? X Yes / No: Please explain. As of September 30, 2016 the Fund's since inception net return of 7.48% exceeds the net return of the NFI ODCE index of 6.80%		
3.	Does the core fund concentration exceed 40% (by value) in any single property type or 35% in any single metropolitan statistical area, determined as of the date of the acquisition of the property? \square Yes: Please explain. / \times \square No		
4.	Is the portfolio leverage within the 35% of overall loan to value guideline? X \(\subseteq \text{ Yes / } \subseteq \text{ No: Please explain.} \)		
5.	What proportion of total AUM do the assets in this product make-up of the firm? - 15.65% What size does SamCERA's account comprise of total product assets? - 2.97%		

Signed by: Ronald L. Ragsdale, Vice President

Dated: January 12, 2017

Name of Firm: Invesco Realty, Inc., parent of Invesco Core Real Estate – U.S.A., L.P.'s general

partner

The Parametric Portfolio Associates LLC Cash Overlay - December 31, 2016

Compliance Certification Statement San Mateo County Employees' Retirement Association

In accordance with SamCERA's Investment Policy Statement, the following compliance worksheet will be completed by each of *SamCERA's* investment managers on a semi-annual basis. These statements must be e-mailed to *SamCERA's* office (<u>Investments@samcera.org</u>) by <u>Monday</u>, <u>January 9</u>, 2017.

General Compliance Issues

1.	Have there been any significant portfolio developments, major changes in firm ownership, organizational structure and personnel? ☐ Yes: Please explain. / ☒ No
2.	Have there been any changes in the firm's investment approach? Yes: Please explain. / No
3.	Have there have been any industry or regulatory disciplinary actions taken against the firm? \square Yes: Please explain. / \square No
4.	Has the firm's insurance coverage been sustained? Xes / No: Please explain.
In	vestment Management Fees
1.	Is SamCERA's investment management fee schedule less favorable than those charged other institutional clients who hold an account investment substantially similar to ours? Yes: Please explain. / No
De	rivative Investments
1.	Are derivatives used in the management of the investment strategy? Yes: Please ANSWER the remaining questions in this section. No: Please SKIP the remaining questions in this section.
2.	Are derivative investments in compliance with SamCERA's investment policies? Yes / No: Please explain.

3.	If the firm entered into a non-exchange traded derivative, was the general nature and associated risks of the counter-party fully evaluated? Yes / No: Please explain. Not Applicable
4.	For non-exchange traded derivative transactions, were the counter-parties broker/dealers? Yes / No
	If Yes: a) Do the counter-parties have investment grade debt? Yes/ No No Are the counter-parties registered with the SEC and do they have net capital to protect against potential adverse market circumstances? Yes/ No: Please explain.
5.	For non-exchange traded derivative transactions, were the counter-parties financial institutions (banks)? [Yes / [No
	 If Yes: a) Do the counter-parties have investment grade debt? ☐ Yes/☐ No b) Do the counter-parties have total assets in excess of \$1 billion, and significant net capital to protect against potential adverse market circumstances? ☐ Yes/☐ No: Please explain.
6.	 Is individual counter-party exposure well diversified? Yes/ No: Please explain. a) What is the largest exposure to a single counter-party within the portfolio? b) Please specify the name of the counter-party and the amount of exposure. c) Have there been any changes to the investment manager's list of approved counter-parties over the past six months?
7.	Are the investment purposes for a derivative investment consistent with the four purposes stated $SamCERA$'s policies? \boxtimes Yes / \square No: Please explain.
	a) Has the firm developed any new purposes for derivative investments? \square Yes: Please explain. $/ \boxtimes No$
8.	List all limited allocation derivative investments individually and the percentage of the portfolio's assets represented by each investment. Not Applicable
	 a) State if the firm has evaluated the exposure to market value losses that can occur from each of these derivatives. Yes / No: Please explain. b) State if these derivative investments in total represent more than 5% of the portfolio's market value. If more than 5%, please explain.
9.	State if any restricted derivative investments are held in <i>SamCERA's</i> portfolios.

	a) If any are held, state the percentage of the portfolio's assets held in such derivatives and why the firm is not in compliance with the investment policies.
10.	. For derivative investments with allocation limits, has the firm tested and measured these investments' sensitivities to changes in key risk factors? Yes / No: Please explain. Not Applicable
l 1.	. Have all derivative investments been made in a manner consistent with the derivative investment process specified in the policy statement? X Yes / No: Please explain.
12.	. Specify the security pricing sources used when developing portfolio market value exposures for limited allocation derivatives.
	Parametric does not invest in limited allocation derivatives as defined in the derivatives policy for the SamCERA account. However, the pricing source for the exchange traded futures reference the closing settlement price on the exchange in which the particular future trades upon.

13. Provide a statement regarding the liquidity of the derivative investments. Provide a general statement discussing the legal and regulatory risks associated with the portfolio manager's investments in derivatives.

Parametric seeks to only hold investment instruments that would be deemed as liquid. Futures provide a transparent and relatively low risk investment exposure management vehicle to use in managing overlay strategies. There is currently numerous liquid global equity, fixed income, commodity, and currency exchange-traded index futures available for use in an overlay program. Before specific futures contracts to be included in a client's overlay portfolio are approved, the instrument is evaluated and screened to ensure adequate liquidity, focusing on open interest, average daily trading volume, bid/ask spread, and liquidity of the underlying index. As Parametric manages approximately over 188 overlay programs and has relationships with numerous counterparties trading in global markets, we have developed a deep knowledge of liquidity levels of markets throughout the world. The primary gauges of liquidity are the average daily volume (ADV) and open interest metrics. Parametric carefully monitors liquidity and estimated costs internally and through external (i.e. broker) sources. As a general rule, the greater the amount ADV and open interest, the greater the liquidity and lower the transaction costs. Parametric continuously monitors these metrics and will only use contracts which have sufficient liquidity to support the required positions. Parametric will also tailor the instruments employed in the overlay program based upon each client's unique needs and objectives.

Parametric's compliance program is designed to reasonably address all known conflicts of interests and other additional specific risks that have been identified through an annual risk assessment or a change in business or regulatory matters. These include legal and regulatory risks. Adherence to all legal and regulatory matters is considered to be an integral part of each

employee's primary job functions. Every employee is required to share in maintaining	and
enforcing compliance with all applicable internal and external rules.	

14. State if the legal and regulatory risk associated with portfolio derivative investments have changed over the past six months.

Yes: Please explain. / No

Signed by:

Benjamin Hammes

Director of Compliance

Dated:

Name of Firm: Parametric Portfolio Associates LLC

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 4.10

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

Authorization for Chief Executive Officer to Execute an Agreement with Segal

Consulting for Actuarial Audit Services

Recommendation

Adopt a resolution authorizing the Chief Executive Officer to execute an agreement with Segal Consulting for actuarial audit services.

Background

The Board has "The sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the...system." (Cal. Const. Article XVI, §17 (e)) and Government Code §31453 requires periodic valuations of SamCERA's actuarial soundness. The Board has determined that it is prudent to have an actuarial audit performed at least every three years in order to determine if there are any issues or concerns with the work performed by the Board's actuary. This second level of oversight places SamCERA in a better position to catch an actuarial error before it can have significant detrimental effect to the soundness of the fund.

Discussion

Segal Consulting, who was selected as the result of a Request for Proposal process, audited the June 30, 2011 and the June 30, 2014, Triennial Experience Study and Actuarial Valuation Report compiled by Milliman, Inc. It would be beneficial to use Segal for the 2017 actuarial audit because Segal is already familiar with SamCERA's various benefit tiers and employers, as well the work performed by Milliman, Inc. This is especially important due to the recent implementation of the new Pension Administration Software System ("PASS") and the data conversion from Pension Gold to the Vitech V3 system. This audit is another opportunity for us to confirm whether there are any issues regarding the implementation of the new PASS.

The attached resolution authorizes the Chief Executive Officer to execute an agreement with Segal Consulting for actuarial audit services that covers the period from April 1, 2017, through December 31, 2017, at a cost not to exceed \$95,000.

Attachment

Resolution authorizing the Chief Executive Officer to execute an agreement with Segal Consulting for actuarial audit services

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

RESOLUTION 2017-01

RESOLUTION AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE AN AGREEMENT WITH SEGAL CONSULTING FOR ACTUARIAL AUDIT SERVICES

- WHEREAS, Article XVI, §17 (e) of the Constitution of the State of California vests the Board with "The sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the...system" and Government Code §31453 requires periodic valuations of SamCERA's actuarial soundness; and
- WHEREAS, this Board has determined that it is prudent to have periodic actuarial audits of the work performed by the Board's actuary to better ensure the financial soundness of the fund; and
- WHEREAS, on March 29, 2011, after conducting a competitive Request for Proposal process, SamCERA selected the Segal firm to conduct an independent audit to validate the appropriateness of the actuarial assumptions and methodologies employed by the Board's actuary and the Segal firm has performed two such audits; and
- WHEREAS, this Board has determined that it is best interests of SamCERA to have use the same actuarial firm to perform audit services for the 2017 triennial experience study; therefore, be it
- **RESOLVED**, the Chief Executive Officer to execute an agreement with Segal Consulting for actuarial audit services that covers the period from April 1, 2017, through December 31, 2017, at a cost not to exceed \$95,000.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on January 24, 2017.

Ayes, Trustees:	
Noes, Trustees:	
bsent, Trustees:	
Abstain, Trustees:	
Shirley Tourel, Board Secretary SamCERA	

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 4.11

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

Amendment to Agreement with Joanne Bond Coaching, LLC

Staff Recommendation

Adopt a resolution authorizing the Chief Executive Officer to execute an amendment to the agreement with Joanne Bond Coaching LLC for leadership coaching services.

Background

Among other management training opportunities, the County's Human Resources Department makes available to County department heads certain leadership coaching services. Several County department heads and management staff have utilized the coaching services of Joanne Bond, a certified leadership coach specializing in coaching business leaders to how to enhance their leadership presence. She has over 25 years' experience.

Discussion

Over the last year, I have found that Ms. Bond's coaching services to be beneficial to me and, in turn, SamCERA staff. There are a few additional services that would be valuable to us. These services include: continued individual customized coaching for four months but at a reduced rate of 2 hours a month, a presentation to the entire staff on Emotional Quotient (EQ) (capability to recognize one's own, and other people's emotions, to use emotional information to guide thinking and behavior, and to manage and/or adjust emotions), and an individual online EQ assessment and report for managers.

The amendment extends the term of the agreement and increases the agreement by \$10,000 for a total of \$34,000.

Attachment

Resolution Authorizing the Chief Executive Officer to amendment the agreement with Joanne Bond Coaching, LLC

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

RESOLUTION 2017-02

RESOLUTION AUTHORIZING THE CHIEF EXECUTIVE OFFICER TO EXECUTE AN AMENDMENT TO THE AGREEMENT WITH JOANNE BOND COACHING LLC FOR LEADERSHIP COACHING SERVICES.

WHEREAS, SamCERA, in accordance with California Government Code Section 31588.2, is authorized to expend funds on the administration of the pension system; and

WHEREAS, This Board has determined that it is in the best interests of SamCERA and its members that the Chief Executive Officer consistently and positively motivate staff to successfully administer the fund and benefits; and

Whereas, San Mateo County's Human Resources Department makes available to County department heads certain leadership coaching services provided by Joanne Bond, a certified leadership coach specializing enhancing leadership presence; and

WHEREAS, Over the last year, Ms. Bond's coaching services have been beneficial to SamCERA staff and there are additional services that would be valuable to staff, therefore be it

RESOLVED, the Chief Executive Officer is authorized to execute an amendment to the agreement with Joanne Bond Coaching LLC at an amount not to exceed \$34,000 for all services through January 2018.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on January 24, 2017.

noes, Trustees:	
Absent, Trustees:	
Abstain, Trustees:	

Ayes, Trustees:

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 5.2

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

Adoption of Cost of Living Adjustments (COLAs) for 2017

Staff Recommendation

Approve a resolution adopting the Cost of Living Adjustments as recommended by Milliman, Inc.

Discussion

Annual COLAs are calculated pursuant to the '37 Act which requires that the COLAs be based on the change in the Consumer Price Index for the Bay Area provided by the U.S. Bureau of Labor Statistics and rounded to the nearest one half of one percent.

Milliman, Inc. has calculated the annual COLAs for each retirement category for approval by the Board. As reflected in the attached letter, Milliman reports that the CPI increased 3.01% during 2016. Rounded to the nearest one half of one percent, this yields a COLA of 3% for Plan 1 and 2 members and a COLA of 2% for Plan 4, 5, 6 and 7 if they retire before April 2, 2017.

All COLAs will be paid beginning with the April 2017 benefit payments.

Attachments

January 18, 2017 letter from Milliman, Inc.

Resolution Adopting Cost of Living Adjustments Effective April 1, 2017 as Recommended by Milliman, Inc.



1301 Fifth Avenue Suite 3800 Seattle, WA 98101-2605

Tel +1 206 624 7940 Fax +1 206 623 3485

milliman.com

VIA EMAIL ONLY

January 18, 2017

Mr. Scott Hood Chief Executive Officer San Mateo County Employees' Retirement Association 100 Marine Parkway, Suite 125 Redwood Shores, CA 94065-5208

Re: Annual COLA Payable in 2017

Dear Scott:

The San Mateo County Employees' Retirement Association (SamCERA) provides a Cost-of-Living Adjustment (COLA) to retirees and beneficiaries who retired on or before April 1 of each year in accordance with Article 16.5 of the County Employees' Retirement Law of 1937 (CERL). This letter outlines the COLA percentage and changes to the COLA Bank to be adopted by the Board and effective in April of 2017.

Inflation Index

The first step in the calculation process is the measurement of inflation. The calculation of the annual COLA is specified in the CERL. For Plan 1 General and Safety members, the COLA is governed by Section 31870.2. For Plan 1 Probation and all Plan 2 members, the details of the COLA are provided under Section 31870.1. For Plan 4-7 members, the COLA is governed by Section 31870. Plan 3 members do not receive any COLA under Article 16.5 of the CERL.

Section 31870.2 says that the COLA should be calculated using...

...the cost of living as of January 1st of each year as shown by the then current Bureau of Labor Statistics Consumer Price Index for All Urban Consumers for the area in which the county seat is situated...

Identical language appears in Sections 31870 and 31870.1 of the CERL. The Retirement Board has adopted the Annual Average Consumer Price Index for All Urban Consumers (CPI-U) for the San Francisco-Oakland-San Jose area (Base Period: 1982-84=100) as the basis for making the annual adjustments. This index increased by 3.01% during the 2016 calendar year, from an index value of 258.572 in 2015 to an index value of 266.344 in 2016.



COLA and COLA Bank

The annual COLA that SamCERA retirees and beneficiaries are eligible to receive is based on the change in the consumer price index rounded to the nearest one-half of one percent (subject to the maximum COLAs specified in relevant sections of the CERL). We recommend that the SamCERA Board adopt the following items to take effect in April 2017:

- COLA percentage
 - Plan 1. Each retiree and beneficiary who retired on or before April 1, 2017 will receive a Cost-of-Living Adjustment in accordance with the following table.

Date of Retirement	General	Safety	Probation
All Dates	3.0%	3.0%	3.0%

- Plan 2. Each retiree and beneficiary who retired on or before April 1, 2017 will receive a Cost-of-Living Adjustment of 3.0%.
- Plan 3. No Cost-of-Living Adjustment is provided to Plan 3 retirees and beneficiaries.
- All Other Plans. Each retiree and beneficiary who retired on or before April 1, 2017 will receive a Cost-of-Living Adjustment of 2.0%, the maximum increase under CERL 31870.
- COLA Bank. COLA Banks are unchanged for all Plan 1 retirees and beneficiaries. After the payment of the April 2017 COLA, all Plan 1 retirees and beneficiaries will have COLA Bank balances of 0.0%. (Note that under no circumstances may the COLA Bank be reduced below 0.0%.) Retirees and beneficiaries in other plans do not accumulate COLA Banks in accordance with Section 31874.4 of the CERL.

Certification

Milliman's work product was prepared exclusively for the use or benefit of SamCERA for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning SamCERA's operations. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product, but should engage qualified professionals for advice appropriate to its own specific needs.

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

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

We are members of the American Academy of Actuaries and Associates of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Craig Glyde, ASA, EA, MAAA

Consulting Actuary



Please let us know if you have any questions or need any additional information.

Sincerely,

Nick J. Collier, ASA, EA, MAAA

Vin alli

Consulting Actuary

NJC/CJG/nlo

cc: Ms. Gladys Smith

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

RESOLUTION 2017-03

RESOLUTION ADOPTING COST OF LIVING ADJUSTMENTS EFFECTIVE APRIL 1, 2017 AS RECOMMENDED BY MILLIMAN, INC.

- WHEREAS, Government Code §31870, §31870.1, §31870.2 and §31874.4 empower the Board to grant cost of living adjustments on an annual basis to recipients of SamCERA benefits; and
- **WHEREAS**, the Board has retained Milliman, Inc. to provide actuarial services to the Board; and
- Whereas, Milliman, Inc., by its letter dated January 18, 2017, and accompanying exhibits has reported the appropriate annual cost of living adjustments for members based on each member's retirement tier, date of retirement; and the applicable rules of the 1937 Act, therefore, be it
- RESOLVED, that the Board adopts the schedules of cost of living adjustments set forth in the Milliman, Inc. letter dated January 18, 2017, addressed to Chief Executive Officer Scott Hood from Milliman Consulting Actuary Nick J. Collier, and the letter's accompanying exhibits entitled "Plan 1 COLA Bank Accumulations, General and Safety" and "Plan 1 COLA Bank Accumulations, Probation." Be it further
- **RESOLVED**, that the Board hereby adopts said cost of living adjustments effective April 1, 2017. Be it further
- **RESOLVED**, that the Chief Executive Officer is hereby empowered to take all actions necessary to provide for the payment of cost of living adjustments in accordance with the adopted schedules.

* * * * *

Regularly passed and adopted, by the San Mateo County Employees' Retirement Association, Board of Retirement, on January 24, 2017.

Noes, Trustees:	
Absent, Trustees:	
Abstain, Trustees:	
Shirley Tourel, Board Secretary	
SamCFRA	

Ayes, Trustees:

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Board of Retirement

January 24, 2017

Agenda Item 5.3

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

Educational Presentation on "Generational Mortality."

Staff Recommendation

Milliman, Inc. will provide an educational presentation on "Generational Mortality."

Background

Milliman, Inc. Presentation on Generational Mortality

A generational mortality table is one that takes projected future mortality improvement into account for each individual member. Instead of basing everyone's benefits on the same Annuity Purchase Rate factors, life expectancy is tied to the member's birth date and retirement date. The concept of using generational mortality rates for valuing pensions is gaining momentum. The IRS currently mandates using static tables, which assume that the life expectancy of a 60-year old in 2017 would be the same as a 60-year old in 2047. Generational Mortality Tables are based on two factors: the person's age and the year they achieve that age. Assuming mortality rates improve over time, the 60-year old in 2047 would have a higher life expectancy than a 60-year old in 2017. Static tables may not reflect this and many believe generational mortality may more accurately capture this concept.

Milliman will provide more information on the development of the generational mortality concept, its adaptation and its potential application by public pension funds, including SamCERA.

Attachment

Milliman, Inc. Presentation on Generational Mortality

SamCERA Board Meeting Generational Mortality

Presented by:

Nick Collier, ASA, EA, MAAA

January 24, 2017





Overview

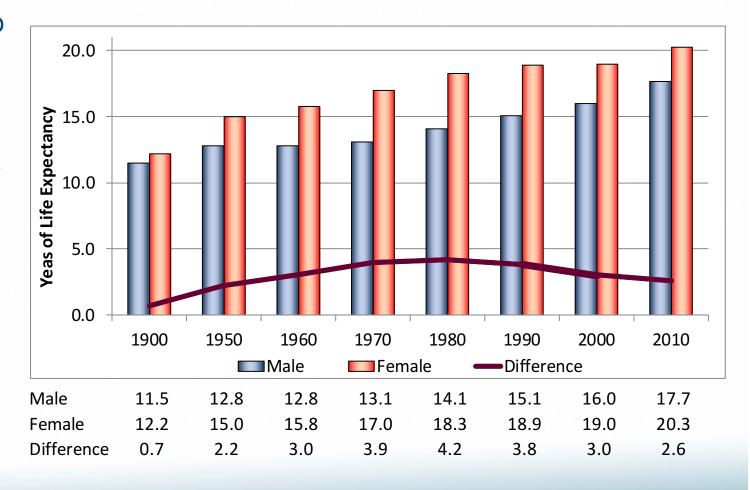
- Triennial investigation of experience to be completed at start of summer
 - Detailed review of all assumptions
 - Basis for June 30, 2017 actuarial valuation
- Outside of the investment return assumption, mortality probably has the greatest impact on the valuation.
- Movement in actuarial community to a more dynamic approach to project life expectancies
 - Generational mortality
- Purpose of discussion today is to provide Board education on generational mortality prior to investigation
 - And give Board a chance to provide feedback





Historical Life Expectancy at Age 65 General Population

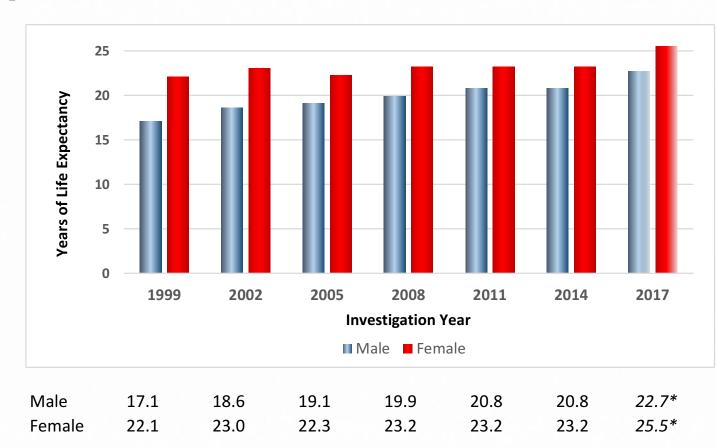
- People keep living longer
- How much longer will people keep living?





Historical Life Expectancy at Age 65 SamCERA

- SamCERA is no exception
- Recent
 experience
 indicates
 significant
 increase in
 male life
 expectancies
- Likely influenced by different actuaries





^{*} Possible life expectancy based on generational mortality

Actuarial Standard of Practice No. 35 (ASOP No. 35)

- ASOP No. 35 Governs mortality assumptions
- Should be inside the "range of reasonable assumptions." §3.4
- Should include an assumption for expected mortality improvement. Uncertainty does not make zero reasonable. §3.5.3
- Should take into account the balance between refined assumptions and materiality. §3.10.2
 - Precision does not necessarily increase accuracy.



Two Parts of Mortality Assumptions



Current: How long are people living today?

Improvement: How long are they <u>projected</u> to live tomorrow?





Two Ways to Assume Mortality Improvement

- 1. "Static Mortality" Historically actuaries have used mortality tables that do not differentiate by year of birth.
 - No explicit assumption that people born in later years live longer
 - Implicitly, actuaries include a margin for future improvement
- 2. "Generational Mortality" specifically assumes people born in later years will live longer.
- What happens each way as people live longer?
 - Static Mortality: As longer lives are observed assumptions are updated. Liabilities and annual costs increase like stair steps.
 - Generational Mortality: Liabilities are consistent, but annual costs (normal costs) increase little by little each year with younger hires.



Mortality Improvement Table Example

- Annual 1% percent decline in probability of death.
- Example 70-year old male
 - If probability of death at 70 = 2.000% (base table)
 - And projected decline = 1.0% (projection table)
 - Then one year later (70-year old male)
 - Probability of death at 70 = 1.980%
 - $2.000\% \times (100\% 1.0\%) = 1.980\%$
 - Next year (70-year old male)
 - $1.980\% \times (100\% 1.0\%) = 1.9602\%$
 - And so on
- Life expectancy at age 65 (Male) by retirement year

2016	2026	2036	2046	2056
22.7	23.6	24.5	25.4	26.3



What are Most Recent Tables

Base Tables – How long are people living today?

- No public plan data was used in the Society of Actuaries (SOA) most recent mortality study. (RP-2014 tables)
- SOA is undertaking a public plan mortality study.
- Most large public plans study their own mortality and customize standard tables to be consistent with their experience. <u>Therefore</u> <u>any industry study of current mortality should only impact those</u> <u>plans to the extent it is consistent with their independent study.</u>

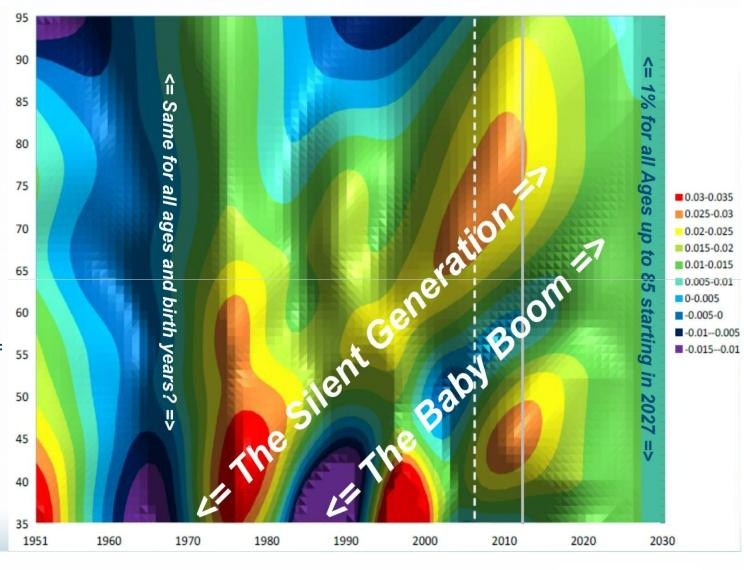
Improvement Tables – How rapidly will longevity improve?

