



Notice of Public Meeting

The Board of Retirement of the San Mateo County Employees' Retirement Association will meet on **Tuesday, March 24, 2015, 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 February 24, 2015
- 4. Approval of the Consent Agenda***
 - 4.1 Disability Retirements
 - Cecilia Alvarez
 - Martha Gomez
 - Elsie Iniquez
 - Teresa Magana
 - 4.2 Service Retirements
 - 4.3 Continuances
 - 4.4 Deferred Retirements
 - 4.5 Member Account Refunds
 - 4.6 Member Account Rollovers
 - 4.7 Approval of 2014 Actuarial Valuation Addendum and Resolution Accepting Contribution Rates to Recommend to the Board of Supervisors for the 2015-2016 Fiscal Year
- 5. Benefit & Actuarial Services**
 - 5.1 Consideration of Agenda Items, if any, removed from the Consent Agenda
- 6. Investment Services**
 - 6.1 Preliminary Monthly Portfolio Performance Report for the Period Ending February 28, 2015
 - 6.2 Report on the Northern Trust Custodial Annual Review
 - 6.3 Report on the Parametric / Clifton Group Overlay Annual Review
 - 6.4 Educational Presentation on the Current Energy Market and Potential Investment Opportunities
- 7. Board & Management Support**
 - 7.1 Status Report on the Update to the Payment Corrections Policy
 - 7.2 Approval of Travel Policy Amendment and Resolution
 - 7.3 Report on the Status of Annual Board-Staff Retreat
 - 7.4 Update on Progress of SamCERA's Information Technology Projects
- 8. Management Reports**
 - 8.1 Chief Executive Officer's Report
 - 8.2 Assistant Executive Officer's Report

Notice of Public Meeting

Page 2 of 2

- 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

9. Report on Actions Taken in Closed Session

10. Adjournment in Memory of the Following Deceased Members:

Ferguson, Ellis	January 29, 2015	Medical Center
Ottman, Marjorie	February 1, 2015	Aging and Adult Services
McQueen, Michael	February 3, 2015	Probation
Dunlap, Kenneth	February 6, 2015	Sheriff
Fowlkes, Doris	February 6, 2015	Superior Courts
Dungan, Louise	February 7, 2015	Chope Hospital
Langenwalter, Evelyn	February 8, 2015	Chope Hospital
Manders, Jan	February 13, 2015	Aging and Adult Services
Eakin, Helen	February 15, 2015	Health Services
Oakes, John	February 18, 2015	District Attorney
Ritts, Raymond	March 5, 2015	Mosquito



Scott Hood, Chief Executive Officer

Posted: March 18, 2015

(* 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.

February 24, 2015 – Board Agenda

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 January 27, 2015
- 4. Approval of the Consent Agenda***

<ol style="list-style-type: none"> 4.1 Disability Retirements <ul style="list-style-type: none"> • Robert Bates • Jocelyn Declaro • Lydia Guzman • Dennis Mayer 4.2 Service Retirements 4.3 Continuances 4.4 Deferred Retirements 	<ol style="list-style-type: none"> 4.5 Member Account Refunds 4.6 Member Account Rollovers 4.7 Acceptance of Semi-Annual Compliance Certification Statements for Period Ending December 31, 2014 4.8 Annual Review of SamCERA’s Mission and Goals Statements 4.9 Approval of Trustee Education Request
--	---
- 5. Benefit & Actuarial Services**
 - 5.1 Consideration of Agenda Items, if any, removed from the Consent Agenda
- 6. Investment Services**
 - 6.1 Preliminary Monthly Portfolio Performance Report for the Period Ending January 31, 2015
 - 6.2 Quarterly Investment Performance Report for the Period Ending December 31, 2014
 - 6.3 Presentation on Unconstrained Bond Investing
 - 6.4 Discussion and Approval of Hedge Fund Search Process
 - 6.5 Annual Review of Investment Consultant, Strategic Investment Solutions
 - 6.6 Approval and Report on Two Alternative Investments *(to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.2, see item C2)*
- 7. Board & Management Support**
 - 7.1 Preliminary Quarterly Financial Report for Period Ending December 31, 2014
 - 7.2 Approval of Resolution Authorizing Submission of Tax Determination Letter Application
 - 7.3 Approval of Travel Policy Amendment
 - 7.4 Presentation of Process to Manage SamCERA Staffing
 - 7.5 Approval to Establish a Second Assistant Executive Officer Position
- 8. Management Reports**
 - 8.1 Chief Executive Officer's Report
 - 8.2 Assistant Executive Officer’s Report
 - 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 and Report of Proposed Alternative Investment *(Confidential Under Gov. Code §54956.81 and §6254.2 – see also item 6.6)*

9. Report on Actions Taken in Closed Session

10. Adjournment in Memory of the Following Deceased Members:

Wilkinson, Phyllis	December 27, 2014	Medical Center
Thompson, Beth	January 6, 2015	Social Service
Glennon, Richard	January 12, 2015	Sheriff
Mullins, Marguerite	January 13, 2015	Medical Center
Faltz, Charles	January 19, 2015	Mental Health
Ludlow, Robert	January 20, 2015	Probation
Illa-Riley, Judy	January 22, 2015	Environmental Health
Smith, Wayne	January 25, 2015	Library

FEBRUARY 24, 2015 – REGULAR BOARD MEETING MINUTES

1501.1 **Call to Order, Roll Call and Miscellaneous Business**

Call to Order: Ms. Lauryn Agnew, Chair, called the Regular Meeting of the Board of Retirement to order at 10:00 a.m.

Roll Call:

Present: Lauryn Agnew, Sandie Arnott, Albert David, Paul Hackleman, Natalie Kwan Lloyd (arrived at 12 noon), Michal Settles, David Spinello and Eric Tashman.

Excused: Ben Bowler

Alternates present: Christopher Miller (arrived at 10:50 a.m.), Alma Salas

Staff: Scott Hood, David Bailey, Michael Coultrip, Gladys Smith, Brenda Carlson, Mabel Wong, Lilibeth Dames, Elizabeth LeNguyen, Barbara Edwards, and Kristina Perez.

Consultants: Patrick Thomas and Jonathan Brody (SIS)

- 1502.2.1 **Oral Communications From the Board:** Mr. David and Ms. Settles reported on their attendance at CALAPRS Advanced Principles of Pension Management for Trustees, held at UCLA on January 28 – 30, 2015.
- 1502.2.2 **Oral Communications From the Public:** Elizabeth Kimmel, a County employee, introduced herself and let the Board know she would be attending the Board of Retirement meetings as an employee representative of SEIU.
- 1502.3.1 **Approval of Regular Board Meeting Minutes January 27, 2015:** Ms. Agnew asked if there were any changes to the Regular Board minutes, and there were none.
Action: Mr. David moved to approve the minutes of the Regular Meeting from January 27, 2015, and the motion was seconded by Ms. Arnott. The motion carried with a vote of 6-0-1, with trustees Agnew, Arnott, David, Hackleman, Settles, and Spinello all in favor; none opposed. Mr. Tashman abstained.
- 1502.4.0 **Approval of the Consent Agenda:** Ms. Agnew asked if there were any items to be removed from the Consent Agenda, and consideration of the disability retirement applications of Robert Bates and Dennis Mayer were removed, and consideration of Lydia Guzman’s application was continued.
Action: Mr. Tashman moved to approve the remaining items on the Consent Agenda, and the motion was seconded by Mr. Spinello. The motion carried with a vote of 7-0, with trustees Agnew, Arnott, David, Hackleman, Settles, Spinello and Tashman, all in favor; none opposed.
- 1502.4.1 **Disability Retirements:**
The Board found that Jocelyn Declaro is (1) permanently incapacitated for the performance of her usual and customary duties as a Licensed Vocational Nurse, (2) found that her disability was a 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.
- 1501.4.2 **Service Retirements:**
The Board ratified the actions as listed below for the following members regarding service retirements:

Member Name	Effective Retirement Date	Department
Allhiser, Mary	December 13, 2014	District Attorney
Amital, Chuck	January 1, 2015	Courts
Bulaong, Josefino	December 13, 2014	Public Works
Cava, Elsa	December 19, 2014	Medical Center

Chou, Mei	January 1, 2015	Deferred from Medical Center
Condon, Thomas	December 12, 2014	Sheriff's
Douglass, Phillip	January 1, 2015	Medical Center
Kurtz, Richard	January 1, 2015	Public Works
Mah, Amy	December 6, 2014	Human Services Agency
Osawa, Steven	January 1, 2015	Deferred from Superior Court
Prochnow, Mark	January 1, 2015	Aging & Adult Services
Ruiz, Martha	December 6, 2014	Housing
Siu Young, Andre	December 31, 2014	Information Services
Titus, Amy	December 22, 2014	Deferred from Library
Torres, Joseph	December 3, 2014	Child Support Services
Valencia, Silvia	December 22, 2014	Deferred Children & Family Svcs

1502.4.3 **Continuances:**

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

Survivor's Name	Beneficiary of
Morelli, Michael	Amberg, Barbara
Thomas, John	Thomas, Lois
Gray, Bettie Jo	Gray, Forrest

1502.4.4 **Deferred Retirements:**

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

Member Name	Retirement Plan Type
Acton, Dean	Vested, G3
Clausen Keith A.	Vested, G4
Hardisty, Kathleen O.	Vested, G4
Henry, Sharon S.	Vested, G4 - Reciprocity
Horrisberger, Jay R.	Vested, G4 - Reciprocity
Okada, L P.	Vested G4 - Reciprocity
Ouzounian, Annie E.	Vested, G4
Sarmiento, Anna M.	Vested, G4

1502.4.5 **Member Account Refunds:**

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

Member Name	Retirement Plan Type
Brown, Andrew	G7, Non-vested
Cornell, Marilyn	G7, Non-vested
Floyd, Sandra	Plan 3, G4, Vested
Krist, Kerri	G4, Non-vested
Scopesi, Dina (FBO: Diane Tommey)	G2, Plan 3, Vested
Scopesi, Dina (FBO: Gino Scopesi)	G2, Plan 3, Vested

1502.4.6 **Member Account Rollovers:**

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

Member Name	Retirement Plan Type
Luna-Franco, Ana	G7, Non-vested

1502.4.7 **Acceptance of Semi-Annual Compliance Certification Statements for Period Ending December 31, 2014:** The Board reviewed and accepted the semi-annual Compliance Certification Statements from SamCERA's non-alternative investment managers, as of December 31, 2014.

1502.4.8 **Annual Review of SamCERA's Mission and Goals Statements:** The Board reviewed and reaffirmed SamCERA's current Mission and Goals statement.

1502.4.9 **Approval of Trustee Education Request:** The Board approved Trustee Lauryn Agnew's attendance at SOCAP15.

1502.5.1 **Consideration of Agenda Items, if any, Removed From the Consent Agenda:** The Board adjourned into closed session at 10:05 a.m. to consider the disability retirement application of Robert Bates. The meeting reconvened in open session at 10:25 a.m. and Ms. Carlson reported the action on this matter as follows:
Action: Mr. Hackleman made a motion to accept the findings and recommendation of the Hearing Officer, John Simonson, which found that Robert Bates is permanently incapacitated for the performance of his usual and customary duties as a Deputy Sheriff, and that his disability is not a result of an injury arising out of and in the course of his employment; and to deny his application for a service-connected disability retirement. The motion was seconded by Ms. Settles and carried with a vote of 7-0, with trustees Agnew, Arnott, David, Hackleman, Settles, Spinello and Tashman, all in favor; none opposed.

The Board then considered the matter of the disability application of Dennis Mayer in open session. Attorney Ellen Mendelson appeared on behalf of the applicant Dennis Mayer and County Counsel Jan Ellard appeared on behalf of the Fund. Ms. Mendelson and Ms. Ellard both addressed the Board and answered questions from Board members.

Action: Ms. Settles moved to accept the findings and recommendation of the Hearing Officer, John Schupe, which found that Dennis Mayer is permanently incapacitated for the performance of his usual and customary duties as a Deputy Sheriff, and that his disability is not a result of an injury arising out of and in the course of his employment; to deny his application for a service-connected disability retirement and to grant him a non-service-connected disability retirement. The motion was seconded by Ms. Arnott and carried with a vote of 6-1, with trustees Agnew, Arnott, David, Hackleman, Settles, and Tashman, all in favor; trustee Spinello opposed.

Ms. Agnew adjourned the meeting for a break at 10:50 a.m., reconvening at 11:00 a.m. Mr. Miller arrived at this time and took a seat at the dais, acting as the alternate for Ms. Kwan Lloyd.