- Most recent SOA studies used Social Security data so exclusion of public plan data is not an issue (MP-2014, MP-2015 & MP-2016).
- Changes in expected improvement can have a material impact.
- The question is: How much improvement should we expect?



Complexity MP-2014 Heat Map for Males

- Dashed white line = 2007, most recent year of historic mortality improvement rates directly included.
- Thin gray line = 2014





"The signal is the truth. The noise is what distracts us from the truth."

Nate Silver - The Signal and the Noise: Why So Many Predictions Fail – but Some Don't.

- What is the truth (i.e., the signal) when it comes to mortality improvement?
 - People are living longer. Some level of future improvement should be assumed.
 - We don't know how rapidly future improvements will occur.
 - Mortality improvement has been volatile from one decade to the next.
 - Mortality improvement tends to decline at older ages.

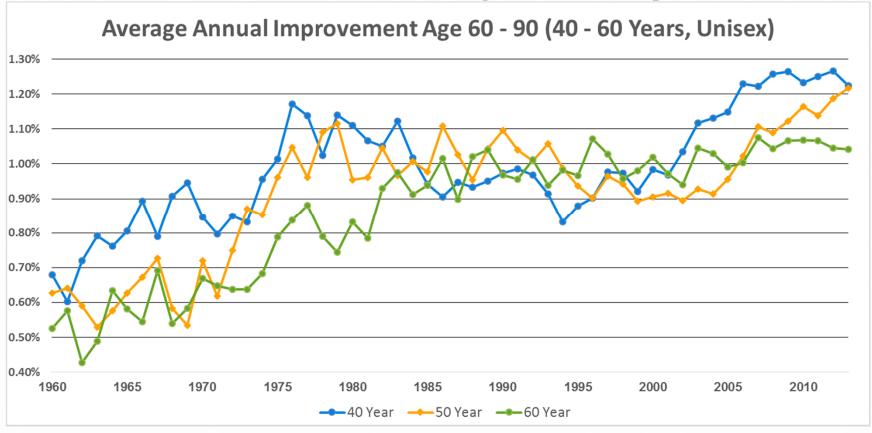


Mortality Projection Stability

- Public plans place a high priority on predictable, stable costs and liability calculations.
- One purpose of generational mortality is to reduce the cost volatility imposed by periodically updating static (i.e., nongenerational) tables.
 - However, changes in the projection assumption can be just as disruptive, and it is difficult to predict future changes in complex mortality improvement models.
 - An alternative which addresses this issue is to use an understandable, less complex improvement assumption based on the observed long term average.
- We believe a unisex table based on 110% of the MP-2016 table is reasonable and less likely to require disruptive updates in the future.



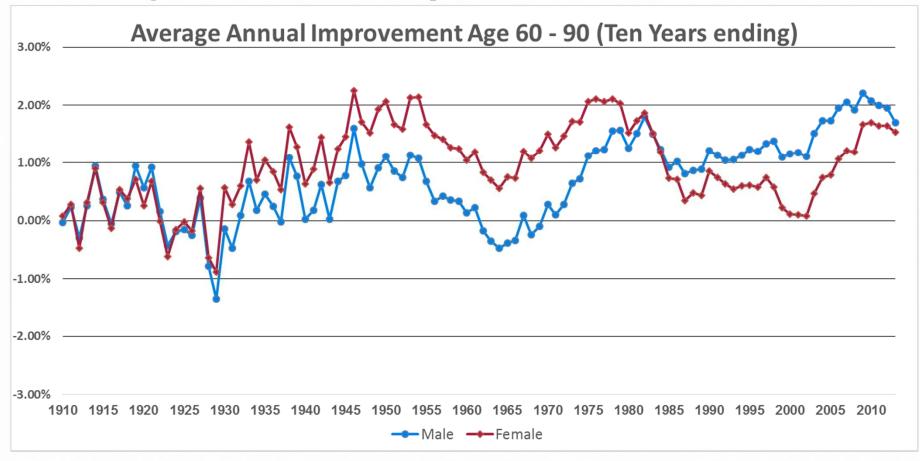
40, 50 and 60 Year Averages of Improvement



- Long term averages over 40 60 years are currently between 1.04% and 1.22%.
- An assumption of 1.10% is reasonable.



Average Ten Year Improvement 1901 – 2013



- We don't know whether male or female mortality will improve faster.
- We don't know from one decade what the next will be like.



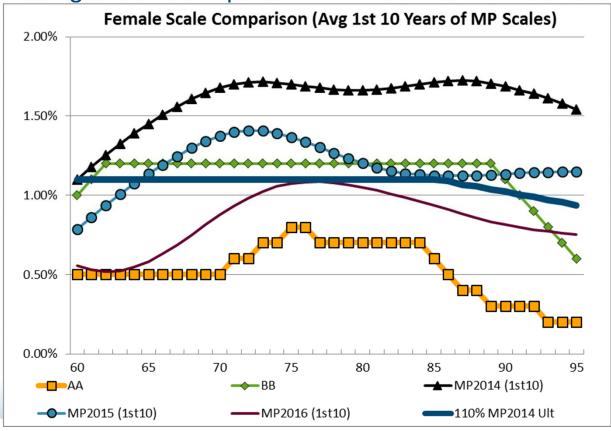
Why 100% or 110% of MP-2016 Ultimate?

- We believe an assumption of 100% to 110% of MP-2016
 Ultimate is reasonable and will not need to be changed in the near future.
- This will make liability and contribution calculations more stable.
- Generational mortality should reduce the cost volatility from changing mortality assumptions. However, changes in the projection assumption can be just as disruptive.



Comparison to Female Projection Scales

- There have been large changes in published improvement scales.
- 110% of MP-2016 Ultimate: (a) Compares reasonably, (b) is likely to stay reasonable, (c) and if kept in the future, cost volatility from unneeded changes in assumptions will be reduced.



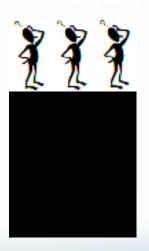


Generational Mortality – Administration Issues

- How do we reflect generational mortality in option factors, employee contribution rates and service purchase when actuarial equivalents are required?
 - Use a "static" projection of mortality to a reasonable future date and apply it to all actuarial equivalencies?

```
-- or ---
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- Use a different set of tables for every birth year?
- → Use static option to prevent additional complexity





What are other Systems doing?

California

- CalPERS is currently using a static table with 20 years of BB projection.
 Intended to give similar results to Scale BB.
- LACERA is using 100% of MP-2016 Ultimate
- CalSTRS is considering 110% of MP-2016 Ultimate
- Two of Segal's California clients have moved to generational mortality using MP-2015.
- Cheiron is recommending their clients move to generational mortality

Surrounding Statewide Systems

- Full Generational Mortality with Scale BB (6)
 - Washington, Oregon, Wyoming, New Mexico ERB, Texas TRS, Texas Municipal
- Full Generational with Scale AA (3)
 - Idaho, Utah, Texas ERS
- Full Generational 110% of MP2014 Ultimate (1): Texas County and District
- Static (4): Nevada, Arizona, New Mexico PERA, Colorado



Impact on Contribution Rates (Rough Estimates)

- Member contribution rates
 - Non-PEPRA plans = Relative 3% increase on base & COLA rates
 - General Plan 4 Entry Age 35 = 13.17% → 13.48% (includes COLA & cost sharing)
 - PEPRA plans = Relative 3% increase
- Employer contribution rates
 - Increase in total = 3% of payroll
- What if old method (static mortality) is retained
 - Theoretically, cost should be the same as generational mortality
- Caution
 - Very preliminary estimates
 - Will have more concrete numbers with the investigation report



Conclusions – People are Living Longer

- We must plan for future mortality improvement in an uncertain environment.
- Generational mortality assumptions should be considered along with the administrative implications.
- Current mortality projections are very complex
 - Precision without accuracy
- Preliminary thoughts
 - Base tables will reflect actual SamCERA experience
 - Use 100% or 110% of MP-2016 projection scale for future improvements



Questions?





SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 6.1

TO:

Board of Retirement

FROM:

Michael Coultrip, Chief Investment Officer

SUBJECT:

Report on Preliminary Monthly Portfolio Performance Report for the Period Ended

Mich R Conf

December 31, 2016

Staff Recommendation

Accept the preliminary performance report dated December 31, 2016 (which will be distributed to the Board in the "day of meeting" folder).

Background

The monthly preliminary performance report will not be ready in time for the Board mailing. Staff decided to hold the accounting books open longer than normal to capture a few quarterly statements due to it being calendar year-end. The monthly preliminary performance report for December will be distributed to the Board ahead of the January Board meeting.

Discussion

Most broad-based equity indices were positive on the month. The broad U.S. equity market (as measured by the S&P 500 Index) was up 2.0% on the month (and hit a record high in December), while developed international equity (as measured by MSCI EAFE) was up 3.4%. Emerging markets were up slightly and returned 0.2%.

The Federal Reserve increased their target overnight rate by 25 basis points, in line with expectations, and consistent with increased confidence in the economic recovery. Economic data were strong in December, with manufacturing and consumer confidence showing increased strength. Estimates of third quarter real GDP growth were also revised higher to 3.5% from 3.2%. Job growth was a bit below expectations, but wage growth continued to show strength.

The general U.S. fixed income market was up 0.1% during the month, as tighter credit spreads offset the impact of higher interest rates. The 10-year U.S. Treasury yield increased by 8 basis points during the month with the yield ending at 2.45% by month-end. Credit spreads tightened again during the month, leading the high yield market higher by 1.8%, while emerging debt returned 1.3%. Commodities also increased by 1.8% during the month.

Attachment

Verus December 2016 Capital Markets Update



Market commentary

ECONOMIC CLIMATE

- The Fed raised interest rates at its December meeting, increasing the federal funds target rate by 0.25%, to a range of 0.50% to 0.75%.
- The U.S. dollar appreciated to its highest level since 2003, as the trade weighted U.S. dollar index rose 0.5% from the previous month against a basket of major currencies. The index was up 9.3% from its 1-year low in May at the end of December.
- The U.S. trade deficit widened by 6.8% in November to -\$45.2 billion, larger than the consensus estimate of -\$44.5 billion. A rise in oil imports and a reduction in capital goods exports were cited as the largest contributing factors.
- The University of Michigan's U.S. consumer sentiment index jumped to 98.2, the highest rate since January 2015. Respondents cited potential new economic policies as the biggest positive.
- The ISM purchasing managers index rose to a 1-year high of 54.7 in December, indicating an expansion in manufacturing activity.

DOMESTIC EQUITIES

- Domestic equities posted a second consecutive positive monthly return, as the S&P 500 returned 2.0% in December. The index set a record high closing value of 2,271 on December 13th.
- As of December 30th, fourth quarter earnings for the S&P 500 are estimated to grow at 3.2% year-over-year, according to FactSet. If the index reports positive earnings growth, it would be the second consecutive quarter of year-over-year earnings growth.

DOMESTIC FIXED INCOME

- The Bloomberg Barclays U.S. Aggregate returned 0.1% in December, the first positive monthly return since July.
- Interest rates continued to rise but at a reduced rate compared to last month. The 10-Year Treasury yield increased 8 bps in December, ending the month at 2.45%.
- U.S. high yield option-adjusted spreads continued their downward trend to the lowest point since September of 2014, and ended the month at 4.2%. High yield spreads have compressed by 2.7% in 2016.

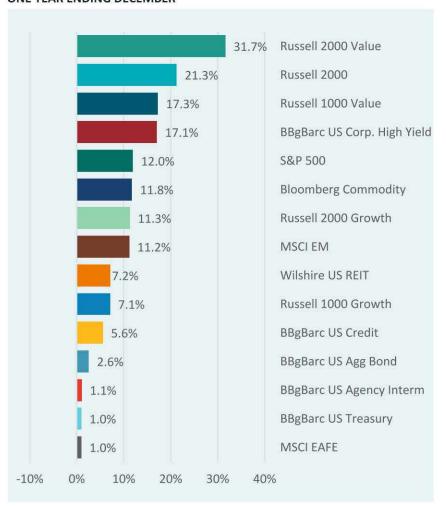
INTERNATIONAL MARKETS

- International equity markets narrowly outperformed domestic equities in December (S&P 500 2.0%) as the MSCI ACWI ex U.S. returned 2.2%.
- Italy voted against a referendum on constitutional reform on December 4th that would have weakened the power of the Senate. The Italian Prime Minster, Matteo Renzi, resigned shortly thereafter. Although Renzi's Democratic party will remain in power, the country's anti-establishment Five Star party has recently gained popularity.
- The ECB announced it would continue its asset purchase program through the initially scheduled date of March 2017, but at a reduced rate. The program will extend until at least the end of 2017, and monthly bond purchases will fall to €60 billion from €80 billion in April 2017.

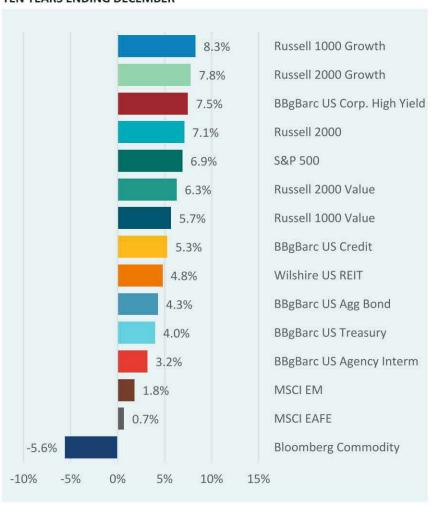


Major asset class returns

ONE YEAR ENDING DECEMBER



TEN YEARS ENDING DECEMBER



Source: Morningstar, as of 12/31/16

Source: Morningstar, as of 12/31/16

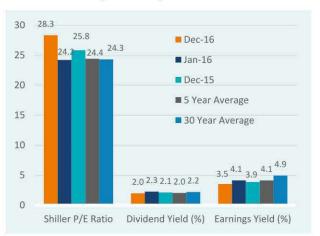


U.S. large cap equities

- The S&P 500 returned 2.0% in December and provided a 12.0% return in 2016.
- The Shiller P/E Ratio for the S&P 500 increased from 26.9 in November to 28.3 at month end, well above the 30-year average of 24.3.
- Relative to the S&P 500, Telecom Services stocks outperformed in December, returning 8.1% compared to the overall index return of 2.0%.

- The worst performing sector in the S&P 500 was Consumer Discretionary stocks, which returned 0.1% in the month.
- Realized volatility of U.S. equities was relatively low in December, as the annualized standard deviation of the S&P 500 was 8.0%, well below the 10-year average of 15.3%.

US LARGE CAP (S&P 500) VALUATION SNAPSHOT



RETURNS IF P/E MOVED TO HISTORIC LEVEL



Source: Yale/Shiller, Verus, as of 12/31/16

S&P 500 VALUATION SNAPSHOT



Source: Standard & Poor's, as of 12/31/16



Source: Yale/Shiller, as of 12/31/16

Fixed income

- The Bloomberg Barclays U.S. Aggregate provided a slightly positive return of 0.1% in December.
- Interest rates continued to rise but at reduced rate.
 The 10-Year Treasury yield increased 8 bps in
 December, ending the month at 2.45%.
- The annualized nominal fixed income yield for the Bloomberg Barclays U.S. Corporate High Yield decreased in December by 45 bps, to 6.1%.

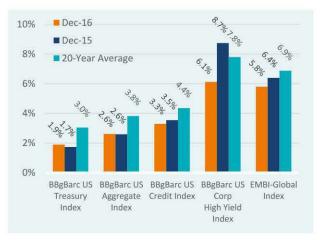
- Total U.S. bond issuance in 2016 was \$6.9 trillion,
 5.8% higher than 2015. The credit expansion was mainly attributed to increases in Federal Agency,
 Municipal and Mortgage-related bonds.
- The 30-year fixed mortgage rate moved upward by 29 bps in December and ended the month at 4.32%, well above the 1-year average of 3.65%.

U.S. TREASURY YIELD CURVE



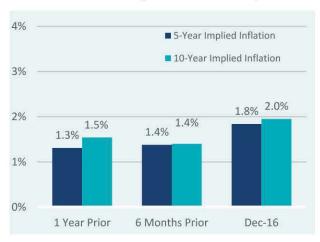
Source: Federal Reserve, as of 12/31/16

NOMINAL FIXED INCOME YIELDS



Source: Morningstar, as of 12/31/16

IMPLIED INFLATION (TIPS BREAKEVEN)



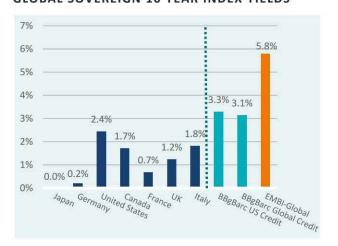
Source: Federal Reserve, as of 12/31/16



Global markets

- The U.S. dollar appreciated against major currencies in December, as the trade weighted index rose 0.5%.
 The index ended the month at 109.2, well above its long-term average of 93.7
- Deutsche Bank and Credit Suisse agreed to settle allegations related to the sales of mortgage-backed securities before the financial crisis of 2008. The amounts of the settlements were reportedly \$7.2 billion and \$5.3 billion, respectively.
- Italy approved a €20 billion bailout on December 23rd for its third largest bank, Banca Monte die Paschi di Siena.
- The Chinese yuan depreciated against the U.S. dollar in December to the lowest rate in eight years, temporarily increasing liquidity issues within the country's financial sector.

GLOBAL SOVEREIGN 10 YEAR INDEX YIELDS



Source: Morningstar, as of 12/31/16

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 12/31/16

MSCI VALUATION METRICS (3 MONTH AVERAGE)



Source: MSCI, as of 12/31/16



Style tilts: U.S. large value vs. growth

- Value equities outperformed growth equities for the third consecutive month. In December, the Russell 1000 Value index and Russell 1000 Growth index returned 2.5% and 1.2%, respectively.
- Short-term outperformance of value equities was partially attributable to the higher concentration of Energy and Financial Services companies in the Russell 1000 Value relative to the Russell 1000 Growth.
- The relative P/E ratio of value to growth equities fell slightly from 0.88 to 0.85. This metric remains above its long-term average of 0.77.
- The recent short-term outperformance of value equities has pointed towards the reemergence of a value premium.

RELATIVE PE RATIO OF U.S. VALUE VS. GROWTH



Source: Russell, Bloomberg, as of 12/31/16

U.S. VALUE VS. GROWTH ABSOLUTE PERFORMANCE

	RUSSELL 1000 GROWTH ANNUALIZED RETURN TO DATE %	RUSSELL 1000 VALUE ANNUALIZED RETURN TO DATE %
QTD	1.0	6.7
YTD	7.1	17.3
1 YEAR	7.1	17.3
3 YEARS	8.6	8.6
5 YEARS	14.5	14.8
10 YEARS	8.3	5.7
20 YEARS	6.9	8.3
	SHARPE RATIO	SHARPE RATIO
3 YEARS	0.81	0.80
5 YEARS	1.26	1.34
10 YEARS	0.54	0.38
20 YEARS	0.34	0.46

Source: Morningstar, as of 12/31/16

U.S. VALUE VS. GROWTH RELATIVE PERFORMANCE



Source: Morningstar, as of 12/31/16



Style tilts: U.S. large vs. small

- U.S. small cap equities outperformed large cap equities in December, as the Russell 2000 index and Russell 1000 index returned 2.8% and 1.9%, respectively.
- Despite the recent outperformance of small cap equities, in all time periods examined below large cap equities have provided a greater risk adjusted return as defined by the Sharpe ratio.
- The relative P/E ratio of small to large cap equities fell from 2.17 to 2.04 in December. This metric remains well above its long-term average of 1.39.

RELATIVE PE RATIO OF U.S. SMALL VS. LARGE



Source: Russell, Bloomberg, as of 12/31/16

U.S. LARGE VS. SMALL ABSOLUTE PERFORMANCE

	RUSSELL 1000 INDEX ANNUALIZED RETURN TO DATE %	RUSSELL 2000 INDEX 5 ANNUALIZED RETURN TO DATE %
QTD	3.8	8.8
YTD	12.1	21.3
1 YEAR	12.1	21.3
3 YEARS	8.6	6.7
5 YEARS	14.7	14.5
10 YEARS	7.1	7.1
20 YEARS	7.9	8.2
	SHARPE RATIO	SHARPE RATIO
3 YEARS	0.83	0.46
5 YEARS	1.34	0.97
10 YEARS	0.47	0.39
20 YEARS	0.43	0.39

Source: Morningstar, as of 12/31/16

U.S. SMALL VS. LARGE RELATIVE PERFORMANCE



Source: Morningstar, as of 12/31/16



Commodities

- The Livestock and Energy Bloomberg Commodity sub-indices outperformed in December as they returned 10.0% and 9.0%, respectively. The overall Bloomberg Commodity Index returned 1.8%.
- WTI crude oil appreciated in December, as the price rose by 8.7% and ended at \$53.72 per barrel. U.S. crude oil inventories decreased by -1.8% and ended the month at 479 million barrels.
- The Bloomberg Precious Metals index underperformed in December, as it returned -2.2%.
 The price of gold fell -2.4% to end the month at \$1,159 per ounce.

INDEX AND SECTOR PERFORMANCE

	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	2.7	11.8	11.8	(11.3)	(9.0)	(5.6)
Bloomberg Agriculture	(2.1)	2.1	2.1	(7.9)	(7.0)	(1.2)
Bloomberg Energy	10.6	16.3	16.3	(24.5)	(16.3)	(15.5)
Bloomberg Grains	1.4	(5.9)	(5.9)	(11.7)	(7.5)	(2.5)
Bloomberg Industrial Metals	6.1	19.9	19.9	(6.5)	(6.6)	(6.2)
Bloomberg Livestock	20.8	(5.6)	(5.6)	(5.1)	(4.5)	(7.5)
Bloomberg Petroleum	8.4	17.2	17.2	(26.2)	(15.7)	(9.3)
Bloomberg Precious Metals	(14.0)	9.5	9.5	(3.3)	(7.8)	4.5
Bloomberg Softs	(11.2)	13.2	13.2	(2.8)	(10.0)	(2.1)

Source: Morningstar, as of 12/31/16

COMMODITY PERFORMANCE



Source: Bloomberg, as of 12/31/16



Appendix

Periodic table of returns

BE																											
A		1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	5-Year	10-Year
	Small Cap Value	74.8	16.6	38.4	23.2	35.2	38.7	66.4	31.8	14.0	25.9	56.3	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	10.1	31.7	15.1	8.3
	Small Cap Equity	32.9	8.1	37.8	23.1	32.9	27.0	43.1	22.8	8.4	10.3	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	14.8	7.8
	Large Cap Value	26.3	6.4	37.2	22.4	31.8	20.3	33.2	12.2	7.3	6.7	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	14.7	7.2
	Large Cap Equity	23.8	4.4	31.0	21.6	30.5	19.3	27.3	11.6	3.3	1.6	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	14.5	7.1
	Commodities	19.3	3.2	28.5	21.4	22.4	16.2	26.5	7.0	2.8	1.0	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	14.5	7.1
	Small Cap Growth	18.9	2.6	25.7	16.5	16.2	15.6	24.3	6.0	2.5	-5.9	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	13.7	6.3
	Emerging Markets Equity	18.1	0.4	19.6	14.4	13.9	8.7	21.3	4.1	-2.4	-6.0	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	11.2	5.7
	Large Cap Growth	13.4	-1.5	18.5	11.3	12.9	4.9	20.9	-3.0	-5.6	-11.4	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	7.1	6.5	4.3
	Real Estate	10.2	-1.8	15.2	10.3	10.6	1.2	13.2	-7.3	-9.1	-15.5	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	6.1	5.8	3.8
	60/40 Global Portfolio	9.7	-2.0	11.6	9.9	9.7	-2.5	11.4	-7.8	-9.2	-15.7	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	3.4	1.8
	US Bonds	3.1	-2.4	11.1	6.4	5.2	-5.1	7.3	-14.0	-12.4	-20.5	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	2.2	1.3
	International Equity	2.9	-2.9	7.5	6.0	2.1	-6.5	4.8	-22.4	-19.5	-21.7	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	1.3	0.7
	Hedge Funds of Funds	1.4	-3.5	5.7	5.1	-3.4	-25.3	-0.8	-22.4	-20.4	-27.9	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	0.1	0.7
	Cash	-1.1	-7.3	-5.2	3.6	-11.6	-27.0	-1.5	-30.6	-21.2	-30.3	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	-9.0	-5.6

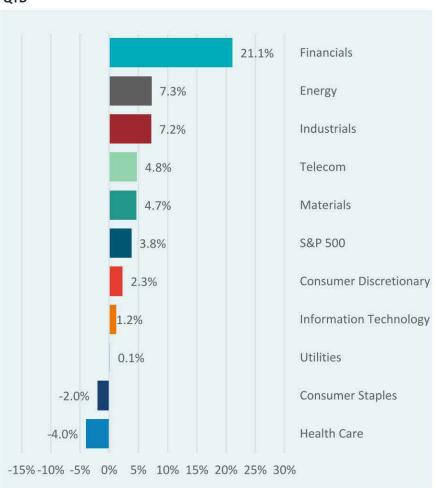


Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, BBgBarc US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, BBgBarc Global Bond. NCREIF Property Index performance data as of 9/30/16.

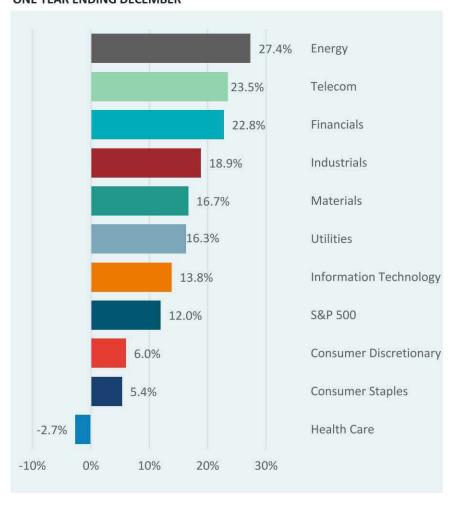


S&P 500 and S&P 500 sector returns

QTD



ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/16

Source: Morningstar, as of 12/31/16



Detailed index returns

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	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	2.0	3.8	12.0	12.0	8.9	14.7	6.9
S&P 500 Equal Weighted	1.1	3.8	14.8	14.8	8.7	15.5	8.4
DJ Industrial Average	3.4	8.7	16.5	16.5	8.7	12.9	7.5
Russell Top 200	2.2	4.1	11.3	11.3	8.9	14.7	6.8
Russell 1000	1.9	3.8	12.1	12.1	8.6	14.7	7.1
Russell 2000	2.8	8.8	21.3	21.3	6.7	14.5	7.1
Russell 3000	2.0	4.2	12.7	12.7	8.4	14.7	7.1
Russell Mid Cap	1.1	3.2	13.8	13.8	7.9	14.7	7.9
Style Index							
Russell 1000 Growth	1.2	1.0	7.1	7.1	8.6	14.5	8.3
Russell 1000 Value	2.5	6.7	17.3	17.3	8.6	14.8	5.7
Russell 2000 Growth	1.4	3.6	11.3	11.3	5.1	13.7	7.8
Russell 2000 Value	4.1	14.1	31.7	31.7	8.3	15.1	6.3

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
BBgBarc US Treasury USTIPS	(0.1)	(2.4)	4.7	4.7	2.3	0.9	4.4
BBgBarc US Treasury Bills	0.0	0.1	0.4	0.4	0.2	0.2	0.9
BBgBarc US Agg Bond	0.1	(3.0)	2.6	2.6	3.0	2.2	4.3
Duration							
BBgBarc US Treasury 1-3 Yr	0.0	(0.5)	0.9	0.9	0.7	0.6	2.1
BBgBarc US Treasury Long	(0.5)	(11.7)	1.3	1.3	7.8	2.5	6.7
BBgBarc US Treasury	(0.1)	(3.8)	1.0	1.0	2.3	1.2	4.0
Issuer							
BBgBarc US MBS	(0.0)	(2.0)	1.7	1.7	3.1	2.1	4.3
BBgBarc US Corp. High Yield	1.8	1.8	17.1	17.1	4.7	7.4	7.5
BBgBarc US Agency Interm	(0.0)	(1.1)	1.1	1.1	1.5	1.1	3.2
BBgBarc US Credit	0.6	(3.0)	5.6	5.6	4.1	3.8	5.3

INTERNATIONAL EQUITY

	1						
Broad Index							
MSCI ACWI	2.2	1.2	7.9	7.9	3.1	9.4	3.6
MSCI ACWI ex US	2.6	(1.3)	4.5	4.5	(1.8)	5.0	1.0
MSCI EAFE	3.4	(0.7)	1.0	1.0	(1.6)	6.5	0.7
MSCI EM	0.2	(4.2)	11.2	11.2	(2.6)	1.3	1.8
MSCI EAFE Small Cap	2.9	(2.9)	2.2	2.2	2.1	10.6	2.9
Style Index							
MSCI EAFE Growth	2.2	(5.5)	(3.0)	(3.0)	(1.2)	6.7	1.6
MSCI EAFE Value	4.6	4.2	5.0	5.0	(2.1)	6.3	(0.2)
Regional Index							
MSCI UK	4.1	(0.9)	(0.1)	(0.1)	(4.4)	4.0	0.3
MSCI Japan	1.0	(0.2)	2.4	2.4	2.5	8.2	0.5
MSCI Euro	6.6	2.0	1.4	1.4	(3.3)	7.1	(0.6)
MSCI EM Asia	(1.4)	(6.1)	6.1	6.1	0.1	4.4	3.4
MSCI EM Latin American	0.9	(0.9)	31.0	31.0	(7.5)	(5.7)	0.3

OTHER

Index							
Bloomberg Commodity	1.8	2.7	11.8	11.8	(11.3)	(9.0)	(5.6)
Wilshire US REIT	4.9	(2.3)	7.2	7.2	13.8	12.0	4.8
Regional Index							
JPM EMBI Global Div	1.3	(4.0)	10.2	10.2	6.2	5.9	6.9
JPM GBI-EM Global Div	1.9	(6.1)	9.9	9.9	(4.1)	(1.3)	3.8
Currency (Spot)							
Euro	(0.6)	(6.1)	(2.9)	(2.9)	(8.5)	(4.1)	(2.2)
Pound	(1.1)	(4.9)	(16.2)	(16.2)	(9.3)	(4.5)	(4.5)
Yen	(2.3)	(13.2)	3.1	3.1	(3.4)	(8.0)	0.2

Source: Morningstar, as of 12/31/16



Notices & disclosures

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SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 6.2

TO:

Board of Retirement

FROM:

Doris Ng, Investment Analyst

SUBJECT:

Presentation of Private Asset Semi-Annual Performance Reports as of June 30,

2016

Staff Recommendation

Accept and review Verus' semi-annual private equity and private real assets performance reports as of June 30, 2016.

Background

In August 2010, the Board of Retirement approved the implementation of SamCERA's private equity program. In October 2013, the Board of Retirement subsequently approved the implementation of SamCERA's private real asset program. Verus intends to provide a semi-annual private equity and private real asset performance report as of June 30th and December 31st of every year.

Discussion

As of June 30, 2016, SamCERA's private equity portfolio had a total market value of \$221.7 million (6.3% of SamCERA's total fund). For the six-month period from January 1, 2016 through June 30, 2016, SamCERA committed to one new fund for a total of \$10 million. This brought the sum of private equity funds in the portfolio to eighteen with \$313.5 million in committed capital across thirteen private equity managers.

As of June 30, 2016, SamCERA's private real assets portfolio had a total market value of \$46.6 million (1.3% of SamCERA's total fund). SamCERA made its first commitment to real assets in July 2014. For the six-month period from January 1, 2016 through June 30, 2016, SamCERA committed to one new fund for a total of \$25 million. This brought the sum of private real asset funds in the portfolio to six with \$100 million in committed capital.

In April 2016, two energy funds were reclassified from the private equity portfolio to the private real assets portfolio, which resulted in a corresponding transfer of \$30 million of committed capital.

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

Attachments

- A. Verus Semi-Annual Private Equity Performance Report for Period Ending 6/30/2016
- B. Verus Semi-Annual Private Real Assets Performance Report for Period Ending 6/30/2016



PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS



PERIOD ENDING: JUNE 30, 2016

Private Equity Review

San Mateo County Employees' Retirement Association

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PE Portfolio Diversification by Vintage Year

PE Portfolio Diversification by Geography
PE Portfolio Diversification by Industry

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Debt-Related:

New issuance slowing down. First half 2016 high yield issuance of \$122.8 billion is down 33.6% from the same period last year and leveraged loan volume of \$129.5 billion¹ is down 10.5% versus the same period last year.

HY spreads weakened but bank debt spreads strengthened. As of June 30, 2016, HY Credit Index widened by 63 bps or 17.3%¹ versus last year. BB-, B+ and B index tightened slightly by 47 bps, 4 bps and 37 bps respectively, a 12.5%¹, 1%¹ and 7.8%¹ decrease versus same period last year.

LBO debt terms appear unchanged. Total leverage (Debt / EBITDA) for the first half of 2016 at $5.5x^2$ same as the first half of 2015. Interest coverage (EBITDA / Cash Interest) for the first half of 2016 at $3.14x^2$ is up slightly by 4.0% from the first half of 2015.

Buyouts & PE:

PE dry powder increasing. During the first half of 2016, PE dry powder was at \$771 billion³, up 8.1% from same period last year. Total buyout dry power was at \$512 billion³, up 7.8% from prior year.

PE Fundraising is slowing, but Buyouts managers have raised more capital. During the first half of 2016, US PE firms raised \$130.4 billion⁴, down 25.1% from prior year. US buyout firms across all buyout strategies raised \$36.6 billion⁴, up 78.3% from prior year.

Investment activity is down. During the first half of 2016, PE firms invested in \$132.4 billion⁵ worth of deals, down 33.6% from prior year and closed on 1,878 transactions, up 3.4% from prior year.

LBO price multiples up slightly, set new record. As of June 30, 2016, US LBO purchase price multiples (Enterprise Value / EBITDA) at all-time high levels are up slightly at $10.5x^2$, a 4.8% increase from prior year. The peak in the previous cycle was $9.9x^2$ which was reached in 2007.

Exit activity decreased. During the first half of 2016, US PE firms exited 459 companies⁶, representing \$113.2 billion⁶ in total transaction value. This represents a 4.0% decrease in the number of exits and a 38.8% decrease in total transaction value compared to prior year. The decline was led by a 17.1% decline in the total value of exits via sale to strategic acquirers, which currently comprise 87.9% of the total transaction value; and a 53.2% decline in the total value of exits via IPO, which currently comprise 9.1% of total transaction value.



VC:

VC dry powder increasing. VC dry powder at \$163.0 billion³, up 13.6% from the same period last year.

VC fundraising up. US VC firms raised \$17.3 billion⁴ in the first half of 2016, a 5.9% increase from the same period last year. 87 funds⁴ closed in the first half of 2016, a 16.3% decrease from the same period last year. The average VC fund size grew 14.1% at \$192.3 million versus the same period last year.

Fewer deals closed but larger. US VC firms deployed \$40.1 billion⁷ in capital for the first half of 2016, a 1% decrease from prior year. The decline was led by a large decrease in number of rounds closed at 4,145, a 23.2% decrease from prior year. This decline was offset by a substantial increase in average investment per deal which grew to \$9.7 million⁷, a 29.4% increase from prior years. The increase in average deal size was driven by US managers preferring later stage investments over early stage investments. Later stage companies generally require larger check sizes versus earlier stage companies.

Late stage valuations up, early stage down. During the first half of 2016, reflecting US manager's preference for late stage investments, the average valuation of a Seed Stage, Series A and Series B investment was down 2.8% at \$5.9 million, 6.2% at \$14.1 million and 9.2% at \$37.6 million, respectively. However, the average valuation of a Series C and Series D+ investment was up 9.0% at \$90 million and 8.7% at \$200 million, respectively.

Exit activity strengthening. VC exits are up during the first half of 2016 compared to prior years. VC firms exited 544 companies⁸ in the first half of 2016, up 42.0% from the same period last year. Similarly, VC firm exits represented \$32.4 billion⁸ in transaction value, up 36.8% from the same period last year. The increase was led by a 41.7% increase in the total value of exits to strategic acquirers, which comprise 87.0% of total transaction value. This more than offset the 50.2% decrease in total value of exits via IPO which comprised only 5.4% of the total transaction value.

Ex US:

Ex US dry powder flat, and below the dry powder in the U.S. PE dry powder outside the US stayed relatively flat at \$536.7 billion⁹ for 2015 compared to \$534.8 billion for 2014. As of October 2016, dry powder outside the US is less than dry powder in the US by 35.1%.

Fundraising outside of U.S. up. For the first half of 2016, Ex US fundraising was up 9.7% to \$74.4 billion¹⁰ compared to prior year. The increase was led by European funds which raised \$61.0 billion, up 40% from prior year. The increase was offset by a decrease in Asian funds which only raised \$9.7 billion, down 39.0% from prior year.

Investments outside of U.S. down significantly. For the first half of 2016, Ex-US PE firms transacted on \$47.3 billion¹¹ of aggregate value, down 45.8% from prior year. The largest decline in dollar value was in Europe where firms only invested in \$35.3 billion¹¹ worth of deals, a 40.0% decrease from prior years. Asia also invested in \$9.4 billion worth of deals (-33.4% from prior year). The rest of the world only invested in \$2.7 billion worth of deals (-81.6% from prior year).



Market Commentary

Entry valuations increase on new investments outside the U.S. As of June 30, 2016, global median purchase price multiples (Enterprise Value / EBITDA) was up at $8.9x^{12}$, a 3.1% increase from prior year. However, this was driven by a $4.8\%^2$ increase in U.S. purchase multiples at 10.5x. Ex-U.S., purchase multiples increased by less than the U.S. led by Europe which at 9.9x was up $4.1\%^{13}$ versus prior year.

Leverage multiples in Europe stayed flat. European LBO leverage multiples (Debt / EBITDA) have averaged 4.8x¹³ through the first half of 2016, a decrease of less than 1% from prior year. European LBO financing at \$30.2 billion¹⁴ is down 20.9% versus prior year.

Exit activity is strengthening outside the U.S.. In contrast to the U.S. which recorded \$113.2 billion¹⁵ in exits for the first half of 2016, a decrease of 38.8% from prior year, exits outside the US amounted to \$159.9 billion¹⁵, a 12.6% increase from prior year.

Outlook:

PE allocations likely to increase. A recent survey of institutional investors conducted on June 30, 2016 indicated that 56% intend to increase their allocation for private equity. This is an increase of 32.8% from the survey taken during the same period last year.

Institutional investors most interested in investing in North America and like small- to mid-market buyouts. Based on the survey conducted on June 30, 2016, Institutional investors view North America as the most attractive location to invest in the current economic climate with 60% choosing it as their preferred investment destination. This compares favorably versus Europe (35%¹⁶) and Asia (26%¹⁶). In the same survey, 50%¹⁶ of institutional investors also cited the small to mid-market buyout strategy as presenting the best opportunities in the current financial climate. Venture capital was mentioned next with 36%¹⁶ of institutional investors believing it presented the best opportunities.



Market Commentary

- (1) UBS' US Leveraged Capital Markets Weekly Update July 8, 2016
- (2) LCD's Leveraged Buyout Review 2Q15
- (3) Pregin Quarterly Update Q2 2016; PE Dry powder is the aggregation of Buyout, VC and Growth strategies.
- (4) Pregin Q2 2016 Private Equity Fundraising and Pregin Q1 2016 Private Equity Fundraising
- (5) Pregin Q2 2016 Private Equity-Backed Buyout Deals and Exits Factsheet and Pregin Q1 2016 Private Equity-Backed Buyout Deals and Exits Factsheet
- (6) PitchBook's 1H 2016 Global PE Exits & Company Inventory Report
- (7) PitchBook's Venture Capital Valuations + Trends Data Sheet (1H 2016)