1502.6.1 **Preliminary Monthly Performance Report for the Period Ending January 31, 2015:** Mr. Coultrip discussed the preliminary monthly performance report with the Board. He reported that SamCERA's net preliminary return for January 2015 was +0.02%, while the preliminary trailing twelve month return was +7.9% net. This item was informational only and no action was taken.

1502.6.2 **Quarterly Investment Performance Report for the Period Ending December 31, 2014:** Mr. Coultrip introduced the Quarterly Investment Performance Report. Mr. Thomas and Mr. Brody went over the quarterly report, page by page, reviewing managers' performances and discussing details of the report with the Board. The net 4th quarter total return for the SamCERA portfolio was +1.6%. This item was informational only and no action was taken.

The meeting was adjourned for a break at 11:55 a.m., reconvening at 12:05 p.m. Ms. Kwan Lloyd joined the meeting at 12 noon, and took her seat with the Board. Mr. Miller stepped down upon her arrival.

1502.6.3 **Presentation on Unconstrained Bond Investing:** Mark Lindbloom, Portfolio Manager, and Veronica Amici, Head of Public/Multi-Employer Relationships at Western Asset Management, presented an introduction to unconstrained fixed income investing and provided a summary to the Board of Western's approach to these types of investments. This item was informational only and no action was taken.

The meeting was adjourned for a short break at 12:50 p.m. and reconvened at 12:55 p.m. Discussion about unconstrained bond investing continued between the Board and staff.

Mr. David was excused from the meeting at 1:00 p.m. and Mr. Miller sat with the Board as Mr. David's alternate for the remainder of the meeting.

The Board then adjourned into closed session to discuss Item 6.6.

1502.6.6 **Approval and Report on Two Alternative Investments (to be heard in Closed Session, Confidential Under Gov. Code §54956.81 and §6254.2, see item C2):**

Upon reconvening from the closed session, Ms. Carlson reported the following action taken by the Board in closed session:

Action: Ms. Settles made a motion to approve a commitment of \$10 million in the Everstream Solar Infrastructure I to fulfill SamCERA's second Real Asset investment. The motion was seconded by Ms. Kwan Lloyd and carried with a vote of 6-1-1, with trustees Agnew, Hackleman, Kwan Lloyd, Miller (for David), Settles, and Spinello all in favor; with trustee Arnott opposed and trustee Tashman abstaining.

Ms. Carlson also reported the Board accepted staff's report on the \$15 million commitment in JLL Partners Fund VII as authorized by the CEO pursuant to Resolution 12-13-04. (No board action was required.)

At this time the SamCERA staff joined the meeting to pay tribute to retiring CEO, David Bailey. Chair Lauryn Agnew, Trustees Settles, Tashman and Arnott, CEO Scott Hood, and Consultant Patrick Thomas all gave remarks and thanked Mr. Bailey for his dedicated service to SamCERA. The meeting was adjourned for a refreshment break at 2:55 p.m.

Mr. Hackleman, Ms. Kwan Lloyd and Mr. Tashman were excused for the remainder of the meeting. Ms. Salas took a seat with the Board as the alternate for Mr. Hackleman. The meeting was reconvened at 3:05 p.m.

- 1502.6.4 **Discussion and Approval of Hedge Fund Search Process:** Mr. Coultrip discussed the proposed process for finding a complement to the AQR Delta strategy within the Hedge Fund category. It is a similar process to that which was undertaken for the recently completed Opportunistic Credit search. **Action:** Ms. Salas moved to approve the process outlined and authorized staff to perform due diligence in order to bring a recommendation to the Board. The motion was seconded by Mr. Spinello and carried by vote of 6-0, with trustees Agnew, Arnott, Miller (for David), Salas (for Hackleman), Settles and Spinello all in favor; none opposed.
- 1502.6.5 **Annual Review of Investment Consultant, Strategic Investment Solutions:** Mr. Coultrip reviewed the results and feedback from the performance review survey that was sent to staff and trustees regarding the consultant services provided by SIS. Ten trustees and four staff members had completed the survey, which found increased positive ratings for SIS above last year's results. This item was for discussion only and no action was taken.
- 1502.7.1 **Preliminary Quarterly Financial Report for Period Ending December 31, 2014:** Ms. Wong directed Board members to the revised report included in the "Day of Meeting" folder, reflecting changes made to the report after the packet was mailed. She reported SamCERA's net position restricted for pension as of December 31, 2014, totaled \$3,281,749,592; representing a decrease of approximately \$3.8 million, attributed to the market depreciation of assets during the quarter. Ms. Wong noted that the reconciliation of asset accounts from State Street to Northern Trust is still in process. This item was informational only and no action was taken.
- 1502.7.2 **Approval of Resolution Authorizing Submission of Tax Determination Letter Application:** Mr. Hood presented the staff report, explaining that in order to maintain SamCERA's tax qualified status, SamCERA's plan documents and its operation must be consistent with the requirements of Internal Revenue Code (IRC). SamCERA submitted the necessary documents in 2011, and received a favorable tax determination letter from the IRS in 2014. Changes in the IRS "cycles" shifted certain deadlines, and SamCERA needs to submit again in 2015; a new tax determination submittal has been prepared by Ms. Carlson. **Action:** Mr. Miller moved to approve a resolution authorizing the Chief Executive Officer to execute and submit to the Internal Revenue Service (IRS) SamCERA's application for a tax determination letter and any other related documents along with the \$2,500 filing fee. The motion was seconded by Ms. Salas and carried by vote of 6-0, with trustees Agnew, Arnott, Miller (for David), Salas (for Hackleman), Settles and Spinello all in favor; none opposed.
- 1502.7.3 **Approval of Travel Policy Amendment:** Mr. Hood introduced proposed changes to the Board's Travel policy clarifying the reimbursement of Trustee meeting expenses, including mileage reimbursements and stipends for certain meetings. **Action:** Mr. Spinello moved to approve a resolution amending the Board's Policy for Reimbursement of Travel and Other Official Expenses for Trustees and Staff to set forth the reimbursement of expenses for Trustees' attendance at meetings of the Board and Board Committees, effective January 1, 2015. The motion was seconded by Mr. Miller and carried by vote of 6-0, with trustees Agnew, Arnott, Miller (for David), Salas (for Hackleman), Settles and Spinello all in favor; none opposed.
- 1502.7.4 **Presentation of Process to Manage SamCERA Staffing:** Mr. Hood reviewed a proposed process to actively plan for SamCERA's future staffing needs and discussed the purpose with the Board. This item was informational only and no action was taken.

- 1502.7.5 **Approval to Establish a Second Assistant Executive Officer Position:** Mr. Hood presented a proposal to create a second Assistant Executive Officer (AEO) position in order to allow a division of responsibilities within the organization and to have a higher and deeper level of expertise in specific disciplines. The new AEO position would be primarily overseeing fiscal and IT operations.
Action: Ms. Arnott moved to authorize staff to work with the County Human Resources Department to establish and fill one additional AEO position at SamCERA. The motion was seconded by Ms. Salas and carried by vote of 6-0, with trustees Agnew, Arnott, Miller (for David), Salas (for Hackleman), Settles and Spinello all in favor; none opposed.
- 1502.8.1 **Chief Executive Officer's Report:** Mr. Hood went over the "Day of Meeting" folder contents with the Board, which included the monthly calendar, SACRS nominating information, and the draft agenda for the Board retreat in April. He also reminded Trustees about upcoming conferences.
- 1502.8.2 **Assistant Executive Officer's Report:** Ms. Smith announced a new member guide regarding disabilities was produced by staff, and samples were given to the Board members. She reported information regarding the Trustee election on June 8, and pointed out the elections timeline included in the "Day of Meeting" folder.
- 1502.8.3 **Chief Investment Officer's Report:** Mr. Coultrip stated the private equity opportunity with Emergence Capital Partners IV, LP that was approved for \$10 million last month via the authority given to the CEO in Resolution 12-13-04, was actually funded for \$8 million as the fund was oversubscribed. He reported that the Investment Analyst position recruitment was progressing and that second interviews were happening in the coming few weeks.
- 1502.8.4 **Chief Legal Counsel's Report:** Ms. Carlson thanked Mr. Spinello for his suggestion to show specific retirement scenarios in the member publications and those scenarios are included in the latest disability guide.

Mr. Bailey updated the Board on the search for agenda management software, saying that RFP responses were received and the selection process is continuing.

- 1502.10 **Adjournment:** Ms. Agnew adjourned the meeting at 4:01 p.m. in memory of the following deceased members:

Wilkinson, Phyllis	December 27, 2014	Medical Center
Thompson, Beth	January 6, 2015	Social Service
Glennon, Richard	January 12, 2015	Sheriff
Mullins, Marguerite	January 13, 2015	Medical Center
Faltz, Charles	January 19, 2015	Mental Health
Ludlow, Robert	January 20, 2015	Probation
Illa-Riley, Judy	January 22, 2015	Environmental Health
Smith, Wayne	January 25, 2015	Library

Scott Hood
 Chief Executive Officer

Kristina Perez
 Retirement Executive Secretary

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Items 4.1- 4.6

To: Board of Retirement

From: Gladys Smith, Retirement Benefits Manager



Subject: Approval of Consent Agenda Items 4.1 – 4.6

4.1 Disability Retirements

- a) The Board find that Cecilia Alvarez is (1) permanently incapacitated for the performance of her usual and customary duties as a Custodian, (2) find that her disability was a 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.
- b) The Board find that Martha Gomez is (1) permanently incapacitated for the performance of her usual and customary duties as a Management Analyst III, (2) find that her disability was a result of an injury arising out of and in the course of her employment, and (3) grant her application for a service-connected disability retirement.
- c) The Board find that Elsie Iniguez is (1) permanently incapacitated for the performance of her usual and customary duties as a Benefits Analyst II, (2) find that her disability was not a result of an injury arising out of and in the course of her employment, (3) deny her application for a service-connected disability retirement, and (4) grant her a non-service-connected disability retirement.
- d) The Board find that Teresa Magana is (1) not permanently incapacitated for the performance of her usual and customary duties as a Medical Assistant II, and (2) deny her application for a service-connected disability retirement.

4.2 Service Retirements

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

Member Name	Effective Retirement Date	Department
Adler, Robert	January 6, 2015	Controllers Office
Barrett, Donna	January 31, 2015	Medical Center
Burns, Mary	January 18, 2015	Sheriff's
Cleary, Francis	January 4, 2015	Probation
Fischer, Robert	January 17, 2015	Deferred from Sheriff's
Foy, Catherine	January 31, 2015	Probation

Guzman, Lydia	January 3, 2015	Family Health
Hofmann, Mary	January 3, 2015	Sheriff's
Lilles, Renato	January 31, 2015	Tax Collector
Livengood, Robert	January 25, 2015	Sheriff's
Lopez-Ocegueda, Irma	January 12, 2015	Superior Court
Pacheco, Alan	January 31, 2015	Public Works
Roberts, Jon	January 15, 2015	Sheriff's
Schulz, Elizabeth	January 17, 2015	Public Health
Vargas, Rene	January 31, 2015	Behavioral Health & Recovery Svcs
Yee, Warren	January 30, 2015	Sheriff's
Yoch, Maria	February 1, 2015	Deferred from Medical Center

4.3 Continuances

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

Survivor's Name	Beneficiary of:
Dempsey, Anne	Wiese, Annabelle
Faltz, Judy	Faltz, Charles
Finn, Patricia	Glennon, Richard
Hayselden, Louis	Hayselden, Diane
Riley, George	Illa-Riley, Judy
Thompson, Donald	Thompson, Beth

4.4 Deferred Retirements

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

Member Name	Retirement Plan Type
Cordeiro Muniz, Lisa M.	Vested, G4
Jensen, Tina H.	Vested, G4
Lechuga, Aaron R.	Vested, G4
Xu, Dan	Non-Vested G4 - Reciprocity
Williams, Nihcole C.	Vested, G4

4.5 Member Account Refunds

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

Member Name	Retirement Plan Type
Ealy, William	G4, Non-vested
Ferguson, Ellis (FBO: Timothy Ferguson)	G4, Vested
Ismael, George	P4 & S4, Vested
Jones, Danielle	G7, Non-vested
Madjd-Sadjadi, Nashmeel	G4, Non-vested
Sharpe, Maybelline	G4, Vested
Smith, Alexandra	G7, Non-vested
Valera, Francisco	G4, Non-vested

4.6 Member Account Rollovers

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

Member Name	Retirement Plan Type
Hoch, Marcus	G5, Non-vested
Soller, Marie	G4, Non-vested

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 4.7

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Approval of 2014 Actuarial Valuation Addendum and Resolution accepting contribution rates to recommend to the Board of Supervisors for the 2015-2016 fiscal year.

Recommendation

Approve the June 30, 2014 Actuarial Valuation Addendum dated March 13, 2015, and Resolution accepting contribution rates to recommend to the Board of Supervisors for the 2015-2016 fiscal year.