- (8) PitchBook's Venture Capital Liquidity Data Sheet (1H 2016)
- (9) Preqin Dry powder by Geography (Preqin Website) Year-end and October 2016 data was used as Preqin did not have bi-annual data available. Dry powder includes Buyout, Distressed PE, Growth, Mezzanine, Other, Real Estate and Venture Strategies.
- (10) Pregin Q2 2016 Private Equity Fundraising
- (11) Preqin Q2 2016 Private Equity-Backed Buyout Deals and Exits Factsheet July 2016
- (12) PitchBook 2016 2Q M&A Report
- (13) LCD European Leveraged Buyout Review (1H 2016)
- (14) LCD European Leveraged Lending Review (1H 2016)
- (15) PitchBook's 1H 2016 Global PE Exits & Company Inventory Report
- (16) Preqin Investor Outlook: Alternative Assets, H2 2016 Data Pack

Investment Type	Policy Target	Policy Range	Market Value %	Market Value \$(000)	Unfunded Commitment \$(000)	Market Value + Unfunded \$(000)
SamCERA - Total Plan			100.0%	3,516,247		
Buyout (60% +/- 20%)	4.2%	3.2%-6.4%	3.7%	130,988	64,122	195,110
Venture Capital (20%, 0%-30%)	1.4%	0.0%-2.4%	1.7%	60,445	15,600	76,045
Debt-Related/Special Situations (20% +/- 10%)	1.4%	0.8%-2.4%	0.9%	30,273	52,791	83,064
Total Private Equity	7.0%	6%-10%	6.3%	221,706	132,513	354,219

Portfolio Summary

- As of June 30, 2016, the Private Equity Portfolio had a total market value of \$221.7 million, with \$131.0 million in Buyout, \$60.4 million in Venture Capital, and \$30.3 million in Debt-Related/Special Situations. Total market value is the current reported value of investments, excluding the remaining amount of unfunded commitments.
- SamCERA has contributed \$210.9 million toward its Private Equity commitments. Unfunded commitments total \$132.5 million.
- All sub-asset classes are within the policy range while commitments continue to be made to new managers at a slower pace.

Portfolio Activity

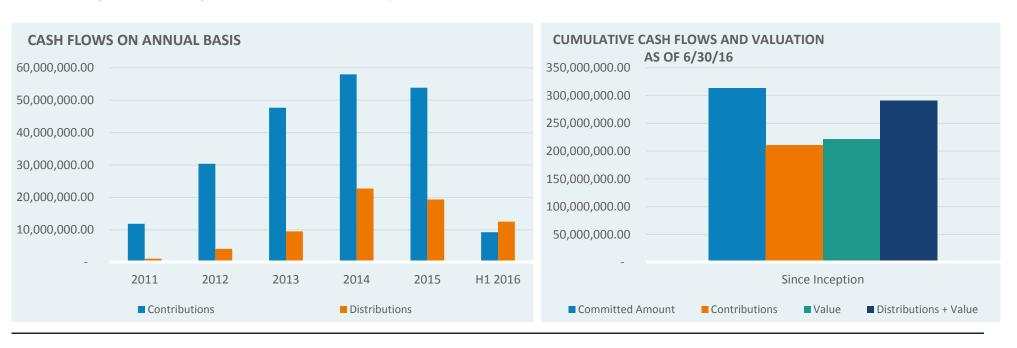
SamCERA committed \$10.0 million to OHA Strategic Credit Fund II in the first half of 2016. The portfolio committed \$10.0 million to Angeles Equity Partners I in the third quarter of 2016.

Performance

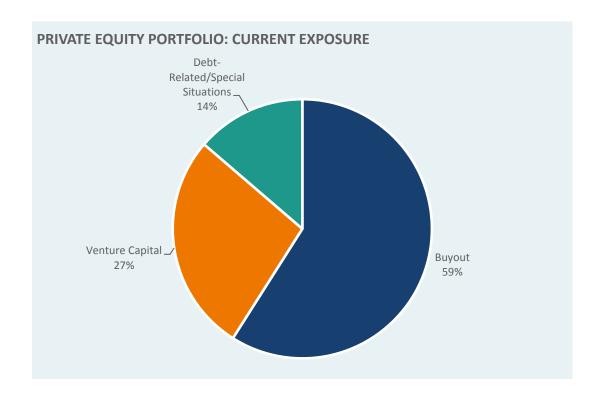
- The Private Equity portfolio's performance, as measured by net IRR, is 18.13%. Capital weighted average investment age of the portfolio is 2.24 years.
- The portfolio is currently valued at \$221.7 million. Together with \$69.3 million in realized distributions, the Total Value at \$291.0 million is approximately \$80.1 million above \$210.9 million total capital contributions, resulting in a total value multiple of 1.38x and a distribution multiple of 0.33x.
- Attribution of returns:
 - Buyouts up \$45.4 million / +35.5% versus cost (Sycamore, ABRY VII, and Warburg Pincus XI leading), with 33.2% of Total Value of portfolio

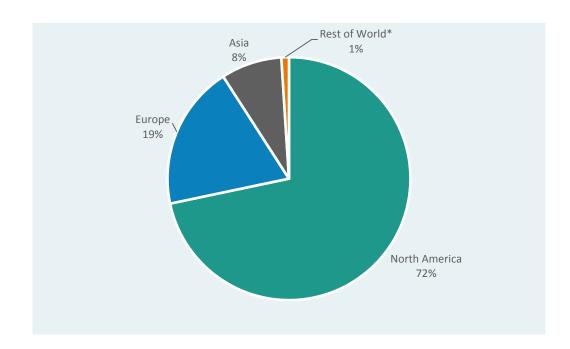
distributed;

- Venture Capital up \$25.1 million / +65.3% versus cost (General Catalyst VI, Third Rock III, Emergence Capital III, and NEA 14 leading), with 8.2% of Total Value of portfolio distributed; and
- Debt-related/Special Situations up \$9.6 million / +21.5% versus cost (ABRY Advanced Securities II leading), with 53.4% of Total Value of portfolio distributed.
- Within Private Equity, the current allocation of invested capital is 59.0% to Buyout, 27.3% to Venture Capital, and 13.7% to Debt-Related/Special Situations.



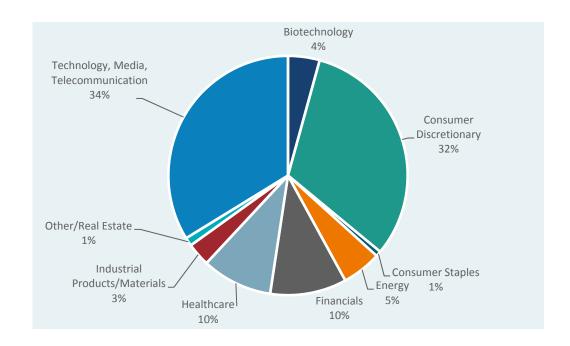






Based on the value of portfolio companies as of June 30, 2016, if provided by the partnerships. Differences between reported value and the total portfolio valuation is due to temporary cash funds, fees, other expenses, and holdings with undisclosed geography breakdown.

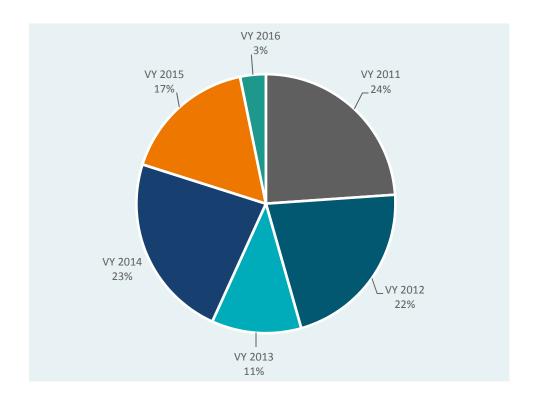
^{*} Rest of World includes Kenya, Cayman Islands, United Arab Emirates, and Brazil.



Based on the value of portfolio companies as of June 30, 2016, if provided by the partnerships. 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

Portfolio Diversification



Material Exceptions to Policy Significant Events

 As of June 30, 2016, the Private Equity Portfolio is slightly below the lower range of its target allocation, with exposures within target diversification bands.



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PERIOD ENDING: JUNE 30, 2016

Real Assets Review

San Mateo County Employees' Retirement Association

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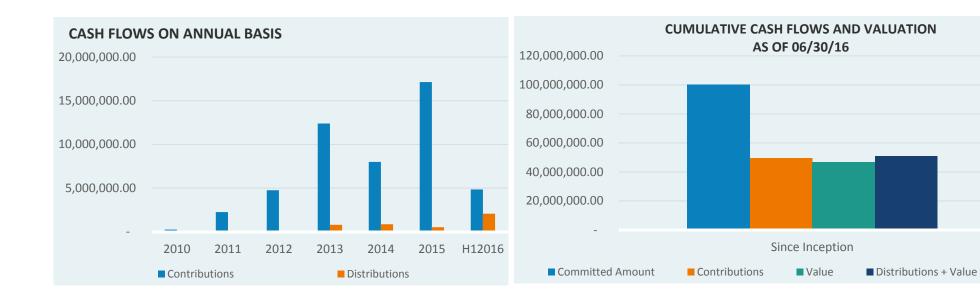
SEATTLE 206-622-3700 LOS ANGELES 310-297-1777 SAN FRANCISCO 415-362-3484

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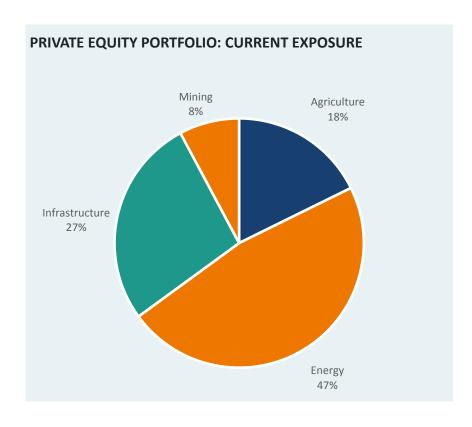
Past performance is no guarantee of future results. This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other "forward-looking statements." No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Verus Advisory Inc. and Verus Investors, LLC ("Verus") file a single form ADV under the United States Investment Advisors Act of 1940, as amended.

Performance

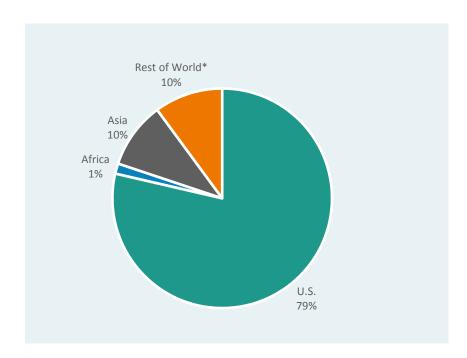
- The portfolio is currently valued at \$46.6 million. Together with \$4.2 million in realized distributions, the Total Value at \$50.8 million is approximately \$1.2 million above \$49.6 million total capital contributions, resulting in a total value multiple of 1.02x and a net IRR of 1.23%. Capital weighted average investment age of the portfolio is 1.97 years.
- Within Real Assets, the current allocation of invested capital is 17.7% to Agriculture, 47.2% to Energy, 27.2% to Infrastructure, and 7.8% to Mining.





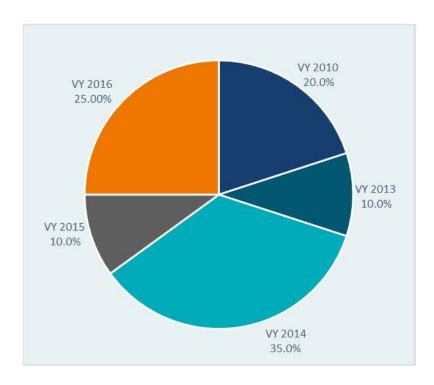


Portfolio Diversification



Based on invested capital as of June 30, 2016, if provided by the partnerships.

^{*} Rest of World includes Chile and Australia.



- As of June 30, 2016 due to the recent inception and lack of maturity of the program, the Real Assets
 Portfolio was below its target allocation and target diversification ranges.
- The Portfolio is expected to be diversified over a period of 3 to 5 years.
- No other significant events.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 6.3

made Contro

TO:

Board of Retirement

FROM:

Michael Coultrip, Chief Investment Officer

SUBJECT:

Amendment of SamCERA's Investment Policy Statement

Staff Recommendation

Adopt a resolution amending the SamCERA Investment Policy Statement.

Background

In October, staff provided an educational presentation on the Board's fiduciary duty, delegation of authority and governance and how they are intertwined. In November, staff led a workshop to discuss ways the Board may wish to delegate certain activities in the selection of retirement fund investments, with the goal being effective Board governance and prudent investment decisions by having: (1) Appropriate delegation of authority, along with proper alignment of responsibilities, authorities and expertise; (2) Clear lines of authority and improved decision making; (3) The right balance between strategy and oversight and day-to-day management; (4) Increased focus on strategy by the Board.

Discussion

At its November meeting, the Board determined that for its public market new manager hire process certain interim steps in the process should be delegated to staff. Under this approach, the Board would be updated on the process to develop the manager short-list and approve the final recommendation. Also discussed were a number of potential governance models related to private market due diligence approaches, and the Board determined not to adjust its current process.

Staff memorialized the Board's direction in a proposed amendment to the Investment Policy Statement by merging the existing Section 2.0 "Roles and Principal Duties" and Appendix C "Due Diligence Policy" into a new section 2.0 entitled "Management of the Fund" comprised of two sub-sections: A. "Roles and Principal Duties" and B. "Investment Portfolio Management." The new language is attached and staff will walk the Board through each of the new provisions.

The following additional proposed revisions to the Investment Policy Statement memorialize the Board's actions regarding "Phase One" changes in implementing the new asset allocation target policy portfolio along with changing the risk parity policy benchmark. The changes are summarized below:

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

- 1. "Phase One" implementation of the updated asset allocation policy that the Board approved in October 2016. The "Phase One" implementation plan was approved by the Board in December 2016.
- 2. Changing the risk parity policy benchmark to 60% MSCI World / 40% BC Global Aggregate from 60% Russell 3000 / 40% BC Aggregate. This was approved by the Board in December 2016.
- 3. A correction in the description of the Custom Real Asset Index composition.

Attachments

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



SamCERA's Investment Policy Statement

Approved June 2014
Revised September 2014
Revised September 2015
Revised January 2016
Revised October 2016

Revised January 2017

1.0 ESTABLISHMENT OF INVESTMENT POLICY

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

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

A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

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

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

Constitution of the State of California

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

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

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

The 1937 Act

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

Government Code section 31595.

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

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

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

SamCERA's Mission and Goals

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

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

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

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

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

2.0 MANAGEMENT OF THE FUND

A. ROLES AND PRINCIPAL DUTIES

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

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

B. INVESTMENT PORTFOLIO MANAGEMENT

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

1. Hiring New Managers

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

For private markets (private equity and private real assets), the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when an investment decision for a private market opportunity must be made prior to the date of the next regularly scheduled Board meeting. In these instances, if the investment is for \$25 million or less, the Chief Executive Officer is authorized to make the investment decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, and one member of the Investment Committee as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

2. Monitoring Existing Managers

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

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 14.0 (Quarterly Investment

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

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

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 15.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

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

3. Terminating Existing Managers

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

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its portfolio managers, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

2.0 ROLES AND PRINCIPAL DUTIES

The Fund investments shall be prudently planned, implemented, managed, and monitored. The Board, Investment Committee (the "Committee"), Investment Staff (the "Staff"), Investment Consultant (the "Consultant"), Custodian Bank (the "Custodian"), and Investment Managers (the "Managers") shall coordinate this process. The roles and principal duties of the above mentioned parties are defined below:

A. <u>THE BOARD</u> shall review and approve Committee recommendations. The Board also will review, adopt and monitor all investment policies, guidelines and procedures required to prudently administer the Fund and to effectively mitigate risk to the Fund.

B. THE COMMITTEE shall identify issues pertinent to the effective investment and administration of the Fund and, on Board approval, initiate analysis of such issues by Staff, Consultant or Managers. It also reviews Staff's and Consultant's recommendations regarding all investment policies and Fund management. The Committee provides recommendations to the Board for adoption, oversees implementation, and monitors the investment programs in accordance with all applicable laws and Board-established policies, guidelines and procedures. Refer to Attachment A – Charter of SamCERA's Investment Committee of the Board for detailed Committee responsibilities.

C. THE STAFF shall oversee the Fund's investment program activities, implement the Board decisions, make recommendations to the Committee regarding Fund management, and recommend investment related policies and procedures to the Committee. Additionally, Staff shall monitor the performance and compliance of Managers in accordance with all applicable laws, Board established policies, guidelines and procedures, as well as Schedule B Investment Guidelines set out in the Investment Management Agreements (IMA) between SamCERA and each Manager. Staff shall also facilitate the Committee meetings and complete activities as directed by the Board.

D. <u>THE CONSULTANT</u> shall review, analyze and evaluate the Fund's effectiveness and efficiency and make fund management related recommendations. Consultant assists Staff in implementing the Board decisions and developing all investment-related policies. Consultant's responsibilities are detailed in the service agreement between SamCERA and Consultant.

E. THE CUSTODIAN shall provide custody of SamCERA's investment assets. In addition, the Custodian will manage the securities lending program. The Custodian's responsibilities will be detailed in the service agreement between SamCERA and Custodian.

F. <u>THE MANAGERS</u> shall prudently manage their mandated allocations in accordance with all applicable laws, Board established policies, guidelines and procedures, as well as specific investment guidelines. Managers' responsibilities will be detailed in the Investment Management Agreements (IMA) between SamCERA and each Manager.

3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, in order to meet the following objectives:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Move toward full actuarial funding of the Pension Benefit Obligation based on GASB 25 and the Board's policy of layered fifteen-year unfunded actuarial accrued liability (UAAL) amortization periods.
- C. Achieve a Fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g. 15-20 years).
- D. Provide a more consistent return stream than a traditional 60% Equity / 40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

4.0 INVESTMENT BELIEFS

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

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Diversification is fundamental.
- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.
- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.

5.0 GENERAL INVESTMENT POLICIES

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

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

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

The target asset class allocation, rebalancing ranges, and the sub-asset class portfolio structure of the Fund shall be allocated as follows:

ASSET CLASS	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	4 <u>2</u> 7%	±3%
Fixed Income	<u>21</u> 19%	±2%
Risk Parity	8%	±2%
Alternative Assets *	1 <u>3</u> 2%	±2%
Inflation Hedge *	1 <u>6</u> 4%	±2%

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

A. Public Equity Assets shall be allocated to managers within the following sub-asset classes:

PUBLIC EQUITY ASSET CLASSES	Target Allocation	REBALANCE RANGE
Large Capitalization Domestic	205.0%	±2%
Passive Core	17 6 .0%	±2%
Active Core	3.0%	±2%
Growth	3.0%	±2%
Value	3.0%	±2%
Small Capitalization Domestic	3.0%	±2%
Active Core	3.0%	±2%
International	19.0%	±2%
Passive Core	4.0%	±2%
Growth	5.5%	±2%
Value	5.5%	±2%
Small Capitalization	2.0%	±2%
Emerging Market	2.0%	±2%
TOTAL PUBLIC EQUITY	4 <u>2</u> 7.0%	

B. Fixed Income Assets shall be allocated to managers within the following sub-asset classes:

FIXED INCOME ASSET CLASSES	TARGET	REBALANCE RANGE
	ALLOCATION	
Core	<u>9</u> 7.0%	±2%
Core Unconstrained	3.0%	±2%
Opportunistic Credit	6.0%	±2%
Global Fixed Income	3.0%	±2%
TOTAL FIXED INCOME	<u>21</u> 19 .0%	

C. Risk Parity Assets shall be allocated as follows:

RISK PARITY ASSET CLASS	Target Allocation	Rebalance Range
Risk Parity	8.0%	±2%
TOTAL RISK PARITY	8.0%	

D. Alternative Assets shall be allocated to managers within the following sub-asset classes:

Alternative Asset Classes	TARGET ALLOCATION	Rebalance Range
Private Equity	7.0%	±2%
Hedge Funds (Absolute Return)	<u>6</u> 5.0%	±2%
TOTAL ALTERNATIVE ASSETS	1 <u>3</u> 2 .0%	

E. Inflation Hedge Assets shall be allocated as follows:

Inflation Hedge Asset Classes	Target Allocation	Rebalance Range
Real Estate	7.0%	±2%
Private Real Assets	2.0%	±2%
Liquid Pool	<u>5</u> 3.0%	±2%
TIPS	2.0%	±2%
TOTAL INFLATION HEDGE ASSETS	1 <u>6</u> 4.0	

F. Asset Allocation Policy Benchmark

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

Asset
Allocation
Policy

Benchmark	Benchmark
Public Equity	4 <u>2</u> 7%
Russell 3000 Index	2 <u>3</u> 8%
MSCI ACWI x US IMI Index	19%
Fixed Income	<u>21</u> 19%
BC Aggregate Index	1 <u>2</u> 0%
BC BA Intermediate High Yield Index	6%
BC Multiverse Index	3%
Risk Parity	8%
60% MSCI World Russell 3000 / 40% BC	
Global Aggregate	8%

Alternatives	1 <u>3</u> 2%
Russell 3000 +3%	7%
LIBOR + 4%	<u>6</u> 5%
Inflation Hedge	1 <u>6</u> 4%
NCREIF ODCE	7%
Custom Real Asset Index*	<u>7</u> 5%
BC TIPS Index	2%

^{*}Comprised of 34% Bloomberg Roll Select Commodity Index, 33% S&P Global Large MidCap Commodity and Resources Index-Midcap Natural Resources Index, and 33% S&P Global Infrastructure Index.

7.0 REBALANCING POLICY

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

8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

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

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short term, intermediate term, and long term performance of its investment managers. Generally, the Board defines underperformance as: Cumulative annualized performance (net of fees) over a three-year period below a broad market-based benchmark return times 0.9, or five year return (net of fees) below the broad market based benchmark return.

Performance will also be evaluated in light of the manager's stated style and discipline.

9.0 PUBLIC EQUITY INVESTMENT POLICIES

<u>Public Equity Overview</u>: Public equity is expected to produce returns higher than that provided from fixed income but at potentially higher levels of volatility. Exposure to this asset class will provide return streams generally correlated to that of the general economic growth. There are two primary parts to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

PUBLIC EQUITY MANAGER STRUCTURE:

Domestic Equity: For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The domestic equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. The large-cap composite will consist of Core., Value, and Growth. Core will consist of two strategies, one a passive and another a low-tracking error active., while the Growth and Value categories will consist of higher tracking error active strategies. The Small-Capitalization strategy will consist of an actively-managed Core strategy.

International Equity: International Equity will consist of two sub-composites: 1) Developed Equity, and 2) Emerging Equity. Developed Equity will consist of a passive Core component and active Value, Growth (although both have exposure to emerging markets) and Core Small-Capitalization strategies. Emerging Market Equity will consist of an active Core mandate.

PUBLIC EQUITY PERFORMANCE OBJECTIVE:

The performance objective of the Public Equity Category is to outperform on a net-of-fee basis a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for both the domestic and international equity parts (which results in the following weights: $5\underline{59.6}\%$ Russell 3000, and $4\underline{50.4}\%$ MSCI World ex US IMI), with a maximum tracking error of 3% to this benchmark.

PUBLIC EQUITY RISK EXPOSURES AND RISK MITIGATION:

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

ASSET CLASS	BENCHMARK INDEX
Total Public Equity	Customized Benchmark Portfolio
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	Russell 1000S&P 500

Active Core	S&P 500
Large Growth	Russell 1000 Growth
Large Value	Russell 1000 Value
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000
International Equity	MSCI All Country World ex US IMI
Developed International	MSCI All Country World ex US
Developed International Passive Core	MSCI EAFE
Developed International Growth	MSCI ACWI Free ex US Growth
Developed International Value	MSCI ACWI Free ex US Value
International Small	MSCI ACWI Small Cap ex US
Emerging Markets	MSCI Emerging Markets Free

10.0 FIXED INCOME INVESTMENT POLICIES

<u>FIXED INCOME OVERVIEW</u>: Fixed income is expected to provide a lower but steadier stream of returns than public equity asset classes, but is also expected to reduce the risk of the overall portfolio because bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within fixed income that exhibit very different risk/return trade-offs and hold different tasks in terms of role in the portfolio. Fixed Income is broken out into four subcategories:

1) Core, 2) Core Unconstrained, 3) Opportunistic Credit, and 4) Global Fixed Income

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

Core Unconstrained: Core Unconstrained is a medium-risk fixed income sub-category, and contains the sectors contained in Core plus high yield (below investment grade bonds), non-U.S. Dollar denominated bonds, and emerging market fixed income securities. Core Unconstrained's role in the portfolio is a combination of total portfolio volatility dampening combined with some moderate return enhancement.

Opportunistic Credit: Opportunistic Credit is expected to be the highest-risk fixed income category, and will be used to enhance return by investing in non-traditional sectors of the bond market, including bank loans, high yield bonds, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities.

Global Fixed Income: Global Fixed Income has characteristics similar to a combination of Core and Core Unconstrained but extended to a global opportunity set, and is expected to provide some portfolio volatility dampening along with some return enhancement.

FIXED INCOME PERFORMANCE OBJECTIVE:

The performance objective of the Fixed Income Composite is to outperform, on a net-of-fee-basis, a customized index incorporating the weighted average components for four subcategories highlighted above (which results in the following weights: 572.6% Barclay's Capital Aggregate Bond Index, 2931.6% Barclays BA Intermediate High Yield Index, and 145.8% Barclays Capital Multiverse Index), with a maximum tracking error of 3% to this benchmark.

FIXED INCOME RISK EXPOSURES AND RISK MITIGATION:

The fixed income sub-sectors have very different risk factor exposures, with Core being generally the lowest risk, highest liquidity sub-category, while Opportunistic Credit is generally the highest risk, lowest liquidity sub-category. SamCERA will take into account these unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

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

Core Unconstrained: Typically includes the risk factors found in Core with additional exposures to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity. The allocation to these risk exposures will be dynamic over time as the portfolio is not constrained to a benchmark.

Opportunistic Credit: Typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity.

Global Fixed Income: The primary risk factors are sensitivity to global interest rates, sovereign credit risk (including emerging markets), corporate default risk, and currency impacts.

ASSET CLASS	BENCHMARK INDEX
Fixed Income	Customized Benchmark Portfolio
Domestic Fixed Income	Barclays Capital Aggregate Bond Index
Core/Core Unconstrained	Barclays Capital Aggregate Bond Index
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index
Global Fixed Income	Barclays Capital Multiverse Index

11.0 INFLATION HEDGE INVESTMENT POLICIES

<u>INFLATION HEDGE OVERVIEW</u>: The Inflation Hedge combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan's overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, Risk Parity, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are taken into account. The Inflation Hedge is expected to

provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan.

Inflation Hedge is broken out into four subcategories:

1) Real Estate, 2) Private Real Assets, 3) Liquid Pool, and 4) TIPS

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. The majority of exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. The remainder will be Value-Add proprieties that are expected to provide somewhat higher return potential along with somewhat higher risk. Income will be a large part of the return stream generated from this portfolio. The role of this portfolio is to provide diversification benefits, some protection against unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Equity composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core and Value-Add strategies.

Private Real Assets: Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of three sub-categories: 1) Infrastructure (Core, Secondary, Midstream Energy, and Power), 2) Mining, and 3) Farmland/Timber/Water. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

Sub-Category	Target Allocation	Range
Infrastructure	50%	+/- 50%
Mining	0%	0 – 50%
Farmland/Timber/Water	0%	0 – 50%

Liquid Pool: Similar to Private Real Assets, the Liquid Pool is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. The Liquid Pool will be used to fund new strategies in Private Real Assets and will be composed of three sub-categories: 1) Commodities, 2) Listed Global Natural Resources, and 3) Listed Global Infrastructure. All three sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets. Listed Global Natural Resource and Listed Global Infrastructure may be implemented through the use of relatively inexpensive, passive indices.

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

Sub-Category	Target Allocation	Range
Commodities	34%	+/- 50%
Listed Global Natural Resources	33%	0 – 50%
Listed Global Infrastructure	33%	0 – 50%

TIPS: Inflation Protection is expected to provide some protection against higher rates of inflation.

INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 4450% NCREIF ODCE, 4435.7% Custom Real Asset Index, and 124.3% BC TIPS Index).

INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

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

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA's real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties. Opportunistic-oriented strategies will reside in our Private Equity portfolio due to their higher risk profile. In addition, SamCERA's core real estate fund has a leverage limit of 35%, and SamCERA also sits on the Fund's Advisory Committee.

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

TIPS: The primary risk factors are to changes in real interest rates, deflationary environments (although deflation floors could mitigate some of this risk), and potential illiquidity.

ASSET CLASS	BENCHMARK INDEX
INFLATION HEDGE	CUSTOMIZED BENCHMARK PORTFOLIO

REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM REAL ASSET INDEX
LIQUID POOL	CUSTOM REAL ASSET INDEX
TIPS	BC TIPS INDEX

12.0 ALTERNATIVE ASSETS INVESTMENT POLICIES

<u>ALTERNATIVES OVERVIEW</u>: Alternatives are investments that do not neatly fit into public equities, or fixed income. SamCERA's alternatives program is broken out into the following two sub asset classes:

1) Private Equity, and 2) Hedge Funds

Private Equity: Private Equity is expected to be the highest returning asset class over the long-term. Its role in the portfolio is to provide high return potential in order to maximize the ability of the Fund to meet its performance objectives. The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Debt/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

Sub-Category	Target Allocation	Range
Buyouts	60%	+/- 20%
Venture Capital	20%	0 – 30%
Debt/Special Situations	20%	+/- 10%

The responsibility for private equity sourcing is delegated to SamCERA's investment consultant.

The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

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

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

Investment Manager: No more than twenty (20) percent of the private equity portfolio's target allocation may be committed to any one investment manager (excluding fund of funds).