Summary

At the September meeting the Board accepted the 2014 Actuarial Valuation and approved the 2015-2016 employer and employee contribution rates. Subsequent to the Valuation the County and some bargaining units agreed to share some of the Cost of Living Adjustment (COLA) cost. The result was that General employees under plans 1, 2 and 4 with retirement benefits negotiated under AFSCME, Building & Trades, California Nurses Association (CNA), Attorneys, Management, and LEU (non-Safety) contracts will pay 50% of the retirement COLA cost.

Discussion

The shifting of some of the COLA cost will not change the total amount of contributions expected to be paid to SamCERA for the 2015-16 fiscal year. It only changes the distribution between the County and some members, as negotiated. The agreed changes will lower the required Statutory Contribution Rate (SCR) for the County because a greater portion of the costs will be paid by the groups mentioned above. On an aggregate basis, the County's SCR will decrease by .86% to 37.14% of payroll. The County wants to continue to make additional contributions to the County Supplementary Contribution Account (CSCA) but wants to retain the cost savings generated from the COLA sharing agreement. Milliman created the attached addendum to the valuation to reflect the adjusted employer rates for the groups described above.

Attachment

Milliman June 30, 2014 Actuarial Valuation Addendum – Revised Employer Contribution Rates

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

RESOLUTION 15-16-___

**RESOLUTION ACCEPTING CONTRIBUTION RATES TO RECOMMEND
TO THE BOARD OF SUPERVISORS FOR THE 2015-2016 FISCAL YEAR.**

WHEREAS, Government Code §31453 mandates the periodic actuarial valuation of the Retirement Fund and requires that the Board...*"shall, at least 45 days prior to the beginning of the succeeding fiscal year, recommend to the Board of Supervisors such changes in the rates of interest, in the rates of contributions of members, and in the county and district appropriations as are necessary...;"* and

WHEREAS, the Board has received and accepted the June 30, 2014, valuation report from its actuarial firm, Milliman, Inc., and

WHEREAS, the Board has received and accepted the March 13, 2015 Actuarial Valuation Addendum from its actuarial firm, Milliman, Inc., and

WHEREAS, the Chief Executive Officer has recommended, in agreement with Milliman, Inc., the contribution rates necessary to assure the actuarial soundness of the Retirement Fund,
Therefore, be it

RESOLVED that the Board hereby accepts the employer and member contribution rates as recommended by Milliman, Inc. in its June 30, 2014, Actuarial Valuation of the San Mateo County Employees' Retirement Association and its March 13, 2015 Actuarial Valuation Addendum effective for the fiscal year 2015-2016.

Be it further

RESOLVED that the Board recommends that the Board of Supervisors adopt the recommended **employer contribution rates** for the County of San Mateo, the San Mateo Superior Court and the San Mateo County Mosquito & Vector Control District in accordance with the schedules provided by Milliman, Inc. in its June 30, 2014, Actuarial Valuation and its March 13, 2015 Actuarial Valuation Addendum, effective July 5, 2015.

Be it further

RESOLVED that the Board of Retirement hereby recommends that the Board of Supervisors adopt the recommended **member contribution rates** for SamCERA active members of the County of San Mateo, the San Mateo County Superior Court and the San Mateo County Mosquito & Vector Control District in accordance with the schedules provided by Milliman, Inc. in its June 30, 2014, Actuarial Valuation, and its March 13, 2015 Actuarial Valuation Addendum, effective July 5, 2015.

Be it further

RESOLVED that the Chief Executive Officer is hereby authorized to transmit these rates and recommendations to the Board of Supervisors and to take all actions necessary to provide for their implementation effective July 5, 2015.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

PASSED AND ADOPTED by the Board of Retirement on March 24, 2015.

Lauryn Agnew, Chair, Board of Retirement

I, Michal Settles, Secretary of the Board of Retirement, of the San Mateo County Employees' Retirement Association, DO HEREBY CERTIFY that the foregoing resolution was duly introduced, approved and adopted by the Board of Retirement at a regular meeting of the Board of Retirement held on the March 24, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ATTEST: _____

Michal Settles
Secretary, Board of Retirement



1301 Fifth Avenue
Suite 3800
Seattle, WA 98101-2605
USA

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

milliman.com

VIA EMAIL ONLY

March 13, 2015

Board of Retirement
San Mateo County Employees' Retirement Association
100 Marine Parkway, Suite 125
Redwood Shores, CA 94065-5208

Re: June 30, 2014 Actuarial Valuation Addendum – Revised Employer Contribution Rates

Dear Members of the Board:

We have previously provided you an actuarial valuation report as of June 30, 2014 (dated September 24, 2014) for the San Mateo County Employees' Retirement Association (SamCERA). The contribution rates shown in Exhibits 10 and 11 of that report are scheduled to be effective for the fiscal year beginning July 1, 2015. It is our understanding that since that report was prepared the County has negotiated with various bargaining units for General members to pay for 50% of the cost of COLA benefits. The purpose of this addendum to the valuation is to provide revised employer contribution rates for the fiscal year beginning July 1, 2015 that reflect the change.

Change reflected in the Addendum

Effective July 1, 2015 all current General employees under plans 1, 2 and 4 with retirement benefits negotiated under AFSCME, Building & Trades, California Nurses Association (CNA), Attorneys, Management, and LEU (non-Safety) contracts will pay 50% of the retirement COLA cost. In our valuation report, we assumed these members made no contributions toward the COLA cost, except for employees most recently hired on or after August 7, 2011 (who currently pay 50% of COLA costs) or members of the CNA bargaining unit regardless of hire date (who currently pay 25% of COLA costs).

Impact on employer contribution rates

The aggregate impact of this change on employer statutory contribution rates is shown in the following table.

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.



Class	Employer Statutory Contribution Rate (June 30, 2014 valuation)	Employer Statutory Contribution Rate (with revised COLA share)	Difference
General (County) members	30.25%	29.18%	(1.07)%
General (Court) members	30.73%	30.73%	0.00%
SMCM&VCD members	32.88%	32.88%	0.00%
Safety members	65.47%	65.47%	0.00%
Probation members	46.99%	46.99%	0.00%
All County members	35.78%	34.92%	(0.86)%

The attached Exhibit 10b provides employer statutory contribution rates for all General members. Only rates for plans 1, 2, and 4 have changed. CNA rates now reflect a 50% COLA share, compared to 25% COLA share previously. County rates apply for all County employees except CNA and UAPD employees. County employer rates are shown with 0% COLA share and 50% COLA share. The applicable rate may be applied based upon bargaining unit.

Exhibit 11b provides employer adjusted contribution rates for General members. These rates are the same as shown in exhibit 10b except they include an adjusted UAAL employer rate calculated so that the total County rate is equal to 37.14% of payroll. (Note that 37.14% reflects the County's intent to contribute 38% of payroll, as specified in the MOU, adjusted to reflect the reduction of 0.86% in the statutory contribution rate as a result of the change in member COLA share.)

The aggregate impact of this change on employer adjusted contribution rates is shown in the following table.

Class	Employer Adjusted Contribution Rate (June 30, 2014 valuation)	Employer Adjusted Contribution Rate (with revised COLA share)	Difference
General (County) members	32.11%	31.04%	(1.07)%
General (Court) members	30.73%	30.73%	0.00%
SMCM&VCD members	32.88%	32.88%	0.00%
Safety members	69.75%	69.75%	0.00%
Probation members	49.58%	49.58%	0.00%
All County members	38.00%	37.14%	(0.86)%



County adjusted payroll contribution

As discussed above, the employer adjusted contribution rates shown are the contribution rates that reflect a 37.14% of payroll aggregate County contribution. The statutory contribution rates (with revised COLA share) shown are equivalent to an aggregate County contribution of 34.92% of payroll. The estimated contribution in addition to the statutory contribution rates that result in an employer adjusted contribution rate of 37.14% is \$9,538,000.

Member contribution rates

The member contribution rates provided in the June 30, 2014 actuarial valuation Appendix D can be used to calculate the necessary member rates under these COLA share revisions.

Certification

This addendum is based on our valuation report dated September 24, 2014, and all caveats disclosed in that valuation continue to apply. All plan provisions, assumptions and methods are the same as that valuation, except for the changes due to addition of the 50% COLA sharing for certain General members (irrespective of hire date) as specified in this letter.

Milliman's work is prepared solely for the internal business use of SamCERA. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release.

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

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

Nick Collier, ASA, EA, MAAA
Consulting Actuary

NJC/CJG/fyb

Enclosures

Craig Glyde, ASA, EA, MAAA
Consulting Actuary

San Mateo County Employees' Retirement Association

Exhibit 10b: Employer Statutory Contribution Rates – General

General Members								
Employer Rates								
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate ¹	Total Contribution Rate	Prior Year Total Contribution Rate
<u>Plan 1</u>								
County (0%)	21.53%	(9.80)%	5.88%	5.85%	11.73%	20.21%	31.94%	33.60%
County (50%)	21.53%	(12.72)%	5.88%	2.93%	8.81%	20.21%	29.02%	33.60%
Courts	21.53%	(9.96)%	5.80%	5.77%	11.57%	21.16%	32.73%	33.60%
CNA (50%)	21.53%	(15.58)%	3.58%	2.37%	5.95%	20.21%	26.16%	32.16%
UAPD (25%)	21.53%	(14.39)%	3.58%	3.56%	7.14%	20.21%	27.35%	32.16%
Total	21.53%	(12.23)%	5.66%	3.64%	9.30%	20.25%	29.55%	33.44%
<u>Plan 2</u>								
County (0%)	21.27%	(10.34)%	5.86%	5.07%	10.93%	20.21%	31.14%	32.87%
County (50%)	21.27%	(12.87)%	5.86%	2.54%	8.40%	20.21%	28.61%	32.87%
Courts	21.27%	(10.14)%	5.96%	5.17%	11.13%	21.16%	32.29%	32.87%
CNA (50%)	21.27%	(13.33)%	5.03%	2.91%	7.94%	20.21%	28.15%	31.70%
UAPD (25%)	21.27%	(11.88)%	5.03%	4.36%	9.39%	20.21%	29.60%	31.70%
Total	21.27%	(12.18)%	5.74%	3.35%	9.09%	20.26%	29.35%	32.70%
<u>Plan 3</u>								
County	8.08%	0.00%	8.08%	0.00%	8.08%	20.21%	28.29%	30.18%
Courts	8.08%	0.00%	8.08%	0.00%	8.08%	21.16%	29.24%	30.18%
CNA	8.08%	0.00%	8.08%	0.00%	8.08%	20.21%	28.29%	30.18%
UAPD	8.08%	0.00%	8.08%	0.00%	8.08%	20.21%	28.29%	30.18%
Total	8.08%	0.00%	8.08%	0.00%	8.08%	20.23%	28.31%	30.18%
<u>Plan 4</u>								
County (0%)	20.85%	(10.55)%	6.76%	3.54%	10.30%	20.21%	30.51%	32.08%
County (50%)	20.85%	(12.32)%	6.76%	1.77%	8.53%	20.21%	28.74%	32.08%
Courts	20.85%	(10.69)%	6.67%	3.49%	10.16%	21.16%	31.32%	32.08%
CNA (50%)	20.85%	(12.87)%	5.92%	2.06%	7.98%	20.21%	28.19%	31.26%
UAPD (25%)	20.85%	(11.84)%	5.92%	3.09%	9.01%	20.21%	29.22%	31.26%
Total	20.85%	(11.75)%	6.63%	2.47%	9.10%	20.27%	29.37%	31.95%
<u>Plan 5 (all 50%)</u>								
County	18.02%	(8.22)%	6.78%	3.00%	9.80%	20.21%	30.01%	31.43%
Courts	18.02%	(9.26)%	6.06%	3.00%	8.76%	21.16%	29.92%	31.43%
CNA	18.02%	(8.48)%	6.60%	3.00%	9.54%	20.21%	29.75%	31.43%
UAPD	18.02%	(8.48)%	6.60%	3.00%	9.54%	20.21%	29.75%	31.43%
Total	18.02%	(8.28)%	6.74%	3.00%	9.74%	20.23%	29.97%	31.43%
<u>Plan 7</u>								
County	15.83%	(7.92)%	5.28%	2.63%	7.91%	20.21%	28.12%	29.92%
Courts	15.83%	(7.92)%	5.28%	2.63%	7.91%	21.16%	29.07%	29.92%
CNA	15.83%	(7.92)%	5.28%	2.63%	7.91%	20.21%	28.12%	29.92%
UAPD	15.83%	(7.92)%	5.28%	2.63%	7.91%	20.21%	28.12%	29.92%
Total	15.83%	(7.92)%	5.28%	2.63%	7.91%	20.21%	28.12%	29.92%
<u>All Plans</u>								
County (0%)	19.99%	(9.57)%	6.79%	3.63%	10.42%	20.21%	30.63%	32.09%
County (50%)	19.99%	(11.50)%	6.35%	2.14%	8.49%	20.21%	28.70%	32.09%
Courts	19.99%	(10.42)%	6.04%	3.53%	9.57%	21.16%	30.73%	32.09%
CNA	19.99%	(11.75)%	5.72%	2.52%	8.24%	20.21%	28.45%	31.27%
UAPD	19.99%	(10.85)%	5.77%	3.37%	9.14%	20.21%	29.35%	31.27%
Total	19.99%	(10.98)%	6.35%	2.66%	9.01%	20.26%	29.27%	31.96%

¹ UAAL Contribution Rate includes an offset of 0.95% of payroll to reflect the County Supplemental Contribution Account, except for Courts.

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

San Mateo County Employees' Retirement Association

Exhibit 11b: Employer Adjusted Contribution Rates – General

General Members								
	Employer Rates							Prior Year Total Contribution Rate
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate	Total Contribution Rate	
Plan 1								
County (0%)	21.53%	(9.80)%	5.88%	5.85%	11.73%	22.07%	33.80%	33.77%
County (50%)	21.53%	(12.72)%	5.88%	2.93%	8.81%	22.07%	33.80%	33.77%
Courts	21.53%	(9.96)%	5.80%	5.77%	11.57%	21.16%	32.73%	33.60%
CNA (50%)	21.53%	(15.58)%	3.58%	2.37%	5.95%	22.07%	28.02%	32.33%
UAPD (25%)	21.53%	(14.39)%	3.58%	3.56%	7.14%	22.07%	29.21%	32.33%
Total	21.53%	(12.23)%	5.66%	3.64%	9.30%	22.03%	31.33%	33.60%
Plan 2								
County (0%)	21.27%	(10.34)%	5.86%	5.07%	10.93%	22.07%	33.00%	33.04%
County (50%)	21.27%	(12.87)%	5.86%	2.54%	8.40%	22.07%	33.00%	33.04%
Courts	21.27%	(10.14)%	5.96%	5.17%	11.13%	21.16%	32.29%	32.87%
CNA (50%)	21.27%	(13.33)%	5.03%	2.91%	7.94%	22.07%	30.01%	31.87%
UAPD (25%)	21.27%	(11.88)%	5.03%	4.36%	9.39%	22.07%	31.46%	31.87%
Total	21.27%	(12.18)%	5.74%	3.35%	9.09%	22.02%	31.11%	32.86%
Plan 3								
County	8.08%	0.00%	8.08%	0.00%	8.08%	22.07%	30.15%	30.35%
Courts	8.08%	0.00%	8.08%	0.00%	8.08%	21.16%	29.24%	30.18%
CNA	8.08%	0.00%	8.08%	0.00%	8.08%	22.07%	30.15%	30.35%
UAPD	8.08%	0.00%	8.08%	0.00%	8.08%	22.07%	30.15%	30.35%
Total	8.08%	0.00%	8.08%	0.00%	8.08%	22.05%	30.13%	30.34%
Plan 4								
County (0%)	20.85%	(10.55)%	6.76%	3.54%	10.30%	22.07%	32.37%	32.25%
County (50%)	20.85%	(12.32)%	6.76%	1.77%	8.53%	22.07%	32.37%	32.25%
Courts	20.85%	(10.69)%	6.67%	3.49%	10.16%	21.16%	31.32%	32.08%
CNA (50%)	20.85%	(12.87)%	5.92%	2.06%	7.98%	22.07%	30.05%	31.43%
UAPD (25%)	20.85%	(11.84)%	5.92%	3.09%	9.01%	22.07%	31.08%	31.43%
Total	20.85%	(11.75)%	6.63%	2.47%	9.10%	22.01%	31.11%	32.11%
Plan 5 (all 50%)								
County	18.02%	(8.22)%	6.78%	3.00%	9.80%	22.07%	31.87%	31.60%
Courts	18.02%	(9.26)%	6.06%	3.00%	8.76%	21.16%	29.92%	31.43%
CNA	18.02%	(8.48)%	6.60%	3.00%	9.54%	22.07%	31.61%	31.60%
UAPD	18.02%	(8.48)%	6.60%	3.00%	9.54%	22.07%	31.61%	31.60%
Total	18.02%	(8.28)%	6.74%	3.00%	9.74%	22.05%	31.79%	31.59%
Plan 7								
County	15.83%	(7.92)%	5.28%	2.63%	7.91%	22.07%	29.98%	30.09%
Courts	15.83%	(7.92)%	5.28%	2.63%	7.91%	21.16%	29.07%	29.92%
CNA	15.83%	(7.92)%	5.28%	2.63%	7.91%	22.07%	29.98%	30.09%
UAPD	15.83%	(7.92)%	5.28%	2.63%	7.91%	22.07%	29.98%	30.09%
Total	15.83%	(7.92)%	5.28%	2.63%	7.91%	22.07%	29.98%	30.08%
All Plans								
County (0%)	19.99%	(9.57)%	6.79%	3.63%	10.42%	22.07%	32.49%	32.26%
County (50%)	19.99%	(11.50)%	6.35%	2.14%	8.49%	22.07%	30.56%	32.26%
Courts	19.99%	(10.42)%	6.04%	3.53%	9.57%	21.16%	30.73%	32.09%
CNA	19.99%	(11.75)%	5.72%	2.52%	8.24%	22.07%	30.31%	31.44%
UAPD	19.99%	(10.85)%	5.77%	3.37%	9.14%	22.07%	31.21%	31.44%
Total	19.99%	(10.98)%	6.35%	2.66%	9.01%	22.02%	31.03%	32.12%

This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 6.1

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer

Michael R Coultrip

SUBJECT: Preliminary Monthly Portfolio Performance Report for the Period Ending February 28, 2015

Staff Recommendation

Review the attached SIS market update report.

Background

The February preliminary monthly performance report will not be available by the Board Packet mailing deadline. As discussed previously, staff and Northern Trust are working to include performance estimates for a number of commingled funds in order to provide a more comprehensive performance snapshot of the portfolio. This process is expected to be implemented next month for the March preliminary performance report. Staff will provide the February preliminary performance report in your day-of folder at the March Board meeting.

Discussion

U.S. Economic data were mildly weaker during the month, as the estimate of 4th quarter 2014 GDP growth was revised down to 2.2% from an initial estimate of 2.6%. With this, the overall economic growth in the U.S. averaged 2.4% for calendar year 2014. Oil prices stabilized during the month to around \$50 per barrel (after declining for seven straight months and falling over 50%).

Market sentiment improved from January, which was helped by developments overseas. The EU and Greece reached an agreement to extend emergency financing for four months, a cease-fire in Ukraine appeared to be barely holding up, and the ECB was set to begin its version of QE on March 9th.

The U.S. equity markets were up between +5.0% and +7.0%, with the broad U.S. equity market up +5.8%. Growth outperformed value stocks across the market capitalization spectrum. International equity indices were also higher on the month, with developed markets (as measured by MSCI EAFE) up +6.0% and emerging markets up +3.1%.

The general fixed income market was down -0.94%, as interest rates (as measured by 10-year Treasuries) increased by 32 basis points. High yield bonds returned +2.4%, while emerging market bonds were higher by +1.3% during the month.

Attachments

SIS Market Update

U.S. EQUITY

Equity markets bounced back in February, reversing January's lackluster start to the year.

Growth outperformed Value throughout the market capitalization structure. For the month, the Russell 1000 Growth Index was up +6.7% compared to the Russell 1000 Value Index up +4.8%. The Russell 2000 Growth Index advanced 7.2% and the Russell 2000 Value Index was up 4.6%. The S&P 500 Index ended the month up +5.8%.

The S&P 500 Index has a trailing P/E ratio of 20.5, a forward 12-month estimate P/E ratio of 17.7 and a dividend yield of 1.97%.

Corporate merger highlights for the month included:

Qatar Airways bought a \$1.7 billion stake in the owner of British Airways; Intel will buy German network chipmaker Lantiq for an undisclosed amount to expand its range of chips used in Internet – connected gadgets; Ireland's CRH will pay \$7.4 billion for assets that rivals Lafarge and Holcim needed to sell to secure regulatory approval for their planned merger; Myland will buy Indian drugmaker Famy Care's female health businesses for about \$750 million; Staples, the No. 1 U.S. office supplies retailer, will buy No. 2 Office Depot for \$6.3 billion; Macy's will buy Bluemercury, a chain of upscale beauty shops and spas, for \$210 million; Pfizer will buy Hospira, an Illinois-based provider of injectable drugs and infusion technologies, for approximately \$15 billion; Harris, a communications and info tech company, will buy Exelis, the former defense unit of IIT, in a deal valued at about \$4.4 billion; Canadian gold miner Tahoe Resources will buy smaller rival Rio Alto Mining in a deal valued at \$1.12 billion; Alibaba is expanding into the smart-phone business with a \$590 million investment in start-up Meizu Technology; British semiconductor firm ARM Holdings acquired Internet of Things software developer Offspark; IHH Healthcare and TPG Capital Management are vying to buy a controlling stake in India's Global Hospitals in a deal valued at \$350 million; Canon made a \$2.83 billion offer for network video surveillance leader Axis; Yelp acquired Eat24, an online food ordering service; China's Dalian Wanda Group signed a \$1.2 billion deal to buy Swiss sports marketing firm Infront Sports & Media; Rite Aid will pay about \$2 billion for EnvisionRx, a pharmacy benefit manager owned by investment firm TPG; British data center provider Telecity Group agreed to a non-binding \$2.2 billion all-share deal to buy New York-listed Interxion

Holding; Valeant Pharmaceuticals will buy bankrupt cancer vaccine maker Dendreon for \$400 million; Expedia will acquire Orbitz Worldwide for about \$1.38 billion, further consolidating the online travel industry; Microsoft will buy N-trig, an Israeli provider of digital pens and chips for touch screens, for at least \$200 million; Fairfax Financial, the Canadian p&c insurer, will buy Brit Plc for \$1.88 billion to become one of the top underwriters on the Lloyd's of London market; Internet and network security provider Check Point has bought Israeli start-up Hyperwise; Colorado-based Ball Corp. is buying London-based can maker Rexam in a deal valued at about \$6.64 billion; Valeant Pharmaceuticals will buy Salix Pharmaceuticals for \$10.1 billion; Merck & Co. entered a 5-year collaboration with NGM Biopharmaceuticals to research and develop drugs that treat diabetes and obesity; Bristol-Myers Squibb will buy privately held biotechnology company Flexus Biosciences; Keurig Green Mountain plans to buy back 5.2 million of its shares owned by Luigi Lavazza for about \$619 million; Globe Specialty Metals entered into a \$3.1 billion agreement to merge with Spanish firm Grupo FerroAtlantica; Dublin-based drugmaker Shire bought U.S. firm Meritage Pharma for about \$70 million; Hitachi will acquire the rail division of Italy's Finmeccanica for \$2.1 billion; Boston Scientific is close to buying Endo International's AMS medical device unit, a deal that could value the business at around \$2 billion.

FIXED INCOME

Fed Chair Janet Yellen paved the way for the FOMC to drop its "patient" forward guidance on its March 18th meeting. This would move the Fed to the totally data dependent stage of the cycle, giving it maximum flexibility to begin tightening as soon as it deems appropriate.

GDP growth for the fourth quarter was trimmed a bit; now posting at 2.2% (annual rate), down from the initial estimate of 2.6%. The drag from trade was greater than initially reported with net exports now subtracting 1.2 points (up from 1.0 point) from overall GDP growth.

The yield on the bellwether 10-year Treasury rose to 2.02% at the close of February, up from 1.68% at the end of January. At month-end, the 30-year bond yield was 2.59% and the 3-month T-bill was 0.015%. The Barclays Capital US Aggregate Index was down -0.9% in February.

On the economic front, the following key data was released in December:

THE GOOD

*The index of consumer sentiment rose to 98.1 in January from 93.6 last month, its highest level since 2004.

*The employment cost index, which measures pay and benefits, rose 2.2% in 2014, up from 2% the previous year, but still sluggish by historical standards.

*U.S. employers added a vigorous 257,000 jobs in January, and wages jumped by the most in six years.

*The Institute of Supply Management's index of service industries increased to 56.7 in January from 56.5 in December.

*Job openings in the U.S. rose 3.7% to 5.03 million in December, the highest since 2001.

*The Commerce Department reported that wholesale inventories edged up a slight 0.1% in December, although inventory values are measured in current dollars and month-to-month price changes will affect values.