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

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

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

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

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

ALTERNATIVES PERFORMANCE OBJECTIVE:

The performance objective of the Alternatives Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for two sub-asset classes highlighted above (which results in the following weights: $5\underline{48}$ % Russell 3000+3%, and 462% LIBOR+4%).

ASSET CLASS	BENCHMARK INDEX
Alternatives	Customized Benchmark Portfolio
Private Equity	Russell 3000 + 3%
Hedge Funds (Absolute Return)	LIBOR + 4%

ALTERNATIVES RISK EXPOSURES AND RISK MITIGATION

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

returns. SamCERA will control leverage exposure through partnership selection and portfolio construction and diversification.

13. RISK PARITY INVESTMENT POLICIES

RISK PARITY OVERVIEW: Risk Parity is a risk-diversified balanced portfolio that is expected to provide a more diversified return and risk profile than that of a traditional 60% equity / 40% fixed income portfolio. It is generally designed to be more balanced between equity risk, interest rate risk, credit risk, and inflation risk than a traditional balanced portfolio.

RISK PARITY PERFORMANCE OBJECTIVE:

The performance objective of the Risk Parity Composite is to outperform, on a net-of-fee basis, the 60% MSCI WorldRussell 3000 / 40% BC Global Aggregate over a 5 year rolling period.

RISK PARITY RISK EXPOSURES AND RISK MITIGATION:

Risk parity managers utilize leverage in order to enhance returns. Moderate leverage may be utilized and the portfolio managers should avoid strategies that might place the portfolio outside the expected ranges outlined. Gross exposures are expected to range from 250% to 350%. In addition, the risk parity portfolio shall consist of a portfolio of generally liquid trading instruments.

Counter-parties for Over the Counter (OTC) derivatives must either: (1) have a long-term rating from Standard & Poor's of at least A-, or from Moody's of at least A3; or (2) be approved by the manager's counter-party committee. In the event that the OTC derivative counterparty is an unrated affiliate whose performance is unconditionally guaranteed by the parent company, the parent's credit rating shall apply.

ASSET CLASS	Benchmark Index
Risk Parity	60% MSCI World Russell 3000 / 40% BC Global
	Aggregate

14.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

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

The report will provide sufficient information to assess the following:

- A. Total and active risk assessment at total fund, composite and individual manager level.
- B. Performance attribution at total fund, composite and individual manager level.
- C. Adherence to the investment style for which the manager is retained, as measured by the quarterly risk adjusted active return (deviation of the manager's performance from

the specified performance benchmark) over the last quarter, six months, one-, three-, and five-year periods, including updates from previous quarterly reports regarding adherence to the style for which the firm was retained;

- D. Ability of the active manager to demonstrate consistently positive information ratios, including updates from previous quarterly reports regarding the firm's information ratios;
- E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

15.0 ANNUAL INVESTMENT STRATEGY

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

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

16.0 PROXY VOTING

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

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

17.0 SECURITIES LENDING

- A. Pursuant to Section 2.0 (E), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.
- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
- (i) All loans shall be marked-to-market daily.
- (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
- (iii) Acceptable collateral shall be in the form of cash or marketable fixed income securities with maturities not greater than one year, including (1) Commercial Paper with quality ratings of P-1 and/or A-1 by Moody's Investors Services or Standard & Poor's Corporation, or their equivalents; (2) Banker's acceptances, certificates of deposits and time deposits; (3) United States Treasury and Government Agency short-term obligations; and (4) Repurchase Agreements with United States Treasury Securities and Agencies of the United States Government as collateral.
- (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

APPENDIX A

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

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

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

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

- (a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.
- (b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.
- (c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.
- (e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

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

The Board has exclusive control of the investment of the employees retirement fund. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and

defraying reasonable expenses of administering the system. Except as otherwise expressly restricted by the California Constitution and by law, the Board may, in its discretion, invest, or delegate the authority to invest, the assets of the fund through the purchase, holding, or sale of any form or type of investment, financial instrument, or financial transaction when prudent in the informed opinion of the Board...; &

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

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

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

- 1.0 CONDUCT ASSET ALLOCATION STUDIES
- 1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows
- 2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS
 - 2.1 Establish allowable asset classes
 - 2.2 Determine asset class benchmarks
 - 2.3 Develop risk, return & correlation projections
- 3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES
 - 3.1 Define risk, return and correlation
 - 3.2 Evaluate mean variance optimization
 - 3.3 Determine low risk alternatives and high risk alternatives
 - 3.4 Scale portfolios between two extremes
 - 3.5 Evaluate optimized efficient frontier
 - 3.6 Integrate optimized efficient frontier with asset-liability relationships
- 4.0 ANALYZE BOARD RISK TOLERANCE
 - 4.1 Assess risk/reward trade-offs
 - 4.2 Assess contribution rate sensitivity & variability
 - 4.3 Assess ability to exceed actuarial interest rate
 - 4.4 Assess comfort level with characteristics of specific asset mixes
- 5.0 RECOMMEND PREFERRED ASSET MIX
 - 5.1 Evaluate differences from current target
 - 5.2 Evaluate Board's willingness to implement new target asset mix
 - 5.3 Evaluate appropriateness of variance from peer public fund norms
- 6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY
 - 6.1 Adjust target asset mix
 - 6.2 Introduce new benchmarks

- 6.3 Include required asset class/portfolio modifications
- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
 - 7.1 Adjust manager/style line-up as necessary
 - 7.2 Introduce new managers/asset classes
 - 7.3 Terminate managers/asset classes as necessary
 - 7.4 Establish active & passive allocation targets as appropriate
- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
 - 8.1 Recommend time-line & approach to revise structure
 - 8.2 Conduct manager evaluations
 - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
 - 9.1 Monitor results of managers both gross and net of investment management fees
 - 9.2 Assess consistency of portfolio decision making
 - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
 - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
 - 10.2 Define and assign special projects as warranted
 - 10.3 Monitor performance of Investment Consultant(s)
 - 10.4 Conduct evaluations of Investment Consultant(s)
 - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 Initiate & Evaluate Special Investment Studies
- 12.0 Undertake other work assigned to it by the Board Be it further

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

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

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

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

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

APPENDIX B

Derivatives Investment Policy

1) Introduction

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

2) Derivative Definition

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

3) Types of Securities Included or Excluded

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

4) Approach to Policy

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

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

5) Counter-Party Evaluation

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

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

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

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

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

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

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

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

6) Purposes for Derivatives

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

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

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

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

7) Investment Restrictions and Derivatives Policy

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

Allowable derivative investments

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

Derivative investments with allocation limits

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

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

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

Restricted derivative investments

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

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

8) Risk Analysis and Monitoring of Derivatives

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

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

9) Derivative Investment Process

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

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

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

10) Reporting Requirements

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

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

APPENDIX C

DUE DILIGENCE POLICY

MANUAL

POLICY

SamCERA's due diligence process requires: 1) Staff to perform on going due diligence monitoring, 2) Consultant and Managers to make regularly scheduled due diligence presentations to Staff in SamCERA's offices, and 3) Staff and available Board members to make on-site visitations to the Consultant and Managers' offices on an as-needed basis.

PURPOSE

To discharge the fiduciary responsibilities of the Board and staff, regular due diligence with the San Mateo County Employees' Retirement Association investment managers is essential to the Board's ability to effectively monitor the performance of its investment professionals, and to the prudent discharge of the board's fiduciary duty to the beneficiaries of this multi-billion dollar retirement system.

F.01 - Due Diligence Monitoring

Individual investment managers will be monitored monthly, quarterly and annually. The managers' organizations and operations will be qualitatively monitored on a continual basis.

The Chief Investment Officer, with assistance from the Consultant, will present an investment performance report to the Board on a quarterly basis, as specified in Section 14.0 (Quarterly Investment Performance Reporting) in the Investment Policy. Performance will be measured for the total portfolio as well as individual components such as equities, fixed income and real estate portfolios. In addition, the performance of each component will be broken down into individual portfolios.

Comparisons will be made against market indices defined in this document. A variance from the stated performance objective will be calculated each quarter. Additionally, the portfolios' actual investment approach will be monitored against the required investment style to determine whether the manager is adhering to its acknowledged investment style.

The quarterly investment performance report will compare the total fund, each asset class and individual portfolio return to appropriate market indices and a representative peer group of similar funds or similar style investment managers. The report will note significant changes in the attribution of investment manager performance.

Annually, staff will request and review the Investment Manager's ADV Part II form and inform the board of significant changes in the firm or apparent conflicts of interest. In addition staff will request an annual insurance certification from each professional service provider. Where appropriate a Statement of Standards for Attestation Engagements (SSAE) No. 16 will be obtained and reviewed.

F.02 - Due Diligence Presentations

Consultants and Managers that are under contract with the Board to provide services will make a presentation to Staff at least once a year. The presentation shall include, but not be limited to, an update on the Manager's organization and business plan, changes to the investment process and investment performance. Staff may request presentations more frequently as circumstances demand. The Managers will provide on a semi-annual basis a completed Compliance Certification Statement and in depth responses to a list of questions submitted by staff.

F.03 - Asset Categories

On-site meetings will be grouped by asset categories. This approach enables staff to readily compare and contrast investment approaches, systems, and controls utilized by the investment managers. It will also allow for a better evaluation of the existing asset diversification.

F.04 - Manager Selection Due Diligence

The Board, with the assistance of Staff and Consultant, selects Managers to manage the assets of the Fund. The Board authorizes Staff and Consultant to initiate a public markets search for a manager either to replace a manager or to fill a new mandate approved by the Board. The Consultant and Staff will conduct the search in accordance with criteria established for the search. The search criteria will include the scope of the mandate, the investment style, benchmark, and the minimum qualifications for candidates. When appropriate to better understand an investment strategy, Staff, and Consultant may perform on-site due diligence on the final candidate prior to signing the investment agreement.

The Board may require a public markets Manager being considered as provider of professional services for SamCERA to make a formal presentation to it at a public Board meeting. The presentation may include, but not be limited to: 1) manager's organization and its staff, 2) investment philosophy and process, 3) the resources available to provide the service, 4) proposed fees and 4) performance characteristics.

Appendix CD

DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

Adopted by the Board of Retirement December 14, 2010. Amended January 25, 2011.

This policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law.

I. PURPOSE

This Policy sets forth the circumstances under which the San Mateo County Employees' Retirement Association (SAMCERA) shall require the disclosure of payments to *Placement Agents*, as that term is defined by Government Code section 7513.8, in connection with SAMCERA investments in or through *External Managers*, as that term is defined by Government Code section 7513.8. This Policy is intended to apply broadly to all of the types of investment partners with whom SAMCERA does business, including the general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as investment managers retained pursuant to a contract. SAMCERA adopts this Policy to require broad, timely, and updated disclosure of all Placement Agent relationships, compensation and fees. The goal of this Policy is to help ensure that SAMCERA investment decisions are made solely on the merits of the investment opportunity by individuals who owe a fiduciary duty to SAMCERA.

II. APPLICATION

This Policy applies to all agreements with External Managers that are entered into after the date this Policy is adopted. This Policy also applies to existing agreements with External Managers if, after the date this Policy is adopted, the agreement is amended in any way to continue, terminate, or extend the term of the agreement or the investment period, increase the commitment of funds by SAMCERA or increase or accelerate the fees or compensation payable to the External Manager (Referred to hereafter as "Amendment".) In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

IV. RESPONSIBILITIES

- A. The Board is responsible for:
 - 1. not entering into any agreement with an External Manager that does not

- agree in writing to comply with this policy.
- 2. not entering into any agreement with an External Manager who has violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the board at a public session upon a showing of good cause.
- B. Each External Manager is responsible for:
 - 1. Providing a statement in writing that the External Manager will comply with this policy.
 - 2. Providing the following information to the SAMCERA Investment Staff within 45 days of the time investment discussions are initiated by the External Manager, but in any event, prior to the completion of due diligence. In the case of Amendments, the Placement Agent Information Disclosure is required prior to execution of the Amendment.
 - a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SAMCERA investments.
 - b. A resume for each officer, partner, principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses and investment and work experience. If any such person is a current or former SAMCERA Board Member, employee or Consultant or a member of the immediate family of any such person, this fact shall be specifically noted.
 - c. A description of any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof. Compensation to Placement Agents shall include, but not be limited to, compensation to third parties as well as employees of the External Manager who solicit or market investments to SAMCERA or who are paid based upon investment commitments secured by such employees.
 - d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
 - e. A written copy of any and all agreements between the External

Manager and the Placement Agent.

- f. A statement whether the placement agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
- g. A statement whether the placement agent, or any of its affiliates, is registered as a lobbyist with any state or national government.
- h. The names of any current or former SAMCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.
- 3. Providing an update of any changes to any of the information provided pursuant to section B.2 above within 14 calendar days of the date that the External Manager knew or should have known of the change in information.
- 4. Representing and warranting the accuracy of the information described in section B.2 above.
- 5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SAMCERA,
 - a. all campaign contributions made by the Placement Agent to any publicly elected SAMCERA Board Member during the prior 24-month period. Additionally, any subsequent campaign contribution made by the Placement Agent to any publicly elected SAMCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SAMCERA investment shall also be disclosed.
 - b. all gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SAMCERA Board Member during the prior 24-month period. Additionally, any subsequent gift made by the Placement Agent to any SAMCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SAMCERA investment shall also be disclosed.
- 6. SAMCERA reserves the right to deem the failure to disclose the information required by 5(a) and 5(b) as a material breach of the agreement with the External Manager.

- D. SAMCERA Investment Staff ("Staff") are responsible for:
 - 1. Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
 - 2. Confirming that the information in section B above has been received within 45 days of the time investment discussions are initiated, but in any event, prior to the completion of due diligence and any recommendation to proceed with the contract or Amendment.
 - 3. For new contracts and amendments to contracts existing as of the date of the initial adoption of this Policy, securing the agreement of the External Manager in the final written agreement between SAMCERA and the External Manager to provide in the event that there was or is an intentional material omission or inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SAMCERA is entitled to the greater of the reimbursement of any management or advisory fees paid by SAMCERA for the prior two years or an amount equal to the amounts paid or promised to be paid to the Placement Agent as a result of the SAMCERA investment; and
 - 4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SAMCERA for five years after they have committed a material violation of this Policy; provided, however, that SAMCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
 - 5. Providing a quarterly report to the Board containing (a) the names and amount of compensation agreed to be provided to each Placement Agent by each External Manager as reported in the Placement Agent Information Disclosures, and (b) any material violations of this Policy; and maintaining the report as a public record.

DEFINITIONS:

The following definitions are current as of January 7, 2011. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

As defined in California Government Code section 7513.8, "External Manager" means either of the following: (1) a person who is seeking to be, or is, retained by a board to manage a portfolio of securities or other assets for compensation; (2) a person who is engaged, or proposes to be engaged, in the business of investing, reinvesting, owning, holding, or trading securities or other

assets and who offers or sells, or has offered or sold, securities to a board. (All code section references are to the Government Code, unless otherwise noted.)

As defined in section 7513.8, "**Person**" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

As defined in section 7513.8, "Placement Agent" means any person hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager, or on behalf of another placement agent, who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale of the securities, assets, or services of an External Manager to a board or an Investment Vehicle, either directly or indirectly. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.

As defined in section 7513.8, "Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, constituting or managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

"Compensation" means, for the purposes of this policy, remuneration and other benefits (including without limitation, favors) of any kind.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

RESOLUTION 2017-04

RESOLUTION AMENDING SAMCERA'S INVESTMENT POLICY STATEMENT

- WHEREAS, pursuant to Article XVI, Section 17, of the California Constitution, the Board of Retirement (the "Board"), has the exclusive authority and exclusive fiduciary responsibility for the investment and administration of the assets of the retirement system (the "Fund"), and on June 3, 2014, established an Investment Policy Statement (the "Policy") for the investment of the Fund assets; and
- WHEREAS, the purpose of the Policy is to assist SamCERA in effectively supervising its investments in order to meet the requirements of the California Constitution, the County Employees Retirement Law of 1937 ("the 1937 Act"), the Mission and Goals of SamCERA and other requirements, and to encourage effective communication between SamCERA and its investment managers and investment consultants; and
- **WHEREAS**, the Board periodically reviews its Policy and amends it as necessary so as to remain up to date to reflect recent actions of the Board; and
- WHEREAS, In November, the Board determined that for its public market new manager hire process certain interim steps in the process were delegated to staff. Under this approach, the Board would be updated on the process to develop the manager shortlist and approve the final recommendation; and
- Whereas, the Board has already determined that certain Private Equity investments can be made by the Chief Executive Officer under certain circumstances and now has determined that under certain circumstances the Chief Executive Officer can terminate existing managers or take related actions; and
- WHEREAS, the Board also now desires to memorialize the Board's actions regarding "Phase One" implementation of the updated asset allocation policy and changing the risk parity benchmark from 60% Russell 3000 / 40% BC Aggregate to 60% MSCI World / 40% BC Global Aggregate; and a correction in the description of the Custom Real Asset Index composition; and
- Whereas, the Board has determined that the revisions to the following sections of the Investment Policy Statement reflect these changes: revising Section 2.0 "Roles and Principal Duties" into new section 2.0 entitled "Management of the Fund" and removal of Appendix C "Due Diligence Policy"; and also revisions to Section 6.0 "Asset Allocation & Portfolio Structure"; Section 9.0 "Public Equity Investment Policies"; Section 10.0 "Fixed Income Investment Policies"; Section 11.0 "Inflation Hedge Investment Policies"; Section 12.0 "Alternative Assets Investment Policies"; and Section 13.0 "Risk Parity Investment Policies".
- WHEREAS, the Board and desires to make such amendments; Now, therefore, be it
- **RESOLVED**, that the SamCERA "Investment Policy Statement" be revised to read as set forth in the attached document.



SamCERA's Investment Policy Statement

Approved June 2014
Revised September 2014
Revised September 2015
Revised January 2016
Revised October 2016
Revised January 2017

1.0 ESTABLISHMENT OF INVESTMENT POLICY

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

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

A. GOVERNING DOCUMENTS FOR THE INVESTMENTS OF THE FUND.

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

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

Constitution of the State of California

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

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

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

The 1937 Act

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

Government Code section 31595.

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

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

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

SamCERA's Mission and Goals

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

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

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

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

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

2.0 MANAGEMENT OF THE FUND

A. ROLES AND PRINCIPAL DUTIES

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

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

B. INVESTMENT PORTFOLIO MANAGEMENT

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

1. Hiring New Managers

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

For private markets (private equity and private real assets), the Consultant, with Staff input, sources managers that can best fit the desired mandate consistent with the annual pacing study and applicable investment policy. Consultant and Staff will bring potential private markets opportunities to the Board for approval. An exception to this policy is when an investment decision for a private market opportunity must be made prior to the date of the next regularly scheduled Board meeting. In these instances, if the investment is for \$25 million or less, the Chief Executive Officer is authorized to make the investment decision after consulting with the Board Chair, or if the Chair is not available, the Vice Chair, and one member of the Investment Committee as long as such decision is in the best interest of the fund and consistent with applicable Board policy. Any action under this authorization will be reported to the Board at a subsequent regularly scheduled meeting.

2. Monitoring Existing Managers

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

Quarterly, the Consultant, with assistance from the Chief Investment Officer, will present an investment performance report to the Board, as specified in Section 14.0 (Quarterly Investment

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

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

Annually, Staff and Consultant will convene an investment strategy session, as specified in Section 15.0 (Annual Investment Strategy) in the Investment Policy, to allow a longer-term assessment of the Managers and the total fund performance. Lastly, all public markets Managers are interviewed annually by Staff and Consultant, and must complete a due diligence questionnaire.

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

3. Terminating Existing Managers

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

In situations in which developments give immediate concern that an investment with a Manager is no longer prudent for the investment program and a termination or other related investment decision should be made prior to the next regularly scheduled Board meeting, the Chief Executive Officer is authorized to terminate the Manager and or move Fund assets after consulting with the Board Chair (or Vice Chair or Secretary based on availability, in that order) and one member of the Investment Committee. Situations causing an immediate concern, include, but are not limited to, when: (1) the firm suffers the resignation or other loss of its portfolio managers, (2) the firm dissolves, ceases to exist, or is otherwise incapable of carrying out its activities in the ordinary course of its business, (3) the firm is actually or effectively shut down by a regulatory agency or is accused of theft or fraud or other serious malfeasance by a regulatory agency, or (4) the fund's investment is in jeopardy of material loss. The Board will be promptly notified of the determination by the Chief Executive Officer.

3.0 INVESTMENT OBJECTIVES

The Board shall develop an investment program, consistent with the Investment Beliefs and General Investment Policies as stipulated in Sections 4.0 and 5.0, respectively, in order to meet the following objectives:

- A. Generate risk-adjusted returns that exceed the Asset Allocation Policy Benchmark (as defined in Section 6.0) on a net-of-fee basis over five-year rolling periods.
- B. Move toward full actuarial funding of the Pension Benefit Obligation based on GASB 25 and the Board's policy of layered fifteen-year unfunded actuarial accrued liability (UAAL) amortization periods.
- C. Achieve a Fund return that meets or exceeds the long-term forecast of capital market returns for the asset allocation portfolio benchmark over multiple economic cycles (e.g. 15-20 years).
- D. Provide a more consistent return stream than a traditional 60% Equity / 40% Fixed Income portfolio as measured by lower portfolio drawdowns over a full market cycle.

4.0 INVESTMENT BELIEFS

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

- Strategic asset allocation is the primary driver of portfolio risk and return.
- SamCERA should have a long-term horizon and not be tempted to deviate from its long-term plan in response to short-term volatility.
- Everything else being equal, simplicity is preferred over complexity.
- For those asset classes evidencing market efficiencies, the manager structure may favor the employment of passive strategies.
- Diversification is fundamental.
- There is no single definition of risk. There are various measures of 'risk' that can be used for various purposes.
- The portfolio should be diversified across many risk dimensions/timeframes.
- SamCERA should not pursue investments that will not adequately compensate it for the risks that those investments bring.
- Costs matter.

5.0 GENERAL INVESTMENT POLICIES

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

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

6.0 ASSET ALLOCATION & PORTFOLIO STRUCTURE

The target asset class allocation, rebalancing ranges, and the sub-asset class portfolio structure of the Fund shall be allocated as follows:

Asset Class	TARGET ALLOCATION	REBALANCE RANGE
Public Equity	42%	±3%
Fixed Income	21%	±2%
Risk Parity	8%	±2%
Alternative Assets *	13%	±2%
Inflation Hedge *	16%	±2%

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

A. Public Equity Assets shall be allocated to managers within the following sub-asset classes:

PUBLIC EQUITY ASSET CLASSES	Target Allocation	REBALANCE RANGE
Large Capitalization Domestic	20.0%	±2%
Passive Core	17.0%	5 ±2%
Active Core	3.0%	±2%
Small Capitalization Domestic	3.0%	±2%
Active Core	3.0%	±2%
International	19.0%	±2%
Passive Core	4.0%	±2%
Growth	5.5%	±2%
Value	5.5%	±2%
Small Capitalization	2.0%	±2%
Emerging Market	2.0%	±2%
TOTAL PUBLIC EQUITY	42.0%	

B. Fixed Income Assets shall be allocated to managers within the following sub-asset classes:

FIXED INCOME ASSET CLASSES	TARGET ALLOCATION	REBALANCE RANGE
Core	9.0%	±2%
Core Unconstrained	3.0%	±2%
Opportunistic Credit	6.0%	±2%
Global Fixed Income	3.0%	±2%
TOTAL FIXED INCOME	21.0%	

C. Risk Parity Assets shall be allocated as follows:

RISK PARITY ASSET CLASS	TARGET ALLOCATION	Rebalance Range
Risk Parity	8.0%	±2%
TOTAL RISK PARITY	8.0%	

D. Alternative Assets shall be allocated to managers within the following sub-asset classes:

ALTERNATIVE ASSET CLASSES	TARGET ALLOCATION	Rebalance Range
Private Equity	7.0%	±2%
Hedge Funds (Absolute Return)	6.0%	±2%
TOTAL ALTERNATIVE ASSETS	13.0%	

E. Inflation Hedge Assets shall be allocated as follows:

Inflation Hedge Asset Classes	TARGET ALLOCATION	Rebalance Range
Real Estate	7.0%	±2%
Private Real Assets	2.0%	±2%
Liquid Pool	5.0%	±2%
TIPS	2.0%	±2%
TOTAL INFLATION HEDGE ASSETS	16.0%	

F. Asset Allocation Policy Benchmark

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

Asset
Allocation
Policy

Benchmark	Benchmark
Public Equity	42%
Russell 3000 Index	23%
MSCI ACWI x US IMI Index	19%
Fixed Income	21%
BC Aggregate Index	12%
BC BA Intermediate High Yield Index	6%
BC Multiverse Index	3%
Risk Parity	8%
60% MSCI World / 40% BC Global	
Aggregate	8%
Alternatives	13%

Russell 3000 +3%	7%
LIBOR + 4%	6%
Inflation Hedge	16%
NCREIF ODCE	7%
Custom Real Asset Index*	7%
BC TIPS Index	2%

^{*}Comprised of 34% Bloomberg Roll Select Commodity Index, 33% S&P Global LargeMidCap Commodity and Resources Index, and 33% S&P Global Infrastructure Index.

7.0 REBALANCING POLICY

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

8.0 GENERAL MANAGER INVESTMENT PERFORMANCE POLICIES

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

The Board expects to measure investment performance quarterly and will generally follow prudent time horizons when evaluating short term, intermediate term, and long term performance of its investment managers. Generally, the Board defines underperformance as: Cumulative annualized performance (net of fees) over a three-year period below a broad market-based benchmark return times 0.9, or five year return (net of fees) below the broad market based benchmark return.

Performance will also be evaluated in light of the manager's stated style and discipline.

9.0 PUBLIC EQUITY INVESTMENT POLICIES

<u>Public Equity Overview</u>: Public equity is expected to produce returns higher than that provided from fixed income but at potentially higher levels of volatility. Exposure to this asset class

will provide return streams generally correlated to that of the general economic growth. There are two primary parts to the Public Equity category: 1) Domestic Equity, and 2) International Equity.

PUBLIC EQUITY MANAGER STRUCTURE:

Domestic Equity: For the domestic equity program, the majority of the tracking error will come from stock selection via active management as the overall manager structure for domestic equities will not possess any significant biases in terms of investment style. The domestic equity composite will consist of two sub-composites: 1) Large-Capitalization Equity, and 2) Small-Capitalization Equity. The large-cap composite will consist of Core. Core will consist of two strategies, one a passive and another a low-tracking error active. The Small-Capitalization strategy will consist of an actively-managed Core strategy.

International Equity: International Equity will consist of two sub-composites: 1) Developed Equity, and 2) Emerging Equity. Developed Equity will consist of a passive Core component and active Value, Growth (although both have exposure to emerging markets) and Core Small-Capitalization strategies. Emerging Market Equity will consist of an active Core mandate.

PUBLIC EQUITY PERFORMANCE OBJECTIVE:

The performance objective of the Public Equity Category is to outperform on a net-of-fee basis a customized index (Customized Benchmark Portfolio) incorporating the weighted average components for both the domestic and international equity parts (which results in the following weights: 55% Russell 3000, and 45% MSCI World ex US IMI), with a maximum tracking error of 3% to this benchmark.

PUBLIC EQUITY RISK EXPOSURES AND RISK MITIGATION:

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

ASSET CLASS	BENCHMARK INDEX
Total Public Equity	Customized Benchmark Portfolio
Domestic Equity	Russell 3000
Large Capitalization Domestic Equity	Russell 1000
Passive Core	Russell 1000
Active Core	S&P 500
Small Capitalization Domestic Equity	Russell 2000
Active Core	Russell 2000

International Equity	MSCI All Country World ex US IMI
Developed International	MSCI All Country World ex US
Developed International Passive Core	MSCI EAFE
Developed International Growth	MSCI ACWI Free ex US Growth
Developed International Value	MSCI ACWI Free ex US Value
International Small	MSCI ACWI Small Cap ex US
Emerging Markets	MSCI Emerging Markets Free

10.0 FIXED INCOME INVESTMENT POLICIES

<u>FIXED INCOME OVERVIEW</u>: Fixed income is expected to provide a lower but steadier stream of returns than public equity asset classes, but is also expected to reduce the risk of the overall portfolio because bonds have lower risk than most other major asset classes. That said, there are a number of sub-categories within fixed income that exhibit very different risk/return trade-offs and hold different tasks in terms of role in the portfolio. Fixed Income is broken out into four subcategories:

1) Core, 2) Core Unconstrained, 3) Opportunistic Credit, and 4) Global Fixed Income

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

Core Unconstrained: Core Unconstrained is a medium-risk fixed income sub-category, and contains the sectors contained in Core plus high yield (below investment grade bonds), non-U.S. Dollar denominated bonds, and emerging market fixed income securities. Core Unconstrained's role in the portfolio is a combination of total portfolio volatility dampening combined with some moderate return enhancement.

Opportunistic Credit: Opportunistic Credit is expected to be the highest-risk fixed income category, and will be used to enhance return by investing in non-traditional sectors of the bond market, including bank loans, high yield bonds, convertible bonds, and CMBS/ABS securities. This sub-category will be exposed to general economic risk factors, similar to public equities.

Global Fixed Income: Global Fixed Income has characteristics similar to a combination of Core and Core Unconstrained but extended to a global opportunity set, and is expected to provide some portfolio volatility dampening along with some return enhancement.

FIXED INCOME PERFORMANCE OBJECTIVE:

The performance objective of the Fixed Income Composite is to outperform, on a net-of-fee-basis, a customized index incorporating the weighted average components for four sub-categories highlighted above (which results in the following weights: 57% Barclay's Capital

Aggregate Bond Index, 29% Barclays BA Intermediate High Yield Index, and 14% Barclays Capital Multiverse Index), with a maximum tracking error of 3% to this benchmark.

FIXED INCOME RISK EXPOSURES AND RISK MITIGATION:

The fixed income sub-sectors have very different risk factor exposures, with Core being generally the lowest risk, highest liquidity sub-category, while Opportunistic Credit is generally the highest risk, lowest liquidity sub-category. SamCERA will take into account these unique risk factors when constructing the fixed income portfolio to help ensure that the overall risk profile of the total portfolio is consistent with expectations.

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

Core Unconstrained: Typically includes the risk factors found in Core with additional exposures to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity. The allocation to these risk exposures will be dynamic over time as the portfolio is not constrained to a benchmark.

Opportunistic Credit: Typically includes the risk factors contained in Core and Core Unconstrained, but, depending on the mandate, with higher emphasis to high-yield default risks, emerging markets sovereign/corporate default risk, and potential illiquidity.

Global Fixed Income: The primary risk factors are sensitivity to global interest rates, sovereign credit risk (including emerging markets), corporate default risk, and currency impacts.

ASSET CLASS	BENCHMARK INDEX
Fixed Income	Customized Benchmark Portfolio
Domestic Fixed Income	Barclays Capital Aggregate Bond Index
Core/Core Unconstrained	Barclays Capital Aggregate Bond Index
Opportunistic Credit	Barclays Capital BA Intermediate High Yield Index
Global Fixed Income	Barclays Capital Multiverse Index

11.0 INFLATION HEDGE INVESTMENT POLICIES

<u>INFLATION HEDGE OVERVIEW</u>: The Inflation Hedge combines inflation-sensitive assets under a single asset class to simplify the asset allocation process and enable better performance monitoring of the plan's overall, direct exposure to assets with inflation-hedging properties. The plan also has indirect exposure to inflation-sensitive assets through other asset classes, such as Public Equity, Fixed Income, Risk Parity, and Alternatives. When determining the appropriate allocation of inflation protection, both direct and indirect exposures to inflation-sensitive assets across the plan are taken into account. The Inflation Hedge is expected to provide a high degree of inflation beta, attractive risk-adjusted returns and diversification benefits to the overall plan.

Inflation Hedge is broken out into four subcategories:

1) Real Estate, 2) Private Real Assets, 3) Liquid Pool, and 4) TIPS

Real Estate: Real Estate is expected to provide a return and risk profile between that provided by fixed income and equities. The majority of exposure will be in Core real estate assets of the highest quality located in the best locations in North America, Europe, and Asia. The remainder will be Value-Add proprieties that are expected to provide somewhat higher return potential along with somewhat higher risk. Income will be a large part of the return stream generated from this portfolio. The role of this portfolio is to provide diversification benefits, some protection against unanticipated inflation, and a steady income stream. Higher risk Opportunistic/Development real estate strategies will reside in the Private Equity composite due to their higher-risk, longer time horizon, and the less liquid nature of the investment set compared to Core and Value-Add strategies.

Private Real Assets: Private Real Assets are expected to provide attractive total and risk-adjusted returns that exhibit low correlations with traditional asset classes but positive correlation with inflation. Private Real Assets will be composed of three sub-categories: 1) Infrastructure (Core, Secondary, Midstream Energy, and Power), 2) Mining, and 3) Farmland/Timber/Water. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

Sub-Category	Target Allocation	Range		
Infrastructure	50%	+/- 50%		
Mining	0%	0 – 50%		
Farmland/Timber/Water	0%	0 – 50%		

Liquid Pool: Similar to Private Real Assets, the Liquid Pool is expected to provide positive correlation to inflation, but with potentially higher beta to public equity markets. The Liquid Pool will be used to fund new strategies in Private Real Assets and will be composed of three sub-categories: 1) Commodities, 2) Listed Global Natural Resources, and 3) Listed Global Infrastructure. All three sub-categories are meant to provide some protection from higher levels of unanticipated inflation while providing a diversifying return stream from that of public markets. Listed Global Natural Resource and Listed Global Infrastructure may be implemented through the use of relatively inexpensive, passive indices.

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

Sub-Category	Target Allocation	Range	
Commodities	34%	+/- 50%	
Listed Global Natural Resources	33%	0 – 50%	

TIPS: Inflation Protection is expected to provide some protection against higher rates of inflation.

INFLATION HEDGE PERFORMANCE OBJECTIVE:

The performance objective of the Inflation Hedge Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for four composite sub-asset classes (which results in the following weights: 44% NCREIF ODCE, 44% Custom Real Asset Index, and 12% BC TIPS Index).

INFLATION HEDGE RISK EXPOSURES AND RISK MITIGATION:

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

These risks will be mitigated in a number of ways. First, the primary emphasis of SamCERA's real estate program will be focused on Core properties, with a secondary emphasis to Value-Add properties. Opportunistic-oriented strategies will reside in our Private Equity portfolio due to their higher risk profile. In addition, SamCERA's core real estate fund has a leverage limit of 35%, and SamCERA also sits on the Fund's Advisory Committee.

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

TIPS: The primary risk factors are to changes in real interest rates, deflationary environments (although deflation floors could mitigate some of this risk), and potential illiquidity.

ASSET CLASS	BENCHMARK INDEX
INFLATION HEDGE	CUSTOMIZED BENCHMARK PORTFOLIO
REAL ESTATE	NCREIF ODCE
PRIVATE REAL ASSETS	CUSTOM REAL ASSET INDEX
LIQUID POOL	CUSTOM REAL ASSET INDEX
TIPS	BC TIPS INDEX

12.0 ALTERNATIVE ASSETS INVESTMENT POLICIES

<u>ALTERNATIVES OVERVIEW</u>: Alternatives are investments that do not neatly fit into public equities, or fixed income. SamCERA's alternatives program is broken out into the following two sub asset classes:

1) Private Equity, and 2) Hedge Funds

Private Equity: Private Equity is expected to be the highest returning asset class over the long-term. Its role in the portfolio is to provide high return potential in order to maximize the ability of the Fund to meet its performance objectives. The Private Equity program will contain manager allocations to three primary sub-categories: 1) Buyouts, 2) Venture Capital, and 3) Debt/Special Situations. These allocations will be implemented via allocation to primary and secondary fund investments and co-investment opportunities. The sub-allocation target allocation and ranges around target are summarized below:

Sub-Category	Target Allocation	Range		
Buyouts	60%	+/- 20%		
Venture Capital	20%	0 – 30%		
Debt/Special Situations	20%	+/- 10%		

The responsibility for private equity sourcing is delegated to SamCERA's investment consultant.

The private equity portfolio shall adhere to the following investment guidelines covering diversification and quality:

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

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

Investment Manager: No more than twenty (20) percent of the private equity portfolio's target allocation may be committed to any one investment manager (excluding fund of funds).

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

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

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

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

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

ALTERNATIVES PERFORMANCE OBJECTIVE:

The performance objective of the Alternatives Composite is to outperform, on a net-of-fee basis, a customized index incorporating the weighted average components for two sub-asset classes highlighted above (which results in the following weights: 54% Russell 3000+3%, and 46% LIBOR+4%).

ASSET CLASS	BENCHMARK INDEX
Alternatives	Customized Benchmark Portfolio
Private Equity	Russell 3000 + 3%
Hedge Funds (Absolute Return)	LIBOR + 4%

ALTERNATIVES RISK EXPOSURES AND RISK MITIGATION

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

13. RISK PARITY INVESTMENT POLICIES

RISK PARITY OVERVIEW: Risk Parity is a risk-diversified balanced portfolio that is expected to provide a more diversified return and risk profile than that of a traditional 60% equity / 40% fixed income portfolio. It is generally designed to be more balanced between equity risk, interest rate risk, credit risk, and inflation risk than a traditional balanced portfolio.

RISK PARITY PERFORMANCE OBJECTIVE:

The performance objective of the Risk Parity Composite is to outperform, on a net-of-fee basis, the 60% MSCI World / 40% BC Global Aggregate over a 5 year rolling period.

RISK PARITY RISK EXPOSURES AND RISK MITIGATION:

Risk parity managers utilize leverage in order to enhance returns. Moderate leverage may be utilized and the portfolio managers should avoid strategies that might place the portfolio outside the expected ranges outlined. Gross exposures are expected to range from 250% to 350%. In addition, the risk parity portfolio shall consist of a portfolio of generally liquid trading instruments.

Counter-parties for Over the Counter (OTC) derivatives must either: (1) have a long-term rating from Standard & Poor's of at least A-, or from Moody's of at least A3; or (2) be approved by the manager's counter-party committee. In the event that the OTC derivative counterparty is an unrated affiliate whose performance is unconditionally guaranteed by the parent company, the parent's credit rating shall apply.

ASSET CLASS	BENCHMARK INDEX
Risk Parity	60% MSCI World / 40% BC Global Aggregate

14.0 QUARTERLY INVESTMENT PERFORMANCE REPORTING

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

The report will provide sufficient information to assess the following:

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

E. Quarterly, annual, three- and five-year total time-weighted returns relative to the specified performance benchmark and manager style peer group.

15.0 ANNUAL INVESTMENT STRATEGY

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

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

16.0 PROXY VOTING

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

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

17.0 SECURITIES LENDING

A. Pursuant to Section 2.0 (E), the Custodian shall manage a securities lending program to enhance income in accordance with the terms and conditions set forth in a mutually acceptable securities lending agreement and guaranty.

- B. The Board reserves exclusive authority to approve the securities lending agreement prior to the commencement of securities lending activity.
- C. Unless otherwise specified in the agreement(s):
- (i) All loans shall be marked-to-market daily.
- (ii) Collateral on each loan shall be maintained daily at 102% of loan value for domestic securities and 105% of loan value for international securities.
- (iii) Acceptable collateral shall be in the form of cash or marketable fixed income securities with maturities not greater than one year, including (1) Commercial Paper with quality ratings of P-1 and/or A-1 by Moody's Investors Services or Standard & Poor's Corporation, or their equivalents; (2) Banker's acceptances, certificates of deposits and time deposits; (3) United States Treasury and Government Agency short-term obligations; and (4) Repurchase Agreements with United States Treasury Securities and Agencies of the United States Government as collateral.
- (iv) Borrower must have a long-term credit rating of either "A" from S&P or "A2" from Moody's. For split rated borrowers, the higher rating shall prevail if not the same rating, with the lower rating having a minimum long-term credit rating of either "A-" from S&P or "A3" from Moody's.
- D. The Chief Investment Officer shall be responsible for monitoring the securities lending program and recommending changes as appropriate.

APPENDIX A

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Investment Committee Charter as Amended

RESOLUTION 99-00-09

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

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

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

- (a) The retirement board ... shall have the sole and exclusive fiduciary responsibility over the assets of the ... system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets ... are trust funds and shall be held for the exclusive purposes of providing benefits to participants ... and their beneficiaries and defraying reasonable expenses of administering the system.
- (b) The members of the retirement board ... shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.
- (c) The members of the retirement board ... shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.
- (d) The members of the retirement board...shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate of return, unless under the circumstances it is clearly not prudent to do so.
- (e) The retirement board..., consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the... system. &

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

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

WHEREAS, The Board of Retirement, wishes to exercise these powers as follows:

EXERCISE OF POWERS: The Board shall exercise its investment, management and administrative authority and responsibility through the approval of motions recorded in public meeting &

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

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

1.0 CONDUCT ASSET ALLOCATION STUDIES

1.1 Determine the characteristics of the Policy's liabilities in regards to the nature of Fund's cash flows

- 2.0 DEVELOP ASSET MIX ALTERNATIVES TO MEET LIABILITY REQUIREMENTS
 - 2.1 Establish allowable asset classes
 - 2.2 Determine asset class benchmarks
 - 2.3 Develop risk, return & correlation projections
- 3.0 EVALUATE EFFICIENT FRONTIER ALTERNATIVES
 - 3.1 Define risk, return and correlation
 - 3.2 Evaluate mean variance optimization
 - 3.3 Determine low risk alternatives and high risk alternatives
 - 3.4 Scale portfolios between two extremes
 - 3.5 Evaluate optimized efficient frontier
 - 3.6 Integrate optimized efficient frontier with asset-liability relationships
- 4.0 ANALYZE BOARD RISK TOLERANCE
 - 4.1 Assess risk/reward trade-offs
 - 4.2 Assess contribution rate sensitivity & variability
 - 4.3 Assess ability to exceed actuarial interest rate
 - 4.4 Assess comfort level with characteristics of specific asset mixes
- 5.0 RECOMMEND PREFERRED ASSET MIX
 - 5.1 Evaluate differences from current target
 - 5.2 Evaluate Board's willingness to implement new target asset mix
 - 5.3 Evaluate appropriateness of variance from peer public fund norms
- 6.0 RECOMMEND AMENDMENTS TO SAMCERA'S INVESTMENT POLICY
 - 6.1 Adjust target asset mix
 - 6.2 Introduce new benchmarks
 - 6.3 Include required asset class/portfolio modifications
- 7.0 RECOMMEND REVISIONS TO MANAGER STRUCTURE
 - 7.1 Adjust manager/style line-up as necessary
 - 7.2 Introduce new managers/asset classes
 - 7.3 Terminate managers/asset classes as necessary
 - 7.4 Establish active & passive allocation targets as appropriate

- 8.0 IMPLEMENT CHANGES TO MANAGER STRUCTURE
 - 8.1 Recommend time-line & approach to revise structure
 - 8.2 Conduct manager evaluations
 - 8.3 Establish portfolio and asset allocation rebalancing procedures
- 9.0 EVALUATE MANAGER PERFORMANCE
 - 9.1 Monitor results of managers both gross and net of investment management fees
 - 9.2 Assess consistency of portfolio decision making
 - 9.3 Evaluate organizational, ownership, personnel & other firm developments
- 10.0 RECOMMEND AND EVALUATE INVESTMENT CONSULTANT STRUCTURE & PERFORMANCE
 - 10.1 Recommend for Board determination the retention and termination of Investment Consultant(s) as necessary
 - 10.2 Define and assign special projects as warranted
 - 10.3 Monitor performance of Investment Consultant(s)
 - 10.4 Conduct evaluations of Investment Consultant(s)
 - 10.5 Evaluate organizational, ownership, personnel and other firm developments
- 11.0 Initiate & Evaluate Special Investment Studies
- 12.0 UNDERTAKE OTHER WORK ASSIGNED TO IT BY THE BOARD Be it further

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

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

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

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

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

APPENDIX B

Derivatives Investment Policy

1) Introduction

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

2) Derivative Definition

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

3) Types of Securities Included or Excluded

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

4) Approach to Policy

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

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

5) Counter-Party Evaluation

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

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