*The Commerce Department reported that retail sales excluding automobiles, gasoline, building materials and food services edged up 0.1% in January following a 0.3% drop in December.

*While the homebuilder sentiment index fell to 55 in February; readings above 50 indicate that more builders view sales conditions as positive.

*Wholesale prices fell by a record amount in January, led by the biggest drop in gasoline prices in six years.

*The median existing-home price was \$199,600 in January, 6.2% above January 2014 levels.

*Financial data firm Markit reported that its preliminary or 'flash' reading of its Purchasing Managers Index for the service sector rose to 57.0 in February from a final reading of 54.2 in January.

THE NOT SO GOOD

*The Commerce Department reported that the U.S. economy grew 2.6% in the October to December quarter – down from a gain of 4.6% in the second quarter and 5% in the third quarter.

*The Institute for Supply Management's manufacturing index slowed to 53.5% in January from 55.1% in December, marking the worst performance in a year.

*The Commerce Department reported that new orders for manufactured goods fell 3.4% in December, the fifth straight month of declines.

*The Commerce Department reported that consumer spending dropped 0.3% in December after a downwardly revised 0.5% increase in November. It was the largest drop since September 2009.

*The U.S. trade deficit in December jumped to \$46.6 billion, the highest level in more than two years as exports fell and Americans bought a record amount of imports.

*U.S. consumer borrowing expanded by \$14.8 billion in December, pushing consumer debt to a record \$3.31 trillion.

*The Fed's labor market conditions index, which weighs 19 different economic indicators, fell to 4.9 in January from an upwardly revised 7.3 in December and was the lowest reading since September.

*The U.S. consumer sentiment unexpectedly fell in February from an 11-year high amid worries over slowing economic growth, suggesting a recent weakness in spending might last for a while.

*Student loans 90 days or more overdue rose to 11.3% in the last quarter; total student borrowing now stands at \$1.16 trillion, the most on record.

*Housing starts slipped 2.0% to a seasonally adjusted annual rate of 1.07 million last month.

*The index of leading indicators rose 0.2% in January, the weakest gain since August; the index is designed to predict the future health of the economy.

*The National Association of Realtors reported that existing home sales fell 4.9% in January to a seasonally adjusted annual rate of 4.82 million.

NON-U.S. MARKETS

As expected, the European Central Bank (ECB) made no changes to the monetary policy stimulus program announced at its last meeting on January 25th. It reaffirmed its commitment to a quantitative easing program of €60 billion per month in purchases of public and private sector securities, beginning on March 9th and lasting until at least September 30, 2016, or beyond if needed.

Eurozone real GDP rose 0.3% in the fourth quarter, unchanged from the preliminary (flash) estimate. The newly released details revealed broad-based strength across the demand components.

Greece's unemployment rate edged up in December to 26.0%. It had been grinding slowly lower since peaking at 28.0% in September 2013. But there is now the

disquieting sense that it may now be leveling off at an extremely high level.

There are some tentative signs that wage inflation is picking up in Japan. Labor cash earnings rose 1.3% year-over-year in January, the 11th consecutive gain, although because of the 3.0% VAT hike last April, real earnings fell 1.5%.

China is expected to lower its GDP target to around 7% this year, after the economy grew 7.4% in 2014, the slowest pace in 24 years. China's central bank continues to ease. The People's Bank of China made a system-wide cut to bank reserve requirements to fight off economic slowdown and looming deflation.

India's central bank also eased again. The Reserve Bank of India cut its administer rates a quarter point, leaving the repo rate at 7.50% and the reverse repo at 6.50%. Its previous move was a quarter point cut in January. Before that it was on hold for a year following a brief tightening cycle that ran from September 2013 to January 2014.

Inflation is accelerating severely in Russia. The CPI inflation rate rose another 1.7 points to 16.7% year-over-year, more than double the reading from last fall and it's highest in 13 years.

Non-U.S. equities posted strong returns in February. The MSCI ACWI Ex-U.S. advanced +5.4% (US dollars) for the month. International Developed stocks (EAFE) were up +6.0% and Emerging Markets were up +3.1% for the month.

CONCLUSION

Even with the improvement in the U.S. job market and the overall economy, longer-term interest rates in many advanced economies have moved down significantly since the middle of last year; the declines have reflected, at least in part, disappointing growth trajectories on the international arena and aggressive monetary positioning. A long period of rock-bottom borrowing costs and massive purchases of bonds by the Fed via several rounds of quantitative easing have spurred investors to embrace risk assets and equities. How the adjustment to higher rates will go has few historical mappings to offer guidance.

Monthly Market Update

US Equity Indices Trailing Performance

Annualized Performance to Date: Ending Feb-15	1 Month	3 Months	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
Russell 3000 Index	5.79	2.84	2.85	14.12	20.27	18.02	16.36	9.43	8.30
Russell TOP 200 Index	5.89	1.98	2.42	15.59	20.26	17.78	15.83	8.74	7.66
Russell TOP 200 Growth Index	6.57	3.55	5.01	17.74	22.79	18.06	17.03	10.78	9.09
Russell TOP 200 Value Index	5.17	0.35	-0.20	13.41	17.73	17.47	14.62	6.65	6.22
S&P 500 Index	5.75	2.31	2.57	15.51	20.34	18.00	16.18	9.13	7.99
Russell 1000 Index	5.78	2.63	2.87	14.88	20.47	18.14	16.39	9.36	8.30
Russell 1000 Growth Index	6.67	3.94	5.03	16.24	22.52	18.05	17.21	10.76	9.28
Russell 1000 Value Index	4.84	1.27	0.65	13.49	18.36	18.11	15.51	7.83	7.21
Russell Mid-Cap Index	5.54	4.11	3.89	13.31	20.95	18.95	17.74	10.93	9.92
Russell Mid-Cap Growth Index	6.88	4.78	5.08	13.10	22.00	18.16	17.92	10.91	9.99
Russell Mid-Cap Value Index	4.10	3.38	2.61	13.63	19.89	19.57	17.53	10.80	9.59
Russell 2000 Index	5.94	5.45	2.53	5.63	17.89	16.58	15.97	10.26	8.31
Russell 2000 Value Index	4.64	3.03	0.29	3.96	14.54	15.32	13.97	8.91	7.13
Russell 2000 Growth Index	7.20	7.86	4.75	7.37	21.31	17.83	17.96	11.52	9.40
DJ US REIT Index	-3.58	4.72	2.87	24.13	14.81	15.22	17.74	9.09	9.09
DJ-UBS US Commodity Index TR	2.58	-8.41	-2.51	-22.77	-12.93	-11.21	-4.95	-9.75	-2.71
DJ-UBS US Gold Index TR	-5.17	3.13	0.99	-8.45	-12.65	-11.29	1.05	2.43	9.84

Non-US Indices Trailing Performance

Annualized Performance to Date: Ending Feb-15	1 Month	3 Months	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
MSCI AC World Index ex USA	5.36	1.46	5.22	1.31	6.86	6.96	7.02	1.62	5.81
MSCI AC World Index	5.61	2.02	3.99	8.11	13.32	12.17	11.29	5.08	6.92
MSCI EAFE Index	5.99	2.85	6.52	0.39	9.66	9.90	8.27	2.10	5.32
MSCI Emerging Markets index	3.11	-1.00	3.73	5.38	-0.30	0.01	3.97	0.37	8.23
ML Global Government Bond Ex. U.S. Index	-1.60	-2.12	-1.77	-8.63	-5.17	-5.24	-0.26	1.29	2.31
Euro	-0.60	-10.03	-7.31	-18.79	-7.37	-5.70	-3.85	-4.23	-1.67
Japanese Yen	-1.74	-0.72	0.29	-14.62	-12.15	-12.19	-5.76	-1.96	-1.36
UK Pound Sterling	2.90	-1.32	-0.89	-7.78	0.90	-1.10	0.30	-3.54	-2.18

US Fixed Income Indices Trailing Performance

Annualized Performance to Date: Ending Feb-15	1 Month	3 Months	YTD	1 Year	2 Years	3 Years	5 Years	7 Years	10 Years
ML 3-month T-bill Total Return Index	0.00	0.00	0.00	0.03	0.06	0.07	0.09	0.29	1.51
BarCap Aggregate Bond Index	-0.94	1.23	1.14	5.05	2.57	2.76	4.29	4.67	4.82
ML U.S. Corp/Govt Master Index	-1.33	1.42	1.35	5.56	2.61	3.03	4.65	4.64	4.87
ML U.S. Corporate Master Index	-0.84	1.74	1.88	6.45	3.90	4.95	6.50	6.42	5.70
BarCap Mortgage Backed Securities Index	-0.16	0.84	0.68	4.80	2.70	2.44	3.56	4.51	4.81
ML U.S. High Yield Master Index	2.39	1.56	3.09	2.77	5.53	7.58	9.17	9.31	7.72
JPM EMBI Global	1.25	-1.32	1.59	4.91	0.86	4.25	7.22	7.29	7.72

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 6.2

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer

Michael Coultrip

SUBJECT: Report on Northern Trust Annual Review

Staff Recommendation:

Review the report on the annual review of SamCERA's custodian bank.

Background:

Northern Trust became SamCERA's custodian effective July 1, 2014. By September 2014, the transition from the prior custodian, State Street, to Northern Trust was complete. In December the Board reviewed the Northern Trust securities lending program.

Discussion:

On March 5th, SamCERA staff held the annual review meeting in SamCERA's office for Northern Trust. Gary Guibert, Patrick Fitzgibbons, and Patrick Mauloff attended from Northern Trust.

The meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, global custody overview, review of the transition process, and a service performance review.

Beginning with the March performance reporting cycle, Northern will utilize their Preliminary Hedge Fund Services in order to include preliminary performance for a number of SamCERA commingled fund investments. This should help ensure timely and accurate delivery of SamCERA's preliminary monthly performance report.

Attachments:

- A. *Northern Trust Custodial Annual Review Questionnaire*
- B. *Northern Trust Custodial Service Review Presentation*

THE FREEDOM TO FOCUS ON WHAT REALLY MATTERS



Northern Trust
Annual Review Questionnaire
March 5, 2015

San Mateo County
Employees' Retirement Association



Exhibits

Insurance Certificate	1
GASB Overview	2
Subcustodian Network	3
SamCERA's Alternative Statement Timelines	4
DataDirect + Investment Risk Analytic Services	5



Organizational Update

1. Provide an update on The Northern Trust's organization, with particular emphasis on (a) changes to your management structure over the past eighteen months and (b) additions/deletions in clients and (c) change in assets that you custody. All significant changes should be accompanied by an explanation.

2014

- On August 4, 2014, Northern Trust announced several leadership changes designed to enhance opportunities for strategic growth, effective September 1, 2014:
 - ◆ Jana Schreuder, President of Wealth Management, will assume the role of Chief Operating Officer. Bill Morrison will continue to serve as President.
 - ◆ Steve Fradkin, President of Corporate & Institutional Services, will assume the role as President, of Wealth Management.
 - ◆ Mike O'Grady, Chief Financial Officer, will assume the role as President of Corporate & Institutional Services.
 - ◆ Biff Bowman, Executive Vice President, Human Resources, will assume the role as Chief Financial Officer.

2013

- On November 5, 2013, Northern Trust announced that Arti Sharma has joined as head of The Northern Trust Company, Canada. Based in Toronto, Arti is responsible for all of Northern Trust's operations in the Canadian market.

CLIENTS GAINED/LOST

The following table represents the number of clients gained and lost and their market value over the past 18 months.

CLIENTS GAINED			CLIENTS LOST		
Year	Number of Clients	Market Value (\$ billions)	Year	Number of Clients	Market Value (\$ billions)
2014	92	\$186.4	2014	45	\$75.6
2013	125	\$177.4	2013	25	\$39.1

REASONS FOR CLIENT LOSSES

While Northern Trust welcomes a steady influx of new clients every year, an inevitable part of our business is that we also lose clients. Over the years, the primary reason that clients have transitioned away from us is that they consolidated all assets with another provider, often because of a merger or acquisition. Other common reasons are: fees, existing relationships at another provider, credit, or diversification of providers.

CHANGE IN ASSETS

As of December 31, 2014, Northern Trust had 2,134 institutional trust and custody clients with approximately \$5.45 trillion in assets.

As of December 31, 2013, Northern Trust had 2,061 institutional trust and custody clients with approximately \$5.08 trillion in total assets, including both U.S. and non-U.S. based clients.



2. What is Northern’s philosophy and current policy regarding new business?

We review our staffing needs, both on a corporate-wide and division-specific basis, throughout the year to determine the appropriate staffing levels to meet our annual growth expectations. Based on the results of these reviews, we will increase staff if appropriate to continue to provide our clients the highest level of service.

3. Provide a list of services available through your firm, including the number of staff supporting those services.

LIST OF SERVICES

As a leader in the financial services industry today, we provide asset and fund administration, investment management, and information services to the following markets around the world:

- Public Funds
- Government Entities
- Large Corporations
- Investment Managers and Fund Sponsors
- Insurance Companies
- Foundations
- Endowments
- Healthcare Systems
- Taft-Hartley Funds
- Bank Trust Departments and Independent Trust Companies

We support our global custody clients from branch or subsidiary offices located in Abu Dhabi, Amsterdam, Bangalore, Beijing, Chicago, Dublin, Frankfurt, Guernsey, Hong Kong, Kuala Lumpur, Limerick, London, Luxembourg, Manila, Melbourne, New York, Riyadh, Seoul, Singapore, Stockholm, Tokyo, and Toronto. Our primary regional asset servicing processing centers are located in Chicago, London, and Bangalore.

We provide a full range of services including:

- Settling trades and safekeeping assets in 105 global securities markets.
- Maximizing returns in foreign exchange in 73 currencies through dealing rooms in Chicago, London, and Singapore.
- Maximizing idle cash balances with cash investment and cash sweep capabilities in 19 currencies (including USD).
- Crediting income on payable date in 36 countries, enhancing cash management and reinvestment opportunities.
- Negotiating minimum tax withholding and timely reclamation.
- Notifying clients and processing corporate actions
- Providing proxy voting services in 53 markets.
- Accounting and reporting on a fully-integrated, multicurrency, trade-date basis through our online system Passport[®].
- Reporting in both base and local currencies, customized to meet clients’ specific reporting needs.



- Analyzing global performance and enabling clients to evaluate their performance continuously and automatically against major market indices and universes worldwide.

MASTER TRUST/MASTER CUSTODY – STAFF FIGURES

As of December 31, 2014, Northern Trust had 15,608 total active employees worldwide. Of this figure, 11,890 individuals are dedicated to supporting our worldwide institutional asset servicing business.

We have broken this figure down by functional category below.

Department	Total
Accounting	844
Alternative Assets	348
Asset Coding & Pricing	183
Asset Servicing	2,042
Banking	137
Client Servicing	395
Executive	74
Finance	335
Foreign Exchange	375
Human Resources & Training	294
Investment Manager Servicing (GFS)	3,484
Investment Risk & Analytical Services (IRAS)	307
Legal	106
Marketing/Business Development	127
NTSI/Brokerage	70
Product Management & Support	127
Risk Management	540
Securities Lending	189
Technology & Other Operations Support	<u>1,913</u>
Total	11,890

4. Has your firm or any of its employees been involved in regulatory or litigation actions related to your business in the past eighteen months? If, please provide details

Northern Trust and its subsidiaries occasionally receive requests for information from government and regulatory agencies. Northern Trust frequently does not know if such requests are related to a formal government or regulatory investigations or, assuming an investigation is underway, whether Northern Trust is a target of such investigation or simply thought to be in possession of information pertinent to such investigation. Northern Trust is not currently involved in any government or regulatory investigation or preceding that would have a material impact on its ability to provide custody services to its clients.



Further, Northern Trust and its subsidiaries are occasionally named as a defendant in custody related litigation. However, in the past eighteen months, Northern Trust has not been subject to any litigation that has had a material effect on its ability to perform services for its clients.

5. Describe the levels of insurance coverage maintained by your firm. E-mail a current certification of insurance to Investments@samcera.org.

Northern Trust maintains the following corporate insurance coverage to protect Northern Trust against extraordinary events:

- **Bankers Blanket Bond.** US\$50 million limit, insured with Chubb, AIG, Houston Casualty, ACE, Great American, CNA. The Bankers Blanket Bond covers criminal acts of officers and employees, loss of property (cash-securities) through burglary, robbery, false pretenses, mysterious disappearance, forgery, alteration of securities, forgery with loan participation, or trading. This policy conforms to Section 412 of the Employee Retirement Income Security Act of 1974 (ERISA). This policy is required for FDIC insured institutions. This policy expires June 1, 2015. Lead policy #81865905.
- **Electronic Computer Crime Policy.** US\$150 million limit, insured with Chubb, AIG, Houston Casualty, ACE, Great American, CAN, QBE, Berkshire Hathaway and Lloyds of London. Protects Northern Trust from dishonest acts of loss resulting directly from the Insured having transferred, paid or delivered any money or property as the direct result of fraudulent input or modification of electronic data into the Insured's computer systems or computer programs; fraudulent voice initiated money transfers or electronic communications to or from the Insured; forged telefacsimilie, acts of hacker causing damage or deconstruction to data or media, including robbery, burglary, larceny, theft, extortion. This policy expires June 1, 2015. Lead policy #81944186.
- **Excess Bond and Computer Crime Policy.** US\$100 million limit, insured with Chubb, Liberty, Zurich, Houston Casualty, Axis, ACE, CNA, Great American, Lloyds of London. Provides additional excess limits upon the exhaustion of limits under the Bankers Blanket Bond and the Electronic Computer Crime Policy. This policy expires June 1, 2015. Lead policy #81944189.
- **All Risk Physical Loss of Securities Insurance.** US\$50 million limit, insured Lloyd's of London syndicates. This Insurance provides protection for loss of customer's securities while in our custody or held at any other assigned custodial location. This policy serves in conjunction with the exhaustion of the Bankers Blanket Bond to provide excess limits for securities held at other than the bank premises and while in transit. This annual policy expires June 1, 2015. Policy #FS1390403.

The Depository Trust Company provides additional levels of protection for on premises and transit coverage as well as numerous other policies designed to protect institutions that use DTC services.

- **Bankers Professional Liability Errors & Omissions.** USD \$90 Million limit, insured with CNA, Zurich, Chubb, Liberty, Houston Casualty, Axis, Arch, Ace, Freedom Specialty. This policy protects Northern against a legal liability incurred from an act, error or omission committed in our performance of professional services. This policy includes cover for Lender Liability and Fiduciary Liability. This annual policy expires June 30, 2015. Lead Policy #267890702.
- **Directors & Officers Liability** (USD \$125 Million limit) and **Side A Liability** (USD \$125 Million limit). Insured with, CNA, ACE, Travelers, Houston Casualty, Chubb, Arch, Liberty, Axis, Freedom Specialty, Zurich, AIG, Torus, Berkshire Hathaway, and Zurich (Zues). Protects directors and officers against judgments, settlements and expenses arising from litigation brought against them while acting in their capacity as a director or officer. Policy



also reimburses the Corporation for indemnification expenses and securities litigation. This annual policy expires June 30, 2015. Lead Policy # 267890702.

Recognizing significant and well-thought out controls, the limits of insurance in place protecting our Corporation have been determined to be adequate by the Business Risk Committee of the Board of Directors of Northern Trust Corporation as reviewed on an annual basis. All policies are for Named Insured: Northern Trust Corporation ET AL, which includes all subsidiary and affiliated companies. Insurance coverage is placed with well-respected insurance carriers, having an AM Best, Moody's and/or Standard & Poor rating of A- or better, financial stability X or better. Carrier's financial stability is reviewed annually by the Credit Risk Committee.

Insurance limits do not extend to third party clients, but rather act to reimburse Northern for its' insured loss. Client obligations and fiduciary responsibilities are not limited by insurance coverage terms, conditions, deductibles and limits, as insurance is never a guarantee that a claim may be covered by a policy of insurance. The Corporation remains responsible for legal liabilities imposed against it and to that end, the capital of the Corporation is available.

Deductible levels are not released to Third Parties as decisions on insurance policy deductible levels are internal risk management decisions based on quantitative analysis and proprietary modeling of risk exposures and tolerance.

All Northern Trust employees are bonded and covered under the Bankers Blanket Bond insurance detailed above.

A current certification of insurance has been submitted to Investments@samcera.org.

6. Do you have a written policy on ethics? If so, please e-mail the policy to Investments@samcera.org.

A current copy of Northern Trust's Ethics Policy has been submitted to Investments@samcera.org.

7. Update all significant personnel changes to the "SamCERA Team".

From inception of the relationship, the same team within Northern Trust has been servicing SamCERA.

8. Provide an overview of your firm's business continuity plan.

Northern Trust's business continuity philosophy and ongoing review efforts emphasize disaster prevention, mitigation and recovery. Our work environment is regularly reviewed to identify, avoid and/or minimize potential sources of risk and the likelihood of significant service interruptions.

Because we view data security and business continuity as mission-critical, we have devoted significant planning, resources and staff to the development and implementation of our plans. The primary components of these plans are summarized below:

- 24/7 / 365 monitoring of critical support systems, using staff and electronic tools.
- Two peer Corporate Data Centers in separate geographic locations – each complete with total system redundancy, data back-up, and sufficient processing and bandwidth capacity to run the critical workloads of both centers.
 - ◆ In the event of a disaster at one of our Corporate Data Centers, the other data center can recover all critical processing within 12 hours or less.
 - ◆ Data centers are connected to multiple Internet entry points to ensure connectivity, and supported by a network with a highly redundant, self-healing where possible, diverse and easily re-routable design.
 - ◆ Critical production data is continuously mirrored between both centers via a private, dedicated point-to-point fiber optic network. An electronic data vaulting program is in place between both centers to



further protect client data and ensure continuity. Robotic tape backups are also created daily, and stored in both data centers.

- State-of-the-art security and fire protection systems for all data processing facilities.
- Alternate work locations for staff, including our own recovery space, contracted recovery space, and work-from-home programs.
- Regularly scheduled site hazard analyses to identify potential vulnerabilities and mitigate known risks.

All of our BC/DR plans are reviewed, tested and updated on a continual basis. Please see Exhibit 1 for the insurance certificate.



Custodial/Accounting Review

9. Provide your assessment of the custodial transition that occurred between SamCERA's former custodian and Northern Trust. Was there anything in the process that you think could have been improved?

Key to a successful conversion from the prior custodian to Northern Trust is to ensure that investment managers are not stopped from trading activity or that flow of distributions to participants is uninterrupted. We also want to make sure to keep SamCERA is kept updated regularly and that all nuances that are unique to supporting the staff of SamCERA are discovered throughout the planning process.

As a repository of data for our clients, integrity in the data received from the prior and posted to Northern's platform is crucial. We believe that each of the listed criteria was met.

Two "improvement" items worth noting are:

- a) Training SamCERA's accounting staff on the reconciliation reports to ease audit.
- b) Understanding the need for SamCERA's "official" preliminary performance returns, especially in the area of alternative assets.

We visited with the accounting team in San Mateo to review the reconciliation templates, to help assure the fiscal year-end audit and to demo reporting templates for GASB standards 40, 53, 67 and Fair Value. Please see Exhibit 2 for material that covers the recent GASB regulations. We are also working with the SamCERA investment team to better streamline the preliminary performance reports.

10. Provide a full review of the custodial process, including (a) who is responsible for various stages of the process, (b) your assessment of the value added by your policies and procedures, (c) what are the advantages/disadvantages of your international custodial relationships, (d) your assessment of the risks associated with SamCERA's use of your services and (e) which parts of your procedures are not functioning as well as you would expect.

The following outlines in broad strokes the key areas of custodial process:

At its most basic level, Northern Trust's services are built on our ability to hold client assets in a safe, efficient, and secure environment without impeding the trading of those assets. Highlights of our custody and safekeeping services for SamCERA include:

- **Scale and Coverage:** Northern Trust maintains assets in physical and book entry form in 102 global markets with over 450,000 different asset types, holding more than \$4.1 trillion in assets worldwide.
- **Automation and Efficiency:** We support direct connectivity with brokers and depositories to facilitate the automated transfer of your assets.
- **A strong network:** Our network of subcustodians is rigorously monitored, and agent banks are selected based on a combination of creditworthiness, service levels, and ability to support best practices. All of our subcustodians are SWIFT-capable, allowing for automation in trade communication and reconciliation.

All of our subcustodians are held to high standards of quality. Our network management team continuously reviews subcustodian performance, and our credit committee re-evaluates each subcustodian's creditworthiness on an ongoing basis. Finally, we have structured reviews for every subcustodian to ensure that your assets are held in the most secure environment possible.



A broader review of our custody includes:

Northern Trust's Straight-through Processing (STP) solution offers an end-to-end trade settlement capability for depository-eligible assets, incorporating automation, accuracy, and transparency. Our clients benefit from higher settlement rates and are able to view up-to-date information on the status of their assets.