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

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

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

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

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

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

6) Purposes for Derivatives

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

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

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

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

7) Investment Restrictions and Derivatives Policy

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

Allowable derivative investments

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

Derivative investments with allocation limits

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

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

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

Restricted derivative investments

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

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

8) Risk Analysis and Monitoring of Derivatives

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

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

9) Derivative Investment Process

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

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

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

10) Reporting Requirements

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

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

Appendix C

DISCLOSURE OF PLACEMENT AGENT FEES, GIFTS, AND CAMPAIGN CONTRIBUTIONS

Adopted by the Board of Retirement December 14, 2010. Amended January 25, 2011.

This policy is effective immediately upon adoption. This policy is intended to supplement any applicable provisions of state or federal law.

I. PURPOSE

This Policy sets forth the circumstances under which the San Mateo County Employees' Retirement Association (SAMCERA) shall require the disclosure of payments to *Placement Agents*, as that term is defined by Government Code section 7513.8, in connection with SAMCERA investments in or through *External Managers*, as that term is defined by Government Code section 7513.8. This Policy is intended to apply broadly to all of the types of investment partners with whom SAMCERA does business, including the general partners, managers, investment managers and sponsors of hedge funds, private equity funds, real estate funds and infrastructure funds, as well as investment managers retained pursuant to a contract. SAMCERA adopts this Policy to require broad, timely, and updated disclosure of all Placement Agent relationships, compensation and fees. The goal of this Policy is to help ensure that SAMCERA investment decisions are made solely on the merits of the investment opportunity by individuals who owe a fiduciary duty to SAMCERA.

II. APPLICATION

This Policy applies to all agreements with External Managers that are entered into after the date this Policy is adopted. This Policy also applies to existing agreements with External Managers if, after the date this Policy is adopted, the agreement is amended in any way to continue, terminate, or extend the term of the agreement or the investment period, increase the commitment of funds by SAMCERA or increase or accelerate the fees or compensation payable to the External Manager (Referred to hereafter as "Amendment".) In the case of an Amendment, the disclosure provisions of this Policy shall apply to the Amendment and not to the original agreement.

IV. RESPONSIBILITIES

- A. The Board is responsible for:
 - 1. not entering into any agreement with an External Manager that does not

agree in writing to comply with this policy.

- 2. not entering into any agreement with an External Manager who has violated this policy within the previous five years. However, this prohibition may be reduced by a majority vote of the board at a public session upon a showing of good cause.
- B. Each External Manager is responsible for:
 - 1. Providing a statement in writing that the External Manager will comply with this policy.
 - 2. Providing the following information to the SAMCERA Investment Staff within 45 days of the time investment discussions are initiated by the External Manager, but in any event, prior to the completion of due diligence. In the case of Amendments, the Placement Agent Information Disclosure is required prior to execution of the Amendment.
 - a. Disclosure of payments or compensation by the External Manager or any of its principals, employees, agents or affiliates, directly or indirectly, to any person or entity to act as a Placement Agent in connection with SAMCERA investments.
 - b. A resume for each officer, partner, principal of the Placement Agent detailing the person's education, professional designations, regulatory licenses and investment and work experience. If any such person is a current or former SAMCERA Board Member, employee or Consultant or a member of the immediate family of any such person, this fact shall be specifically noted.
 - c. A description of any and all compensation of any kind provided or agreed to be provided to a Placement Agent, including the nature, timing and value thereof. Compensation to Placement Agents shall include, but not be limited to, compensation to third parties as well as employees of the External Manager who solicit or market investments to SAMCERA or who are paid based upon investment commitments secured by such employees.
 - d. A description of the services to be performed by the Placement Agent and a statement as to whether the Placement Agent is utilized by the External Manager with all prospective clients or only with a subset of the External Manager's prospective clients.
 - e. A written copy of any and all agreements between the External

Manager and the Placement Agent.

- f. A statement whether the placement agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or explanation as to why no registration is required.
- g. A statement whether the placement agent, or any of its affiliates, is registered as a lobbyist with any state or national government.
- h. The names of any current or former SAMCERA Board Members, employees, or Consultants who suggested the retention of the Placement Agent.
- 3. Providing an update of any changes to any of the information provided pursuant to section B.2 above within 14 calendar days of the date that the External Manager knew or should have known of the change in information.
- 4. Representing and warranting the accuracy of the information described in section B.2 above.
- 5. Causing its engaged Placement Agent to disclose, prior to acting as a Placement Agent to SAMCERA,
 - a. all campaign contributions made by the Placement Agent to any publicly elected SAMCERA Board Member during the prior 24-month period. Additionally, any subsequent campaign contribution made by the Placement Agent to any publicly elected SAMCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SAMCERA investment shall also be disclosed.
 - b. all gifts, as defined in Government Code Section 82028, given by the Placement Agent to any SAMCERA Board Member during the prior 24-month period. Additionally, any subsequent gift made by the Placement Agent to any SAMCERA Board Member during the time the Placement Agent is receiving compensation in connection with a SAMCERA investment shall also be disclosed.
- 6. SAMCERA reserves the right to deem the failure to disclose the information required by 5(a) and 5(b) as a material breach of the agreement with the External Manager.

- D. SAMCERA Investment Staff ("Staff") are responsible for:
 - Providing External Managers with a copy of this Policy at the time that discussions are initiated with respect to a prospective investment or engagement.
 - 2. Confirming that the information in section B above has been received within 45 days of the time investment discussions are initiated, but in any event, prior to the completion of due diligence and any recommendation to proceed with the contract or Amendment.
 - 3. For new contracts and amendments to contracts existing as of the date of the initial adoption of this Policy, securing the agreement of the External Manager in the final written agreement between SAMCERA and the External Manager to provide in the event that there was or is an intentional material omission or inaccuracy in the Placement Agent Information Disclosure or any other violation of this Policy, SAMCERA is entitled to the greater of the reimbursement of any management or advisory fees paid by SAMCERA for the prior two years or an amount equal to the amounts paid or promised to be paid to the Placement Agent as a result of the SAMCERA investment; and
 - 4. Prohibiting any External Manager or Placement Agent from soliciting new investments from SAMCERA for five years after they have committed a material violation of this Policy; provided, however, that SAMCERA's Board, by majority vote at a noticed, public meeting, may reduce this prohibition upon a showing of good cause.
 - 5. Providing a quarterly report to the Board containing (a) the names and amount of compensation agreed to be provided to each Placement Agent by each External Manager as reported in the Placement Agent Information Disclosures, and (b) any material violations of this Policy; and maintaining the report as a public record.

DEFINITIONS:

The following definitions are current as of January 7, 2011. Should the legislature subsequently amend the definitions below, the definition of these terms as amended shall supersede the definitions contained in this policy.

As defined in California Government Code section 7513.8, "External Manager" means either of the following: (1) a person who is seeking to be, or is, retained by a board to manage a portfolio of securities or other assets for compensation; (2) a person who is engaged, or proposes to be engaged, in the business of investing, reinvesting, owning, holding, or trading securities or other

assets and who offers or sells, or has offered or sold, securities to a board. (All code section references are to the Government Code, unless otherwise noted.)

As defined in section 7513.8, "**Person**" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

As defined in section 7513.8, "Placement Agent" means any person hired, engaged, or retained by, or serving for the benefit of or on behalf of, an External Manager, or on behalf of another placement agent, who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker or other intermediary in connection with the offer or sale of the securities, assets, or services of an External Manager to a board or an Investment Vehicle, either directly or indirectly. Notwithstanding the preceding sentence, an individual who is an employee, officer, director, equity holder, partner, member, or trustee of an External Manager and who spends one-third or more of his or her time, during a calendar year, managing the securities or assets owned, controlled, invested, or held by the External Manager is not a Placement Agent.

As defined in section 7513.8, "Investment Vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, constituting or managed by an External Manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other External Managers.

"Compensation" means, for the purposes of this policy, remuneration and other benefits (including without limitation, favors) of any kind.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION Board of Retirement

January 24, 2017

Agenda Item 6.4

TO:

Board of Retirement

FROM:

Michael Coultrip, Chief Investment Officer

SUBJECT:

Report on Opportunistic Credit Short List Managers

Staff Recommendation

Provide feedback on the proposed mandate and short-list of opportunistic managers for a new opportunistic credit strategy within the fixed income asset class.

Background

In October 2016, the Board approved a new asset allocation policy that increased the overall allocation to opportunistic credit to 8% of the total plan. Also, a new sub-category titled "Private Credit" was established as part of this process as a carve-out from Opportunistic Credit. This new Private Credit carve-out has a 2% target allocation, leaving 6% to allocate to more traditional opportunistic credit strategies.

Discussion

As part of the 6% allocation to more traditional opportunistic credit strategies, staff and consultant propose searching for a dynamic multi-sector credit strategy that can invest where the best opportunities in credit are instead of allocating to a multitude of single sector funds. This strategic credit strategy would invest across the global credit spectrum (investment-grade corporates, high yield bonds, bank loans, emerging markets, and securitized) using an opportunistic, top down approach to sector allocation complemented by a bottom-up approach to security selection. Based on current allocations within opportunistic credit, approximately \$70 million, or 2% of the portfolio, will be allocated to a new strategic credit manager. The current allocation within opportunistic credit is approximately 2% underweight as compared to the opportunistic credit target allocation.

The attached memo from Verus outlines the process used to generate a short-list of potential strategic credit strategies. Staff and consultant intend to perform further due diligence on these strategies over the next few months, and anticipate making a final investment recommendation to the Board at that time.

Attachment

Verus Memorandum Strategic Credit Search



MEMORANDUM

DATE: January 13, 2017

TO: SamCERA

FROM: Verus

SUBJECT: Strategic Credit Manager Search

This memo outlines the rationale behind SamCERA's Strategic Credit manager search and the due diligence process followed so far for the search. Also, the memo provides summary background on the remaining managers in the Strategic Credit search for continued due diligence.

As part of SamCERA's asset-liability (AL) study which was finalized in October 2016, the Plan's target allocation to Opportunistic Credit was increased from 5% to 6%. In this AL study, we categorized asset classes into functional roles, namely Growth exposures, Diversifying exposures, and Inflation Hedge exposures. Under this categorization of assets, Opportunistic Credit was delineated as an offensive fixed income exposure falling into the Growth bucket, whereas some other fixed income strategies, such as Core Bond, were delineated as defensive fixed income and allocated to the Diversifying category.

SamCERA's Opportunistic Credit exposure is currently allocated among the following managers and strategies:

Manager name	Product name	Opp Credit strategy	\$ allocation at 9/30	% allocation at 9/30
Angelo Gordon	STAR	Primarily CMBS and non-Agency RMBS	\$27 million	1% (0.7%)
Angelo Gordon	OWL	Primarily whole loans	\$21 million	1% (0.6%)
Brigade	Opportunistic Credit	Primarily high yield and bank loans	\$68 million	2% (1.8%)
Beach Point	Select Fund	Primarily high yield and bank loans	\$43 million	1% (1.2%)

Based on current allocations within Opportunistic Credit, approximately \$70 million, or 2% of the portfolio, will be allocated to the new Strategic Credit manager. We are seeking to diversify within Opportunistic Credit with this new hire. Specifically, we are looking for a multi-sector credit manager that invests across the credit spectrum (corporates, securitized, investment grade, non-investment grade, U.S., non-U.S. and emerging) using an opportunistic, top down approach to sector allocation complemented by a bottom up approach to security selection. In contrast to SamCERA's other Opportunistic Credit managers, we are generally looking at more liquid strategies that also have lower fee structures.

VERUS Page 1 of 2

With this as a backdrop, Verus did a manager screen using the eVestment Alliance database looking for opportunistic credit strategies that met the criteria described above.

The following table shows Verus' search criteria and the resulting number of asset managers after each step of the screen:

Screening Criterion	Remaining Number of Managers
Manager offers global multi-credit strategy	42
Product has at least a 3-year track record	36
Product has at least \$500 million in AUM	27
At least 50% of strategy assets are with institutional clients	18
Product has good, relative peer group performance	10
Products excluded for qualitative reasons	8

Managers who were dropped for qualitative reasons include: 1) not a pure multi-credit approach (use of non-credit sectors), 2) change in fund vehicle such that the product no longer met screening criteria, 3) active credit capabilities viewed as less robust than other candidates. We added back one strategy that was narrowly below the strategy asset cut-off. Verus also added back two managers that are less liquid in their approaches, but that we believe are worthy of consideration and would diversify the current roster.

Our final list of 6 managers (7 products) is as follows:

- Brandywine - Oaktree

Loomis Sayles
 PIMCO (two products)

- Oak Hill - Wellington

Our next step is send a questionnaire to each manager and continue our due diligence. The attached summary comparison table lists the managers as well as brief descriptions about their strategies and performance analytics.

VERUS Page 2 of 2

	PIMCO	PIMCO	Brandywine Global Investment Management, LLC	Loomis, Sayles & Company, L.P.	Oak Hill Advisors	Oaktree Capital Management, L.P.	Wellington Management Company LLP
Firm Inception	1971	1971	1986	1926	1991	1995	1928
Firm AUM (\$MM)	\$1,548,114	\$1,548,114	\$69,865	\$245,207	\$30,436	\$99,833	\$998,250
Strategy/Fund Name	Diversified Income	Income Strategy	Global Multi-Sector Income	World Credit Asset	Diversified Credit Strategies Fund	Strategic Credit	Multi-Sector Credit
PM's & Location	8; Newport Beach, CA	3; Newport Beach, CA	8; Philadelphia, PA	2; Boston, MA	15; New York, NY	1; Los Angeles, CA	14; Boston, MA
Strategy Inception	July-2003	March-2007	April-2013	August-2013	August-2012	July-2012	August-2009
Strategy AUM (\$MM)	\$19,244	\$94,183	\$1,079	\$358	\$3,883	\$3,248	\$752
Strategy Description	The Diversified Income Strategy is designed to provide investors with a comprehensive global credit solution. It is a multi-sector strategy that invests across a broad spectrum of global credit markets sectors, including investment grade and high yield, corporate debt as well as emerging market debt. The allocation among each of these markets 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 invest ment 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.	portfolio that is actively managed to maximize current income with a secondary objective of long term capital appreciation. The strategy utilizes multiple sectors of the bond market including government and municipal bonds, broad exposure to credit sectors and foreign exchange in an effort to generate a competitive and consistent distribution yield and monthly dividend. Managed to pursue efficient income generation, the strategy also focuses on PIMCO total-return ideas in an effort to maximize capital appreciation and risk-	Brandywine's Global Multi-Sector Income is a flexible high-yielding strategy that targets consistent income levels while seeking a modest total return. Brandywine Global's approach to achieving these goals is to tactically allocate across higher-yielding fixed income sectors globally that offer the most attractive combination of value and durable fundamentals. Active macroeconomic themes of the Global Fixed Income team guide the strategy's betahedging program and provide key inputs for the strategy's top-down valuation framework. The Global Credit team incorporates a rigorous bottom-up, proprietary credit research as part of the investment decision making process.	over a full market cycle. Portfolio construction incorporates the firm's top- down viewpoints driven by real-time market and economic data in conjunction with a rigorous bottom-up analysis with the goal of identifying long-term themes and undervalued securities. The strategy invests in the full spectrum of publicly traded credit sectors including investment grade and below investment grade bonds, bank loans, securitized and emerging	Fund (the "Fund") seeks to achieve attractive risk-adjusted total returns for its investors by investing primarily in the non-investment grade corporate debt markets in the United States and Europe across high yield bonds, leveraged loans, structured products and distressed securities. Oak Hill adheres to a value-oriented, risk-adjusted investment approach that emphasizes a disciplined investment process. Oak Hill's investment professionals are organized into six industry groups. Each group has deep industry knowledge, experience, and relationships with world-class operators. (Media and Telecommunications; Basic	Leveraging Oaktree's global platform, the Strategic Credit team sources new investment opportunities through a variety of internal and external channels. Internal deal sources stem from the firm's trading operations, dedicated sourcing teams, specialized investment teams. The team conducts diligence on potential investments utilizing the network of investment professionals throughout the firm, third party experts and analysis, and a broad array of industry management teams. Once opportunities are identified, the team performs what-if analysis on a range of potential credit events for each credit. After conducting their research, the investment professionals assess each credit via a robust, collaborative decision-making process. It is during this process that they apply a disciplined investment criteria, evaluate the risk/reward potential and size investments.	investment universe consists of a broad range of credit sectors including high yield, bank loans, securitized debt, convertible bonds, and emerging market debt. The approach is total-return rather than benchmark oriented, but seeks to provide long-term total
Minimum quality	ссс	ссс	В	None	N/A	N/A	В
Benchmark	Diversified Income Custom Benchmark	Bloomberg Barclays US Aggregate	Bloomberg Barclays Multiverse	50% BGA USD/25% BGHY USD/15% CEMBI/10% SP/LSTA	N/A	N/A	Multi Sector Credit Blend

	РІМСО	PIMCO	Brandywine Global Investment Management, LLC	Loomis, Sayles & Company, L.P.	Oak Hill Advisors	Oaktree Capital Management, L.P.	Wellington Management Company LLP
Target Return	None	None	4% over Libor	5-7%	N/A	N/A	5-8%
# of Issues	700-1000	3000+	50-100	100-150	N/A	N/A	400-500
Concentration Limits	Max issuer: 35% Max high yield: 100% Max EM: 100%	Max corp high yield: 50% Max EM: 20% Max unhedged: 10%	Max issuer: 5% Max sector: 25% Max local EM FX: 25%	Max sector: 5% Index Relative Max country: 35%	N/A	N/A	Unconstrained
Duration range	3-8 years	0-8 years	0-10 years	0-5 years	N/A	N/A	2-6 years
Vehicles	SA;MF	MF	SA	SA; CF; MF	N/A	N/A	SA;CF
Management Fees	SA: 0.50% first \$100 mm SA: 0.45% next \$100 mm SA: 0.40% remaining assets MF: 0.75% all assets	MF: 0.45% on all assets	SA: 0.55% first \$25 mm SA: 0.50% next \$75 mm SA: 0.45% remaining assets	SA: 0.50% all assets CF: 0.50% all assets MF: 0.75% all assets	N/A	N/A	SA: 0.55 first \$100 mm SA: 0.50% remaining assets CF: 0.50% all assets
Liquidity	Daily	Daily	Daily	Daily	N/A	N/A	Daily

Verus⁷⁷





January 2017 Opportunistic Credit Search

San Mateo County Employees' Retirement Association

I. Manager overview



Manager comparison

	PIMCO Diversified Income	PIMCO Income	Brandywine Global Multi-Sector	Loomis Sayles World Credit	Oak Hill Diversified Credit	Oaktree Strategic Credit	Wellington Mutli-Sector Credit
FIRM OWNERSHIP	Wholly owned subsidiary of Allianz Global	Wholly owned subsidiary of Allianz Global	100% parent owned (Legg Mason)	100% owned by Natixis Global Asset Management	100% employee owned	100% employee owned	100% employee owned
FIRM NAME	PIMCO	PIMCO	Brandywine Global Investment Management, LLC	Loomis, Sayles & Company, L.P.	OAK HILL ADVISORS	Oaktree Capital Management, L.P.	Wellington Management Company LLP
PRODUCT NAME	Diversified Income	Income Strategy	Global Multi-Sector Income	World Credit Asset	OHA Diversified Credit Strategies Fund	Oaktree Strategic Credit	Multi-Sector Credit
FIRM TOTAL AUM (\$MM)	\$1,548,115	\$1,548,115	\$69,866	\$245,208	\$30,436	\$99,834	\$998,250
STRATEGY AUM (\$MM)	\$19,244	\$94,183	\$1,079	\$359	\$3,884	\$3,248	\$752
INCEPTION DATE	Jul-03	Mar-07	Apr-13	Aug-13	Aug-12	Jul-12	Aug-09
PREFERRED BENCHMARK	Diversified Income Custom Benchmark	Bloomberg Barclays US Aggregate	LIBOR - 3 Month	50% BGA USD/25% BGHY USD/15% CEMBI/10% SP/LSTA	Blended High Yield and Leveraged Loan Benchmark	NA	Multi Sector Credit Blend
INVESTMENT APPROACH	Combined	Combined	Fundamental	Combined	Fundamental	Fundamental	Fundamental
SCREENING APPROACH	Combined	Combined	Top-Down	Combined	Bottom-Up	Bottom-Up	Top-Down
STYLE EMPHASIS	Other	Other	Multi-sector	Other	Other	Other	Other

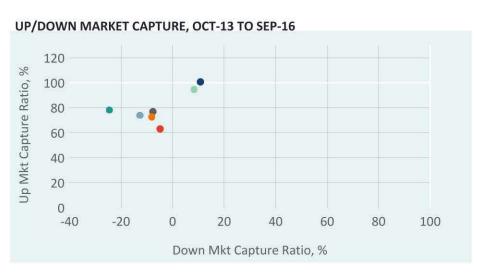


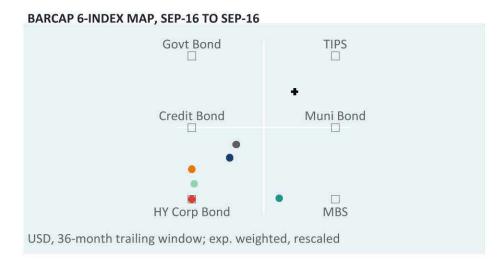
Style and portfolio comparison

PIMCO Income

- PIMCO Diversified Income
- Brandywine Global Multi-Sector
- Loomis Sayles World Credit **♣** Barclays Multiverse

- Oak Hill Diversified Credit
- Oaktree Strategic Credit
- Wellington Mutli-Sector Credit



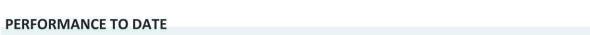


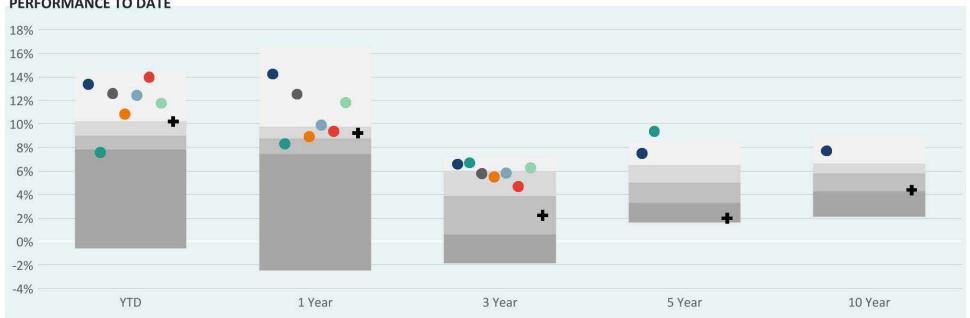
	PIMCO Diversified Income	PIMCO Income	Brandywine Global Multi-Sector	Loomis Sayles World Credit	Oak Hill Diversified Credit	Oaktree Strategic Credit	Wellington Mutli-Sector Credit
ANNUAL TURNOVER	99.0%	164.0%	178.9%	74.4%			173.0%
YIELD TO MATURITY	5.6%	4.8%	4.2%	5.0%			6.8%
EFFECTIVE DURATION	5.5	2.6	5.1	4.8			4.0
AVERAGE QUALITY ISSUE	BBB	BBB	BBB	ВВ			В
MINIMUM QUALITY ISSUE	ССС	CCC	В	None			В



Performance comparison - as of September 2016

- PIMCO Diversified IncomeOak Hill Diversified Credit
- PIMCO IncomeOaktree Strategic Credit
- Brandywine Global Multi-Sector
- Loomis Sayles World CreditBarclays Multiverse
- Wellington Mutli-Sector Credit





EXCESS ANNUALIZED RETURN TO DATE, %	YTD	1 Year	3 Year	5 Year	10 Year
PIMCO Diversified Income	3.2	5.0	4.4	5.5	3.3
PIMCO Income	-2.6	-0.9	4.5	7.4	root
Brandywine Global Multi-Sector	2.4	3.3	3.6	1 1	.===
Loomis Sayles World Credit	0.6	-0.3	3.3	466)	:
Oak Hill Diversified Credit	2.2	0.7	3.6	()	
Oaktree Strategic Credit	3.8	0.1	2.5)———
Wellington Mutli-Sector Credit	1.5	2.6	4.1		



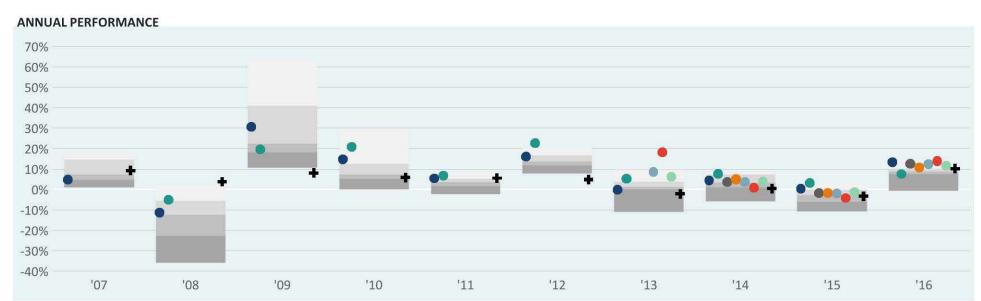
Calendar year performance

PIMCO Income

- PIMCO Diversified Income
- Oaktree Strategic Credit Oak Hill Diversified Credit
- Brandywine Global Multi-Sector
- **♣** Barclays Multiverse

Loomis Sayles World Credit

- Wellington Mutli-Sector Credit



ANNUAL PERFORMANCE AND RANKING	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
PIMCO Diversified Income	4.9	-11.2	30.7	14.8	5.5	16.1	-0.1	4.5	0.5	13.4
Rank	75	47	31	20	28	30	82	40	18	9
PIMCO Income		-5.1	19.7	20.9	6.8	22.7	5.2	7.7	3.2	7.6
Rank		24	62	14	15	3	15	24	4	78
Brandywine Global Multi-Sector								3.7	-1.7	12.6
Rank								50	42	10
Loomis Sayles World Credit								5.0	-1.7	10.8
Rank								37	42	19
Oak Hill Diversified Credit							8.7	3.7	-2.1	12.4
Rank							7	50	45	10
Oaktree Strategic Credit							18.3	0.8	-4.2	14.0
Rank							1	79	66	7
Wellington Mutli-Sector Credit							6.3	4.0	-1.3	11.8
Rank							9	44	40	11
Barclays Multiverse	9.2	3.8	8.0	5.8	5.5	4.8	-2.2	0.5	-3.3	10.2
Rank	40	3	100	74	25	100	89	81	61	28



Performance summary - as of September 2016

	PIMCO Diversified Income	PIMCO Income	Brandywine Global Multi-Sector	Loomis Sayles World Credit	Oak Hill Diversified Credit	Oaktree Strategic Credit	Wellington Mutli-Sector Credit	Barclays Multiverse
PERFORMANCE ANALYSIS - (3 Years	5)							
Alpha %	5.0	5.9	4.3	4.2	4.6	3.4	4.7	0.0
Beta	0.7	0.3	0.6	0.5	0.5	0.6	0.6	1.0
R-squared %	30.0	15.0	34.2	29.8	17.0	14.7	28.3	100.0
Sharpe Ratio	1.3	2.4	1.3	1.4	1.1	0.8	1.2	0.5
Treynor Ratio	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.0
Tracking Error %	4.5	4.0	3.9	3.9	5.1	5.9	4.6	0.0
Annualized Std Dev %	5.1	2.7	4.4	4.0	5.2	6.1	5.1	4.2
Information Ratio	1.0	1.1	0.9	0.8	0.7	0.4	0.9	222
Max Drawdown %	-4.8	-1.3	-5.2	-5.6	-8.4	-12.0	-5.8	-7.8
Calmar Ratio	1.4	5.2	1.1	1.0	0.7	0.4	1.1	0.3
Excess Ann. Return %	4.4	4.5	3.6	3.3	3.6	2.5	4.1	0.0
PERFORMANCE TO DATE								
1 Year	14.2	8.3	12.5	8.9	9.9	9.4	11.8	9.2
3 Year	6.6	6.7	5.8	5.5	5.8	4.7	6.3	2.2
5 Year	7.5	9.4	***	***	***	· ·		2.0
7 Year	8.2	10.9	HEE!	###:			***	2.9
10 Year	7.7							4.4
Common Inception (Oct-13)	6.6	6.7	5.8	5.5	5.8	4.7	6.3	2.2
CALENDAR YEAR RETURNS								
2015	0.5	3.2	-1.7	-1.7	-2.1	-4.2	-1.3	-3.3
2014	4.5	7.7	3.7	5.0	3.7	0.8	4.0	0.5
2013	-0.1	5.2		***	8.7	18.3	6.3	-2.2
2012	16.1	22.7						4.8
2011	5.5	6.8						5.5
2010	14.8	20.9					200	5.8
2009	30.7	19.7						8.0
2008	-11.2	-5.1	***	***	***	· ·		3.8
2007	4.9		***			(*****	***	9.2
2006	8.5				777			6.5



Rolling performance

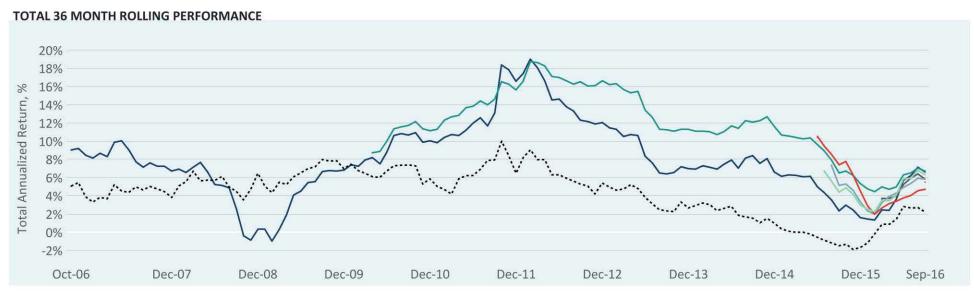
- PIMCO Diversified Income
- Oaktree Strategic Credit

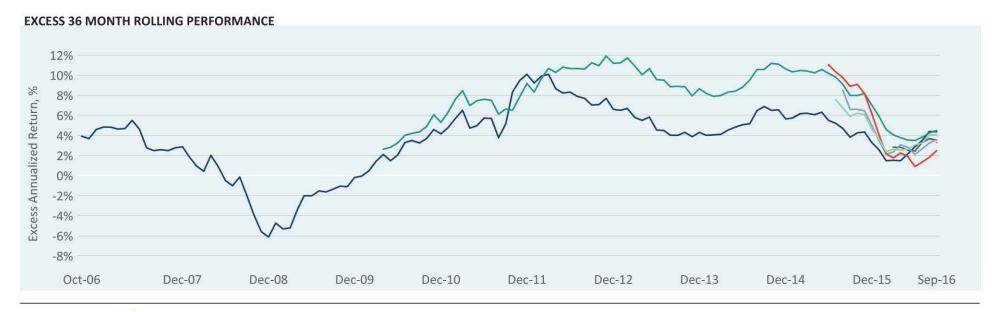
PIMCO Income

- Brandywine Global Multi-Sector
- **♣** Barclays Multiverse

Loomis Sayles World Credit

- Oak Hill Diversified Credit
- Wellington Mutli-Sector Credit