Trade Processing	<p>98% auto capture rate on all trades Automated capture via SWIFT or other e-formats Automated validation of trade information Exceptions routed to a repair queue and chased by IMLG experts</p>
Auto-audit	<p>Automated comparison against our security master file Instant setup of new assets with information required to facilitate processing – system can process hundreds of securities in seconds Feeds from data vendors with auto-updates, ensuring accuracy</p>
Interfaces	<p>Electronic connectivity via SWIFT, flatfile, and other methods Auto-confirmation with brokers and investment managers Pre-matching using CTM, OASYS, and MISYS Exceptions automatically routed to a repair queue and chased daily</p>
Trade Settlement	<p>All exceptions are cleared by settlement date Automatic settlement of positions/cash on settlement date Exceptions automatically routed to a repair queue for resolution Daily chasing and reporting of exceptions</p>
Trade Capture	<p>Automated reconciliation with depositories and investment managers using SmartSteam's TLM Daily reconciliation with depositories Reconciliation with investment managers can be daily, weekly, monthly, or quarterly</p>
Asset Setup	<p>Income information automatically received from a stable of data sources prior to payable date and verified "Income Maps" created for each security as data is received Income automatically posts to client accounts (contractual vs. actual income varies by market and asset type)</p>
Communication	<p>Daily and intra-day reporting on trade status Extensive statistical reporting is available Available on demand or via periodic reporting packages Exportable to Excel, Word, CSV, PDF, or RPT files</p>



Responsibility for various stages of the process:

Senior Management Oversight	Rick Waddell (fhw) Chairman/CEO of Northern Trust Company	David W. Fox (dwf2) Head of North America
------------------------------------	---	---

Relationship Management	Jeffrey Porta (jmp6) Manager, Public Funds Division (312) 557-0474	Gary Guibert (gjf1) Client Executive (312) 444-5913
--------------------------------	---	--

Client Servicing Team	Day-to-day Contacts		
Patrick Fitzgibbons (pjf2) Custody Account Administrator (312) 557-1819	PFAdmin@ntrs.com Back-up Account Manager Lindsay Amborski (lc39) Account Administrator Management (312) 557-4052	Don Anderson (dsa3) Sec. Lending Relationship Manager Patrick Mauloff (pm50) Investment Performance Returns (312) 557-0983	

Custody Book of Record	Audited Accounting Record
Daily Core Custody Post Trade Compliance Cash Management Securities Lending Foreign Exchange Global Investments	Monthly Accounting Reporting Consolidated Reporting Annual Audit Reporting GASB Reporting and Consulting CAFR Support Automated Data Feed

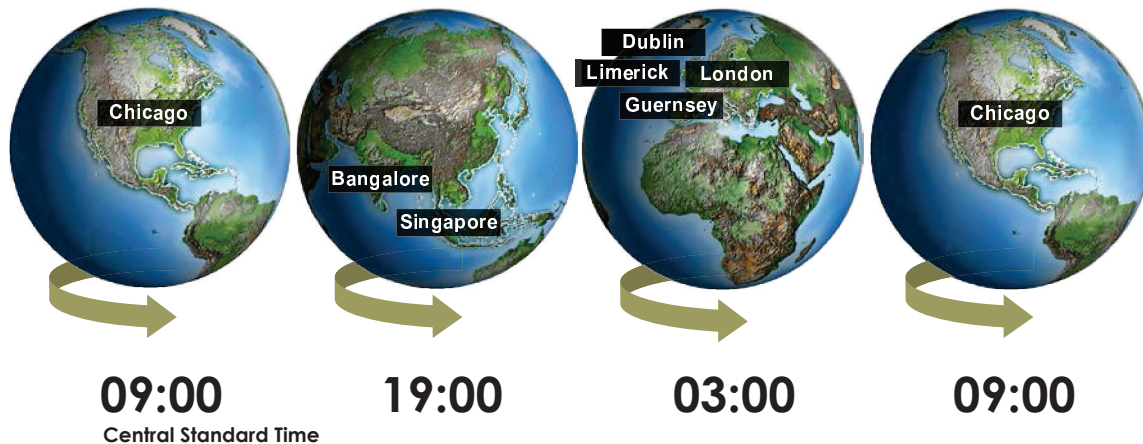
Service Delivery Teams	Global Custody Operations	Investment Management Liaison Group	Private Equity, LP, Alternatives	Tax Reclamation	
Asset Pricing & Coding	Trade & Cash Processing	Accounting & Regulatory Reporting	Income Processing	Corporate & Class Actions	Proxy Services
	Technology Support	Passport Consulting	New Business Consulting	Transition Management	



Value added by Northern’s processing and advantages of global operation:

Global, Round-the-clock Support

Northern Trust’s use of a single, worldwide technology platform allows us to provide global, 24x7 trade and operations support to clients worldwide. As demonstrated by the following global chart, our processing centers are located in Chicago, London, Singapore, and Bangalore work within each respective time-zone to scrub data for 24-hour review.



Assessment of the risks associated with SamCERA’s use custody can be grouped by the functions we believe support the primary role of a custodian bank, which is to hold in safekeeping the assets of SamCERA. The key functions of Northern Trust are to:

- Hold assets in custody. This occurs onshore, offshore with an affiliate, or offshore with a subcustodian. When needed, the main custodian is responsible for selecting the sub-custodian.
- Provide daily and/or monthly asset pricing. Pricing information is provided to custodians by third party vendors that are reviewed for accuracy and methodology.
- Monitor and settle depository transactions. Custodians are also critical in monitoring and settling trades. They are connected electronically to the depositories, providing operational efficiencies and economies of scale when initiating and settling trades.
- Monitor and post income payments. Custodians track and record interest on bonds and equity security dividends. The custody system monitors the scheduled payment date and ensures the correct payment is posted to the right account.
- Provide audited reporting. The custodian provides final market value, transactions, cash positions, and cash activity on a daily or monthly basis.

Also under contracted services to SamCERA is Northern’s role in providing proxy voting, tax reclaim services, corporate actions, cash management, performance reporting, risk reporting, securities lending, and foreign exchange. Each carries its own set of risks. Examples include:

Contract Risk Definition

Contract risk is the risk that something material is missing from the custody contract or that key Operational topics have not been clearly or completely described. Lack of clarity in key areas presents significant risk.

Evaluation Criteria

Investors should conduct a comprehensive evaluation of the custody contract on a periodic basis. There are a number of key operational factors to evaluate within the custodial agreement to ensure they have been clearly defined, including the roles and responsibilities of the custodian and client; the description of services provided by the custodian to ensure that the contract and related service descriptions suitably protects the client from losses due to negligence, fraud and willful misconduct.



We believe the above were well addressed by SamCERA and Northern Trust. Also supported by our SAS70 and independent audits, we believe that our procedures are functioning well.

11. Describe the relative strength and longevity of your staff. Are any of your operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted.

STRENGTH AND LONGEVITY OF STAFF

Relationship managers average 19 years of service to Northern Trust, and are part of our 395 client servicing staff members worldwide.

OUTSOURCING OPERATIONS

As is standard in the industry, Northern Trust contracts with various subcustodians to allow our clients to invest in foreign markets. Additionally, Northern Trust receives daily price feeds from various vendors. Finally, Northern Trust partners with Broadridge Financial Solutions for U.S. proxy and ISS for non-U.S. proxy processing. Northern Trust does not consider such partners (pricing and proxy vendors) to be its subcontractors or agents.

All other services are provided in-house by Northern Trust.

Please refer to the attached Exhibit 3 for a list of our subcustodian network.

12. What are your mission critical systems? Has your firm experienced any problems with these systems in the past eighteen months? When were these systems implemented and when were they last upgraded? Do you anticipate any changes to these systems in the next eighteen months?

MISSION CRITICAL SYSTEMS

Northern Trust's in-house computer facilities include the following systems:

Z/OS (FORMERLY OS/390) AND Z/LINUX

Northern Trust's production mainframe environment consists of two z10 Series processors running z/OS version 1.9 in a Parallel SYSPlex environment. Additionally, each mainframe footprint is configured with two Integrated facility for Linux (IFL) running RedHat Linux, which is providing a distributed gateway into the mainframe DB2 environment. Northern Trust's mainframe database environment consists of DB/2 Universal Database for z/OS version 8 and IMS version 9.

For business continuity purposes, another Z-series mainframe and an asynchronously maintained copy of the production DASD environment is housed at our second datacenter. Both mainframe complexes are maintained in-house by Northern Trust at current, industry-standard levels of software and hardware. Additional capacity is added as business demands warrant.

UNIX/LINUX

There are several operating system alternatives for Unix/Linux applications - Red Hat Linux ES 5.0, IBM AIX 5.3, or Sun Solaris 10.

For the Red Hat Linux (x86) 64-bit operating system, we have standardized on the IBM xSeries hardware platform. This is our preferred platform for horizontally scaled applications and databases (i.e. spread across multiple smaller systems for high availability and where additional servers are added for growth).



For the IBM AIX operating system, we use IBM pSeries hardware on the POWER5 and Power 6 architectures. This is our preferred platform for vertical scaling of large applications or databases, which must run on a single server and grow by adding CPUs.

For the Sun Solaris operating system, we support Sun Microsystems servers and Fujitsu PRIMEPOWER servers based on the SPARC processor.

All production systems are built with either a warm standby host available in a second data center or a live/live or master/slave configuration, with the hosts split between data centers. Data is kept in synch by various forms of hardware or software based DASD mirroring.

For applications that can withstand only very short unplanned outages, high availability is provided by creating a "cluster", utilizing Veritas Cluster Server (VCS) in the Solaris environment.

Our strategic Unix/Linux database platforms are Oracle 11g on Red Hat Linux ES, Solaris and AIX and Oracle RAC on Solaris.

MICROSOFT

Northern Trust currently supports Windows 2008 64-bit for application servers, IIS version 7.0 for web servers and MS-SQL 2008 for database servers.

Applications deployed in the Microsoft environment are built on HP Blade and Proliant DL machines with 2 or 4 processors, depending on the application and size of its user base. When feasible multiple applications are consolidated onto a single host using VMWare ESX 4.x

All critical production systems are built with either a warm standby host available in a second data center or a live/live or master/slave configuration, with the hosts split between data centers. Data is kept in synch by Hitachi Mirroring.

For applications less critical that can withstand unplanned outages are recovered from daily back-ups to a designated test system or spare server from Northern's Commvault Galaxy Backup Environment.

OS/400

Northern Trust's iSeries (AS/400) environment currently runs i5/OS Version 6 Release 1. DB2 UDB is the relational database and it is integrated into the operating system.

We can advise that there is no reliance on third parties for development and customization to our systems. Northern Trust's mainframes are updated in-house at least once a year. Further, our technology platforms are constantly monitored for performance and capacity.

SYSTEM OUTAGES

Northern Trust Technology set goals of scalability, flexibility and availability for its global platform over a decade ago, and set about ensuring that applications and infrastructure are in place to meet those goals. As a result, all major challenges have already been addressed with the outcome of an ongoing robust, reliable and functionally rich environment for clients. This is demonstrated by the fact that Northern Trust's systems have minimal downtime. Due to the careful selection and design of hardware, software and systems personnel, Northern averages 99.9% system availability across our processing and client delivery systems over the last three years.

Northern Trust has sophisticated system monitoring, firecall, and escalation procedures to ensure that all appropriate resources are assigned to resolve outages as quickly as possible. In addition, we have sophisticated business continuity and disaster recovery capabilities. As a result of these capabilities, any computer downtime is usually transparent to our clients.

**SYSTEM IMPLEMENTATION AND UPGRADES**

Northern Trust maintains robust and mature platforms, and continues to invest significant capital in each to ensure we have the capabilities and scalability that our clients require. Northern Trust allocates a percentage of capital each year to upgrade or replace applications that it deems at risk or nearing end of life.

System/Function	Year Installed	Life Expectancy	In-house or Vended	Real-Time vs. Batch
Asset Servicing System	1990	Indefinite	In-house	Real-Time
Fund Accounting (Global Invest One)	1983	Indefinite	Vended (Sungard)	Real-Time
Transfer Agency (Multifonds ¹)	2004	Indefinite	Vended (Multifonds)	Real-Time
Performance Analytics Calculation Engine (Analytical/Performance)	2001	Indefinite	In-house	Batch
Northern Trust Passport [®] (Client/investment manager reporting and information delivery system)	1994	Indefinite	In-house	Real-Time

ANTICIPATED CHANGES TO THE SYSTEMS

We do not anticipate any major system changes or conversions in the next eighteen months. Slightly more than 50% of our annual technology budget is invested in systems development and enhancement and slightly less than 50% is spent on operational maintenance. Approximately half of our technology budget is dedicated to our core system developments and upgrades, and the other half supports our front-end online system for clients, Passport[®].

Unlike many of our competitors (whose technology dollars cover many businesses), our clients can be assured that our investment is targeted at enhancing the asset servicing and asset management services we provide.