Performance statistics

PIMCO Diversified Income

1%

2%

3%

2%

1%

0% 0% PIMCO Income

- Brandywine Global Multi-Sector
- Loomis Sayles World Credit
- Wellington Mutli-Sector Credit **♣** Barclays Multiverse



3%

Tracking Error, %

4%

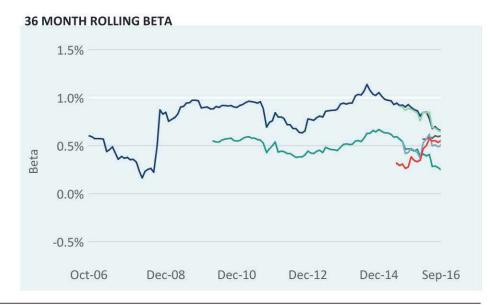
5%

6%







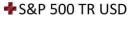




Max drawdown

- PIMCO Diversified Income
- PIMCO Income

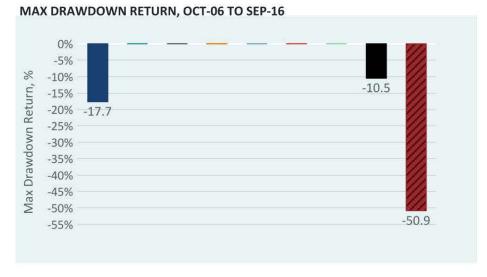
- Brandywine Global Multi-SectorWellington Mutli-Sector Credit
- Loomis Sayles World Credit
- Oak Hill Diversified Credit Oaktree Strategic Credit Wellington Mutli-Sector Credit ♣ Barclays Multiverse













Performance statistics

- PIMCO Diversified Income
- PIMCO Income

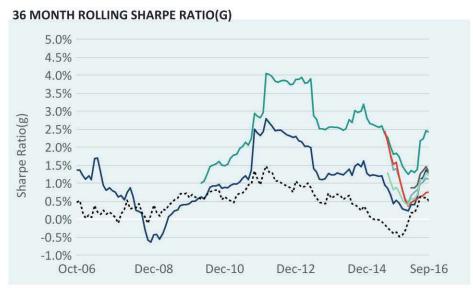
- Brandywine Global Multi-Sector Wellington Mutli-Sector Credit
- Loomis Sayles World Credit
- **♣** Barclays Multiverse

Oak Hill Diversified Credit Oaktree Strategic Credit **36 MONTH ROLLING RISK** 12% 10%









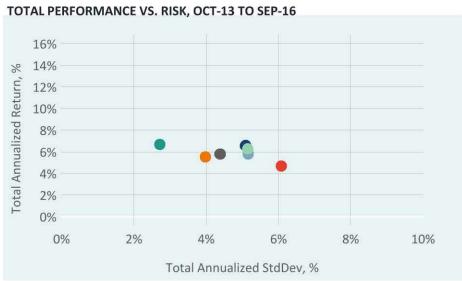


Risk vs. return

- PIMCO Diversified Income
- PIMCO Income

- Brandywine Global Multi-SectorWellington Mutli-Sector Credit
- Loomis Sayles World Credit
- **♣** Barclays Multiverse

- Oak Hill Diversified Credit
- Oaktree Strategic Credit











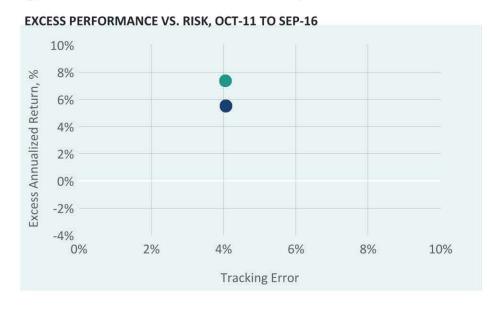
Performance efficiency

- PIMCO Diversified Income
- PIMCO Income

- Brandywine Global Multi-Sector Wellington Mutli-Sector Credit
- Loomis Sayles World Credit
- **♣** Barclays Multiverse











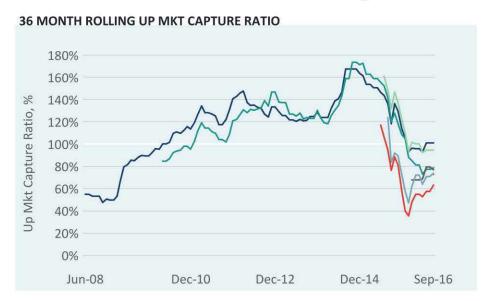


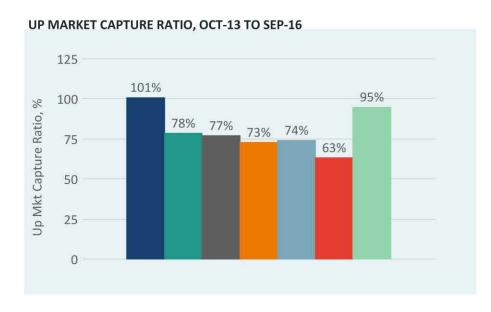
Up & down market analysis

- PIMCO Diversified Income
- PIMCO Income

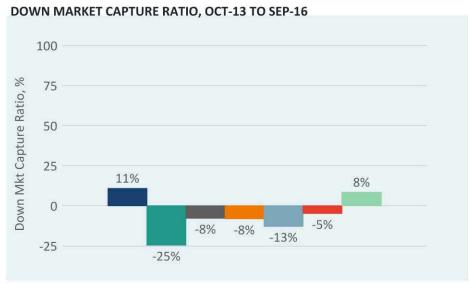
- Brandywine Global Multi-Sector
 Wallington Mutli Sector Credit
- Loomis Sayles World Credit

- Oak Hill Diversified Credit
- Oaktree Strategic Credit
- Wellington Mutli-Sector Credit
- ♣ Barclays Multiverse











January 24, 2017

Agenda Item 7.1

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TO:

Board of Retirement

FROM:

Gladys Smith, Assistant Executive Officer

SUBJECT:

Annual Review of Independent Auditor, Brown Armstrong

Staff Recommendation

Accept the annual performance report of Brown Armstrong Accountancy Corporation, SamCERA's Independent Auditor.

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 six Board members and five staff members. Once again, Brown Armstrong received above average ratings overall from both the Board and staff for the services they provided to SamCERA.

Andrew Paulden will highlight areas in Brown Armstrong's attached survey responses and will be available to respond to any questions or comments regarding his firm's audit services.

Attachments

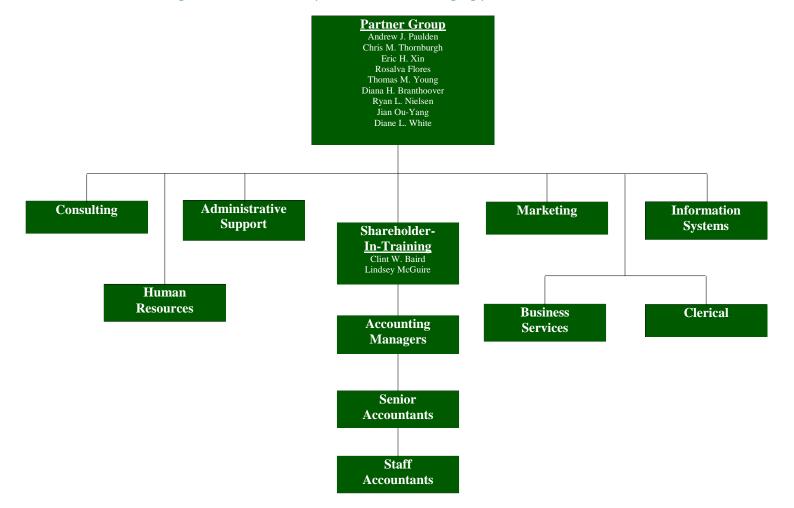
Brown Armstrong Questionnaire Response Peer Review 2016 of Brown Armstrong

Questions for Annual Independent Auditor Evaluation Fiscal Year 2016-17

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.

<u>See organizational chart below.</u> During the year two partners have departed, Steven R. Starbuck passed away in December 2015, and Connie M. Perez departed choosing to peruse other opportunities. Andrew J Paulden has once again taken on the responsibilities of managing partner.



- 2) Update all significant personnel changes or expected changes to the "SamCERA Team."
 - No significant personnel changes to the SamCERA team this year nor any expected for next year.
- 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?
 - One claim has recently been made against our firm by a City client due to an embezzlement scheme. It is our conclusion the claim lacks merit, and we are vigorously defending our firm against such claim. We perform quality audits pursuant to all professional standards. The quality and competency of our audits has been confirmed based on the clean results of our recent peer review.
- 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.
 - Previously provided to SamCERA Management was Brown Armstrong Accountancy Corporation's most recent external quality control review (peer review.) <u>Please see attached peer review report</u>. 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.

 The only outsourcing we do is for Information Technology consultant. They will be utilized if your company falls under high risk for significant changes during the year.

Client Update

- 6) 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.
- 7) Please list all clients gained or lost in the past eighteen months.Over the past eighteen months, we have gained a total of 331 clients and lost

Outlook

221.

8) What issues are other clients concerned with in regards to products, services, education and governance that your staff has not addressed with SamCERA? Our other clients are concerned with obtaining training and implementation guidance relating to both new and proposed accounting/pension standards. See our recommendation at #12 in attending our future continuing education.

9) Are your clients making significant changes that SamCERA should be made aware?

None noted.

10) Relative to your expertise, what trends are occurring in the retirement industry that SamCERA should be tracking?

None noted.

Conclusion

11) 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 will be helpful in accomplishing the goals established.

12) 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. You can save the date for June 1st and 2nd of 2017. We will provide more information once the agenda has been established.

13) Is there any information that would be timely pursuant to SamCERA's contract and this annual review?

None noted.

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

None noted, GASB 74 and 75 will not be applicable to SamCERA.



System Review Report

To the Shareholders of Brown Armstrong Accountancy Corporation and the National Peer Review Committee of the AICPA

We have reviewed the system of quality control for the accounting and auditing practice of Brown Armstrong Accountancy Corporation (the firm) applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended October 31, 2015. Our peer review was conducted in accordance with the Standards for Performing and Reporting on Peer Reviews established by the Peer Review Board of the American Institute of Certified Public Accountants. As part of our peer review, we considered reviews by regulatory entities, if applicable, in determining the nature and extent of our procedures. The firm is responsible for designing a system of quality control and complying with it to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Our responsibility is to express an opinion on the design of the system of quality control and the firm's compliance therewith based upon our review. The nature, objectives, scope, limitations of, and the procedures performed in a System Review are described in the standards at www.aicpa.org/prsummary.

As required by the standards, engagements selected for review included engagements performed under *Government Auditing Standards* and audits of employee benefit plans.

In our opinion, the system of quality control for the accounting and auditing practice of Brown Armstrong Accountancy Corporation applicable to engagements not subject to PCAOB permanent inspection in effect for the year ended October 31, 2015, has been suitably designed and complied with to provide the firm with reasonable assurance of performing and reporting in conformity with applicable professional standards in all material respects. Firms can receive a rating of pass, pass with deficiency(ies) or fail. Brown Armstrong Accountancy Corporation has received a peer review rating of pass.

Weaver and Tidwell, L.L.P.

Dallas, Texas January 29, 2016

January 24, 2017 Agenda Item 7.2

TO: Board of Retirement

FROM: Tariq Ali, Chief Technology Officer

SUBJECT: Report on Implementation of Status of SamCERA's PASS

Discussion

The Project Manager for the PASS implementation Will Morrow will deliver an update on the Pension Administration Software System implementation project.

PASS Implementation

- Status
 - o Line of Business (LOB) launched December 29, 2016
 - Member Self-Service scheduled to launch February 6
 - Mobile application scheduled to launch late February
- Schedule
 - o Completed on schedule launched LOB in accordance with contract schedule
- Budget
 - Completed on budget no variance with approved budget
 - Vitech has invoiced \$6,258,108 (77%) of the \$8,097,560 project budget
 - Four contract amendments approved totaling \$644,688 (8.8% of original contract)
 - Amendment 5 in progress for various changes with a net increase of \$7,091
- Implementation Summary
 - External security vulnerability tests completed with three low priority vulnerabilities
 - All environments available and functioning as planned (including disaster recovery)
 - o 117 open issues (71 were open at go-live)
 - Service packs scheduled for January 13 and February 6
- Implementation Activities
 - Disaster recovery test late January
 - Security testing for Line of Business and mobile app
 - Mobile app testing
 - Workflow optimization
 - Requirements audit
 - Lessons learned
- Other
 - Vitech to provide system performance testing results
 - LRWL will begin phasing out consulting services in February



SamCERA PASS Project Update

January 24, 2017

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PASS Status Overview

- Ø Line of Business (LOB) launched December 29, 2017 as set forth in the contract
- Ø All environments available and functioning as expected (including disaster recovery)
- Ø Member Self-Service scheduled to launch February 6 (including 2016 1099s)
- Mobile application scheduled to launch late February

Implementation Milestones

- q Processing daily employee data updates from County Workday system
- q Processed two County and Courts biweekly payroll reports
- q Two lump sum (refund) payrolls processed
- q Monthly payroll processed as planned on January 18



Implementation Issues

- q No critical issues
- q Service Pack 1 implemented January 17
- q Service Pack 2 scheduled February 6
- q Service packs scheduled monthly
- q External vulnerability test identified three low priority issues with fixes in Service Pack 2



Budget Summary

77% of contract value has been invoiced



Remaining Activities

- Complete Implementation
 - January
 - Ø Security assessments for internal LOB and mobile app
 - Ø Mobile app tests
 - Ø Disaster recovery test
 - February
 - Ø Launch Member Self Service
 - Ø Launch Mobile App
 - Workflow optimization
- Closeout Project
 - Transition support from Vitech and LRWL project staff to Vitech support organization
 - Ø Six month warranty for all defects
 - Refine and finalize post implementation support processes
 - Audit and close implementation budget
 - Audit and close requirements
 - Develop lessons learned report



January 24, 2017

Agenda Item 7.3

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

2016-17 Board-Staff Retreat Topics

Staff Recommendation

Provide direction to staff regarding the topics and schedule for the April 25 and 26, 2017 Board-Staff Retreat.

Background

This item is to give trustees another opportunity to discuss retreat topics and the schedule. The annual Board retreat is scheduled for April 25 and 26, 2017. The Board assists with setting the topics to be addressed at the retreat and provides input regarding the proposed presenters. Following this meeting, staff will begin in earnest to schedule presenters.

Discussion

Attached is a list of the topics that staff recommends. Staff believes this is a well-balanced list of topics that fits in with the amount of time planned for the retreat. If you have additional topics to suggest, please mention them during this agenda item.

The 2017 SamCERA Board-Staff Retreat is scheduled along the same lines as the 2016 retreat:

Days:

Two consecutive days

Timing:

Leaves time in between speakers for discussion

Location:

Day 1: SamCERA Boardroom, Day 2: Offsite

Speakers:

Draw speakers from outside professionals as well as SamCERA's

consultants and staff

Regular Business: Conduct the Board's regular monthly business during the afternoon on

Tuesday of the retreat

Dates:

Tuesday, April 25 and Wednesday, April 26

Attachment

Draft 2017 Board-Staff Retreat Agenda

Agenda & Presenters

Board / Staff Retreat

April 25 & 26, 2017



San Mateo County Employees'
Retirement Association

BOARD / STAFF RETREAT AGENDA Day One—Tuesday, April 25, 2017

<u>Тіме</u>	TOPIC AND PRESENTER
8:30 a.m.	Coffee and Refreshments
9:00 a.m.	Welcome Presenter: Scott Hood, SamCERA Chief Executive Officer
9:15 a.m.	High level look at the Global Economy Presenter: Economist or Global Markets Expert
10:15 a.m.	Open Discussion
10:45 a.m.	Deep Dive Led by Mike Coultrip. Assess longer-term drivers of fund returns and risks. Investigate longer-term manager performance and other characteristics vs indexes and peer groups. Review Risk Dashboard. Presenters: Michael Coultrip, SamCERA Chief Investment Officer and Margaret Jadallah, Verus
11:45 a.m.	Lunch
12:45 p.m.	Actuarial Topic of Interest: Assumed rate of return, assumptions Presenter: Nick Collier, Milliman, Inc
1:45 p.m.	Open Discussion
2:15 p.m.	Break
2:30 p.m.	Beginning of Regular Board Meeting Agenda

BOARD / STAFF RETREAT AGENDA Day <u>Two</u>—Wednesday, April 26, 2017

<u>TIME</u>	TOPIC AND PRESENTER
8:30 a.m.	Coffee and Refreshments
9:00 a.m.	Risk Parity Discussion of the role of Risk Parity in a portfolio. Presenters: TBD
10:15 a.m.	Open Discussion
10:30 a.m.	Mandated Ethics Training Presenter: Brenda Carlson, SamCERA Chief Legal Counsel
11:30 a.m.	Lunch
12:45 p.m.	Trends of the Fund, Liabilities, Membership and Cash Flow Presenter: TBD
1:45 p.m.	Open Discussion
2:15 p.m.	Break
2:30 p.m.	Medical Education - Trends Presenter: Dr Brodkin
3:30 p.m.	Overview of V3 Member Self Service Presenter: TBD
4:00 p.m.	Open Discussion
4:30 p.m.	End of Retreat

January 24, 2017

Agenda Item 7.4

TO:

Board of Retirement

FROM:

Scott Hood, Chief Executive Officer

SUBJECT:

Report on Strategic Plan Implementation

Staff Recommendation

Provide input to staff regarding continued implementation of the two-year Strategic Plan for Fiscal Years 2016-17 and 2017-18.

Background

At its June 2016 Board meeting, the Board approved the two-year Strategic Plan shown at attachment "A." The heart of the plan is a matrix that provides more details about the potential actions, timing and status of each item. The Strategic Plan utilizes a numbering system by fiscal year, meaning the first two digits identify items that were initiated in the fiscal year that ends in the year of the digits. For example, item 14-3 was initiated in the fiscal year that ended on 6/30/14. The number "3" in this case is the sequence number.

Attachment "B" is the Strategic Plan Dashboard, which shows by quarter year, whether items have been completed and the anticipated completion period.

Discussion

Usually, SamCERA has a one-year strategic plan. Last year, however, the Board approved a two-year plan in recognition that the PASS program design and implementation would utilize most of staff's time. A longer time horizon for project completion was deemed more appropriate and more strategic.

In preparing the two-year plan, staff made reasonable estimates on when particular items could be accomplished; however, it underestimated the amount of time needed for the PASS project. While the PASS implementation has been on time and member services and other work load was kept current, only three non-PASS related Strategic Plan items have been accomplished in this fiscal year. Two of these items are investment related.

The following is a summary of the Strategic Plan items completed in the current fiscal year:

16-1 New Systems Training

Tariq Ali developed a systems matrix for staff identifying the system, system support personnel, and options available for staff for initial and subsequent training. This is for all SamCERA IT systems, including the PASS.

16-8 Domestic Equity Manager Structure

The Board approved a new public equity manager structure as part of the implementation of the asset liability study in December 2016.

17-6 Inflation Protection Pool

The Board approved the establishment of a dedicated inflation protection pool at the March 2016 meeting. Further, at the July 2016 meeting, the Board approved a new custom liquid real asset strategy as part of the inflation protection pool. Lastly, in December 2016, as part of the asset liability study, the Board approved changes to the asset allocation policy portfolio that included an optimized sub-allocation of the inflation pool.

As for staff's next steps, staff will revisit the current strategic plan and come up with an updated prioritized timeline to accomplish the listed items.

Attachments

- A. FY 2016-2018 Strategic Plan
- B. Strategic Plan "Dashboard"



San Mateo County Employees' Retirement Association

Strategic Plan

2016-17 UPDATE

Executive Summary

This is an update of SamCERA's Strategic Plan, which covers the fiscal year 2016-17.

Some projects identified in this plan will extend beyond that time period. The update includes this summary and the Action Plan Matrix, which lists and describes the projects staff will pursue during the year. All the steps in the Strategic Planning process leading up to the writing of the report were conducted as usual this year. All staff held a retreat in February 2016 and discussed the strengths, weaknesses, opportunities and threats facing SamCERA. The result of these discussions is the Action Plan Matrix below.

This year's Action Plan Matrix also includes an estimated completion timeframe for each action item as well as the two categories added in FY 15: (1)"Lead," which identifies the individual responsible for coordinating that particular action item, and (2) "End State," which describes the conditions which must be met before that action item can be considered "done."

Staff will provide periodic status updates to the plan during the year.

During the 2016-17 fiscal year SamCERA will continue to pursue its three major goals, all of which are derived from and consistent with SamCERA's mission statement.

SamCERA Mission

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

Asset Management Goal

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

New projects under this goal include performing a cost/benefit analysis to determine if SamCERA should add a risk system to the portfolio, developing an "inflation protection pool" asset class, working with IT to develop a streamlined tech solution to tracking investment manager reporting, developing a quarterly investment performance snapshot to provide employers and to determine whether standardized reporting can be implemented with our private equity managers.

Customer Services Goal

Provide caring, fair, accurate, timely and knowledgeable professional services and information to members and other stakeholders.

Over the coming year, meeting this goal will involve continuing to support the design, development and implementation of our Pension Administration Software System (PASS) during the final phase of the implementation project. Since this is our top priority no new projects were added to this specific goal.

Operations Goal

Constantly improve the effectiveness and efficiency of SamCERA's operations.

Operationally, SamCERA will continue to focus on the PASS implementation. Some related and supporting projects will also be undertaken. These include developing and executing a PASS communications plan to inform our stakeholders of the impending changes. Likewise, staff will undertake a transition of the retiree health accounting functions back to Human Resources and streamline a deduction method that will work with the new PASS system. Additionally, the IT and investment staff divisions will collaborate on finding a technological solution to track investment manager reporting.

Each goal has a number of specific projects designed to help achieve it. The projects incorporate ideas generated during all staff retreats beginning in 2005. The 2016-17 plan is SamCERA's eleventh under the Government Finance Officers' Association (GFOA) Strategic Planning approach. There are now 18 projects for the staff to initiate and/or complete during the 2016-17 fiscal year. There are two projects that will extend into the 2017-2018 fiscal year. As SamCERA staff improves upon the strategic planning processes more action items that are strategic in nature will appear on the list and those items will include items that are more tactical in nature. The net result will be that fewer items will appear in on the strategic plan. That said, the count of 20 tasks broadly understates the tasks ahead for the staff during the next few years as SamCERA continues with its **Technology Modernization Project** and specifically the Pension **Automation Software System** Implementation.

During the previous plan year, the staff completed 8 projects. Projects that were not completed but still relevant are continued on this current plan. In the previous 10 years, staff has completed a total of 210 projects, all over and above their regular duties.

2016-17 Action Plan Matrix

Ranking: A=Must be started and/or completed in FY. B=Should be completed in FY. C=Should be started in FY.

Kanking	: A=	ivius	be started and/or compi	eted in FY. B=Should be completed in FY.	C=Sno	ם סוג	e started in FY.	
ID#	GOAL	RANK	ТОРІС	PLANNED ACTIONS	DIVISIONS	LEAD	TIMING / STATUS	END STATE
14-3	Ops.	Α	SamCERA must be prepared to react to all types of emergencies that might affect the ability of the association to fulfill its responsibilities.	Staff will: Create a committee to meet every two months to review and recommend steps to improve safety and emergency preparedness. Annually review and update the Safety and Emergency Plans. Continue to hold table-top exercises at Staff Meetings. Document the technology emergency plan (for PensionGold, backups, etc.) Document the retiree payroll plan (PensionGold, moving funds, creating and sending files). Keep the emergency contacts information up to date. Committee to develop task list/milestones for coming year.	Admin./All Divisions	Tariq	3 rd Quarter	SamCERA is prepared to respond to emergencies.
14-14	Cust. Serv.	В	Member education is a key to successful retirement planning and the most effective use of SamCERA benefits. Many members are without financial management knowledge. We should provide different types of education to members.	Continue strengthening member education programs. Include: Regular attendance at training/meetings of payroll clerks, use of website and advices to notify members of new information, update of the Survivor Handbook, use of more focus groups for publications, web site, etc.	Ben./Comm.	Gladys	4 th Quarter	Develop Member Education Master Plan.

ID#	GOAL	RANK	ТОРІС	PLANNED ACTIONS	DIVISIONS	LEAD	TIMING / STATUS	END STATE
15-1	Ops.	А	No offsite disaster recovery location for critical technology.	Develop Plan.	П	Tariq	1 st Quarter	Thorough disaster recovery plan for critical infrastructure technology is operational at another site.
16-1	Ops	С	New Technology Systems integration and training.	Develop a systems matrix identifying the system, system support personnel, options for training.	П	Tariq	1 st Quarter	Systems training plan is developed.
16-2	Ops	А	Board Agenda Management.	Implement Board agenda management software.	Admin/IT	Tariq/Gladys	1 st Quarter	Agenda management software implemented.
16-3	Ops	В	Develop Resource Management Plan.	Coordinate and synchronize planning for staffing, space and budget. Discuss during staff retreat in January.	Fin/Admin	Gladys	3 rd Quarter	Resource Management plan implemented.
16-4	Ops	С	Enterprise wide records management.	Explore options to organize the various types of records maintained by SamCERA.	Admin/IT	Gladys	4 th Quarter	Develop approach to organize administrative records.
16-7	Cust Serv.	С	Maintain SamCERA's Culture.	Define SamCERA's culture. Identify ways to maintain the culture.	All	Elizabeth	4 th Quarter	Implement a program to maintain SamCERA's culture.
16-8	Asset Mgmt.	А	Review public equity manager structure.	Investigate options around modifying the public equity manager structure.	lnv.	Mike	1 st Quarter	The public equity manager structure is reviewed and recommended changes, if any, are implemented.

ID#	GOAL	RANK	ТОРІС	PLANNED ACTIONS	DIVISIONS	LEAD	TIMING / STATUS	END STATE
16-11	Asset Mgmt.	Α	Evaluate performance fee arrangement and the use of soft dollars.	Review current performance fee arrangements and the use of soft dollars and explore options available to improve the arrangement.	Inv.	Mike	1 st Quarter	Implement a process which considers fees and the use of soft dollars.
16-12	Ops	В	Our Internal Control procedures should be reviewed to insure they are appropriate for the changes in personnel and organizational structure.	Review internal control policies.	Fin	Tat-ling	3 rd Quarter	Internal control policies are reviewed and recommendations are implemented.
17-1	Ops	А	PASS Communications Plan.	Develop and execute SamCERA's member and employer communications plan regarding what to expect with the rollout of our new PASS system.	Admin/IT	Tariq	4 th Quarter	PASS Rollout with stakeholders informed.
17-2	Ops	В	Retiree Health Transition.	Develop and execute an implementation plan for the transition of retiree health accounting to the County and streamline county member deduction process. Coordinate with Human Resources staff and its retiree health vendor in regards to the accounting and deduction changes. Transition to be completed prior to the launch of the PASS system.	٦	Tariq	4 th Quarter	Effective transition of retiree health accounting and integration of a streamlined deduction process in V3.
17-3	Ops	С	Social Media Policy.	Develop a policy and procedure for SamCERA's use of social media.	Admin/Comm	Tariq	2 nd Quarter, FY 17-18	Effective social media policy implemented.

ID#	GOAL	RANK	ТОРІС	PLANNED ACTIONS	DIVISIONS	LEAD	TIMING / STATUS	END STATE
17-4	Asset Mgmt.	С	Tech Solution for Investments.	Develop a technology solution to assist investment staff in the receipt and tracking of investment manager reporting. Explore the use of Sharepoint as a repository and granting of access to investment managers to deposit reports on an ongoing basis.	IT/Inv.	Tariq/Mike	4 th Quarter, FY 17-18	Implement a program to track investment manager reporting.
17-5	Asset Mgmt.	В	Enhanced Risk Analysis.	Perform a cost/benefit analysis to determine if it makes sense to add a risk system in our investment strategy.	lnv.	Mike	4 th Quarter	Risk System options are studied and evaluated.
17-6	Asset Mgmt.	Α	Inflation Protection Pool.	Develop an "inflation protection pool" asset category to list all such assets for better tracking.	lnv.	Mike	3 rd Quarter	Inflation Protection Pool asset category is developed and Implemented.
17-7	Asset Mgmt.	В	Enhance Investments Onboarding/Staff Procedure Manuals.	Update and maintain investment staff procedure manuals.	lnv.	Mike	4 th Quarter	Proxy voting policy and procedures are reviewed and recommended changes, if any, are implemented.
17-8	Asset Mgmt.	А	Provide Employers More Frequent and High-Level Performance Updates.	Develop a quarterly one-page portfolio snapshot that can provide employers high-level performance data of SamCERA's investment portfolio.	Inv.	Mike	2 nd Quarter	Employers are provided a useful portfolio performance snapshot.
17-9	Asset Mgmt.	Α	Standardize Private Equity Reporting.	Determine if standardized private equity reporting can be required from our private equity investment managers.	Inv.	Mike	2 nd Quarter	Research is completed on whether private equity managers can be required to report in a standardized manner.

Strategic Plan Dashboard

Project	Project					TIM	ING			
Lead				FY 20	16-17	7	FY 2017-18			
-		ITEM	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TA	14-3	Responding to emergencies			X					
GS	14-14	Member education	X							
TA	15-1	Offsite disaster recovery	X							
TA	16-1	New systems training	X							
TA	16-2	Agenda management		X						
GS	16-3	Resource management plan			X					
TA	16-4	Records management				X				
SH	16-7	Maintain SamCERA's culture				X				
MC	16-8	Public equity manager structure		X						
MC	16-11	Fees and soft dollar use			X					
TC	16-12	Internal Controls			X					

14-series were developed for FY 2013-14. 15-series were developed for FY 2014-15. 16-series were developed for FY 2015-16.

as of 1/24/2017



X = completion date

Strategic Plan Dashboard

Project	Project		TIMING										
Lead	•			FY 20	16-17	7	FY 2017-18						
-		ITEM	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
СВ	17-1	PASS communications plan				X							
СВ	17-2	Retiree health transition				X							
СВ	17-3	Social media policy						x					
TA	17-4	Tech solution for investment info								X			
MC	17-5	Enhanced risk analysis				X							
MC	17-6	Inflation protection pool		X									
MC	17-7	Update manuals for investments				X							
MC	17-8	Quarterly investments snapshots		X									
MC	17-9	Standardize private eq. reporting		X									



17-series projects were developed for FY 2016-17.

as of 1/24/2017



X = completion date