13. Discuss the Global Custodian marketplace and Northern Trust's relative success or failure in the current market.**NORTHERN TRUST DIFFERENTIATORS IN GLOBAL CUSTODIAN MARKETPLACE**

Northern Trust's core differentiators include our well-earned reputation for exceptional client service, technological infrastructure, and our sterling financial strength and stability. As it relates specifically to our capabilities as a global custodian, these are some of the features that separate us from our competitors:

A strong network. Our subcustodians' ability to provide us with quality information on all types of market events ensures the overall quality of our services. We dedicate considerable resources to selecting the highest quality providers and holding them to high standards. Over years of building relationships with subcustodians, we are able to leverage their local market expertise and identify service solutions that go beyond the industry-accepted service levels. Finally, we make this "on-the-ground" market intelligence available to clients, a key added value in our service model.

Best-in-class reconciliation process. We perform daily, position-level reconciliations of both stock and cash through what we believe is the most automated reconciliation practice in the market. The ability to ensure the accuracy of our books and records gives clients peace of mind, and positively impacts the accuracy of our event processing for items such as income, corporate action events, taxation issues, and proxy voting.

Customized support for client requirements. Our Subcustodian Network Management Team supports our clients with all specialized requirements in emerging or exotic countries. We go to great lengths to assist our clients with market entry, paperwork, and registration requirements.

¹ Formerly IGEFI



14. What “standards” of measure do other clients employ when evaluating Northern Trust’s Global Custodial capabilities? What standards does your firm utilize when performing a self-evaluation?

Trust/global custody is our flagship franchise. We cannot expect to grow if we are unsuccessful in serving our clients.

We are advised that clients use these GENERAL standards when evaluation Northern Trust’s custody capabilities:

- **Superior Service:** Sustain best-in-class service to clients, as evidenced by exceptional (90%) approval ratings in our annual client satisfaction survey.
- **Organic Growth:** Expand our capabilities and global reach, while focusing on core business lines and client satisfaction.
- **Technological Leadership:** Retain industry leadership with enhancements that enable our clients to efficiently serve their constituents.**Risk Management:** Maintain good stewardship of our organization from the perspective of operational, credit, interest rate and reputational risk.
- Performing a self-evaluation is aligned with our internal and external audit reviews combined with customer satisfaction ratings.

15. Detail Northern Trust’s perspective of SamCERA’s performance expectations for Northern’s accounting group, as spelled out in the contract and how Northern Trust is doing relative to those expectations.

We are currently operating under a 6 business day deadline for issuing audited accounting statements. Page 8 of Schedule A of the custody agreement calls for receipt of “holdings and transaction information” by the 4th business-day from all managers including Alternative investments- LBOs, venture capital, real estate, [hedge funds], etc. For each of SamCERA’s alternative investment funds, Annette Bryan, a Northern Trust technician with industry experience is assigned to handle all aspects of data collection, reconciliation, and problem resolution. She and her team, with the support of Patrick Fitzgibbons actively chase the managers and track receipt of statements. Of issue has been that some of the managers have not met deadlines for preliminaries or finals. In those instances, Annette is to contact and has been contacting the manager to ensure delivery of the statement.

Northern has been unable to meet the original deadline set by Schedule A of the agreement. A large reason is a need that arose from SamCERA to have an “official” preliminary performance report. With inconsistencies in receiving preliminary and/or final statements from each manager, consistently meeting the agreed upon deadlines has not been possible.

As a solution, we have been and are preparing to institute the Preliminary Hedge Fund Services (PHFS) will cover six “alternatives” that are typically a cause of reporting delay. They are

- o Panagora Diversified Risk-Multi Asset Series II
- o Panagora Diversified Risk-Multi Asset Series XI
- o Brigade Credit Fund II
- o Franklin Templeton Global Multisector
- o AQR Delta XN and,
- o AQR Global Risk Premium Fund III.

Following the timeline we examined for all the current holdings (spreadsheet is attached under Exhibit 4), combined with use of the PHFS product, an “official preliminary” performance can be run on the morning of the 8th B/D by SamCERA.



Contrary to the current 4th b/d, across the portfolio, all preliminary statements will have to be received by 2 PM CST of 6th b/d by Northern Trust to meet 8th business-day unaudited performance reporting.

Final statements received on or after 8th business-day will thru-up intra-month after preliminary and/or final data is issued.

Northern is to provide SamCERA with final audited accounting report by the COB of the 9th business day after month-end.

Northern is to provide SamCERA with final audited performance analytics reporting by COB 11 business days after month-end.

We still need to agree on the quarterly cycle given that several managers that cycle their audits quarterly don't have confirmed timelines. Presumably, we are to use stale values and meet specified deadlines.

We also need to review SSARIS Multi-Source Active Commodity Fund as well as Beachpoint Select to make sure both fit in the captioned timelines and add them to the final timeline matrix.

Separate from the "alternatives" valuing the publically traded assets has not been an issue. Neither has **Reporting on Assets Held By Treasurer which is a cash equitization product managed by the County that Northern Trust** incorporates into its reports for the Account the holdings of certain cash and cash equivalents held by the County of San Mateo Treasurer, as well as all cash and other transactions affecting such assets. Northern has been receiving the monthly activity by the agreed upon 4 business days before the agreed upon reporting date of 6th business-days.

16. Security lending – Any issues in how we utilize your services? What are the current trends in revenue sharing? How does our revenue split compare with your other security lending clients?

There are no issues with how SamCERA utilizes Northern Trust's securities lending program as the program is customized based upon SamCERA's risk tolerances. SAMCERA's earnings could potentially be increased through acceptance of additional borrowers. Revenue sharing in Securities Lending continues to be driven by the fee split sharing model. Fee splits have remained fairly stable with a slight increase to the client side over the more recent time frames. SamCERA's current fee split is very favorable to SamCERA relative to other public funds of similar lendable asset size and similar earnings potential. This is likely due to SamCERA being a recent entrant to Northern Trust's securities lending program.



Performance & Analytical Review

17. Provide a full review of the performance process, including (a) who is responsible for various stages of the process, (b) your assessment of adequacy of communication between performance and accounting, (c) which parts of your procedures are not functioning as well as you would expect.

OVERVIEW OF PERFORMANCE SYSTEM

Our internally developed performance system is a single, flexible, worldwide, multi-currency engine, which supports all asset classes and all clients regardless of geographical location. Our performance module offers tremendous flexibility and customization to properly analyze any investment strategy regardless of mandate or the investment program structure.

Performance data (positions, valuations, and transactions) is sourced directly from our accounting database. An extract from the accounting database to our performance module is triggered after each day's transaction activity and updated valuations have been processed.

Rates of return and other measures are calculated in accordance with CFA Institute, GIPS, and BAI standards.

Prior to producing any periodic performance reporting for the client, we reconcile return calculations using a series of automated on-line tools and exception-based reports to flag items falling outside of defined tolerance levels.

All of the following analytical information is available:

CALCULATION FREQUENCY

- Accounts, aggregations, and indexes: daily, monthly, and cumulative
- Universe composites and populations: quarterly and cumulative

FLEXIBLE CATEGORIZATION

- Total fund gross and net of fees
- Asset class returns
- Regional returns
- Variety of sector returns (GICS, FTSE, Russell, Style and Size, Fixed Income Sectors, and maturity bands, etc.)
- Custom categorization

SECURITY LEVEL RETURNS

- Security level returns sorted by market value or greatest asset impact
- Long-term, dollar-weighted rates for alternative assets

ATTRIBUTION

- Total plan fund
- Arithmetic and geometric equity models (for single currency)
- Arithmetic and geometric equity models (for multiple currencies)
- Stock level
- Arithmetic and geometric fixed income models (for single currency)
- Arithmetic and geometric fixed income models (for multiple currencies)
- Risk decomposition



CHARACTERISTICS

- Worldwide equity and fixed income security characteristics
- Portfolio vs. benchmark comparisons

COMPOSITES AND POPULATIONS

- Trust composites & populations: Corporate ERISA, Public Funds, and Not-for-Profits
- Multiple trust composites and populations based on fund size
- Multiple program universes for comparison to your aggregations
- Multiple asset class and style manager universes
- 3rd party universes from TUCS, Venture Economics, etc.

INDEXES

- Thousands of indexes from all index vendors
- Custom benchmarking support

MISCELLANEOUS

- Statistical calculations such as standard deviations, tracking error, Sharpe Ratios, etc.
- Correlation analysis for managers and asset classes
- Specialized support and analytics for private investment, including private equity, real estate, and hedge funds
- Ex-post Value at Risk
- “Peek-through” on commingled fund accounts

PRIVATE MONITOR™

Private Monitor™ is a comprehensive custom report for private equity and real estate investments that includes internal rates of return and funding and distribution ratios grouped by vintage year and type, portfolio asset allocation by partnership type, and opportunity costs analysis. Benchmarking reports depicting the private equity portfolio’s value added over the public market, your program versus the returns of other private equity and real estate programs, and universe comparisons by vintage year are included.

ADEQUACY OF COMMUNICATION

Our performance and accounting information utilize the same database. Using one database promotes accuracy of data across all reporting, so there is no need for a special reconciliation process. The benefit of a single database source is that the accounting audit provides the foundation for the performance audit.

Prior to preparing any periodic performance reporting for the client, we reconcile return calculations using a series of automated online tools and exception-based reports to flag items falling outside of client-defined tolerance levels.

Additionally, we can undertake a monthly performance sign-off with your investment managers. As an initial step, mutually agreed upon tolerances are determined for each fund manager. We then compare rates of return with investment managers and analyze discrepancies that fall outside of the tolerance levels. In the unlikely event that the source of a discrepancy cannot be identified, Northern Trust will stand behind its return calculation as an independent third party.



18. Describe the relative strength and longevity of your staff. Are any of your operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted.

IRAS STAFF OVERVIEW

All performance measurement and analysis is provided in-house through our IRAS group. The unit is staffed with 307 investment professionals, with service teams and support personnel located in all three major regions offering 24-hour processing and coverage.

Clients are assigned a dedicated Senior Consultant and Analyst. The Consultant is responsible for tailoring a performance analysis program that is aligned with a client’s specific needs. They also provide ongoing professional support and training to ensure that clients are able to fully utilize the power and utility of our performance product range and introduce new capabilities and enhancements. The Analyst works in support of the Consultant and with our Operations Group to ensure data quality.

Our Senior Consultants have more than 10 years of experience. These professionals typically have prior experience working at investment management firms, outside consulting firms, plan sponsor organizations, and other areas within Northern Trust.

Recognizing need for specialists in a complex investment environment, we also have three specialist teams dedicated to alternative investments, manager compliance, and ex-ante risk analysis, allowing us to bring additional resources to the relationship, when appropriate.

Our IRAS professionals are supported by:

- A dedicated Product Development Team
- Comprehensive Economic Research, Investment Research, and Accounting Teams
- Powerful systems architecture that provides the flexibility to meet clients’ evolving needs, and
- A dedicated staff of over 50 Information Technology professionals.

EXTERNAL VENDORS

Northern Trust has developed long-standing, solid working relationships with all of its vendors. The strength of our relationships has resulted in customized changes, excellent support, sufficient testing, and upgrades for our clients.

In order to provide the best capabilities available, we partner with external vendors who can enhance the information and expertise that we bring to our clients. In addition to reviewing vendors regularly, we develop customized solutions with them to meet our clients’ unique performance needs. The vendors we work with to provide the client with performance evaluation include:

- | | |
|---|--|
| ▪ BlackRock Solutions | ▪ ISS |
| ▪ Bloomberg | ▪ Evestment |
| ▪ The Burgiss Group | ▪ Morningstar |
| ▪ Compustat (S&P) | ▪ MSCI Barra |
| ▪ Datastream International | ▪ Reuters |
| ▪ Frank Russell | ▪ RIMES Technologies |
| ▪ Frontier Analytics | ▪ StatPro |
| ▪ FTSE Group | ▪ TUCS (Trust Universe Comparison Service) |
| ▪ Informa | ▪ Thompson Reuters |
| ▪ Interactive Data Fixed Income Analytics | |



19. What are your mission critical systems? Has your firm experienced any problems with these systems in the past eighteen months? When were these systems implemented and when were they last upgraded? Do you anticipate any changes to these systems in the next eighteen months?

Please refer to our response provided to Question 12 above for the requested information.

20. Discuss the Performance & Analytical marketplace and Northern Trust's relative success or failure in the current market.

We combine over 30 years of performance analysis experience and innovation with our robust and integrated technology platform to deliver timely, accurate, and customized decision support information to our clients. As a leading global custodian, Northern Trust stands in a class of its own when it comes to our performance analysis capabilities, due to our:

- **Experienced professionals** – All performance measurement and analysis is provided in-house through our Investment Risk & Analytical Services (IRAS) unit. The unit is staffed with more than 306 investment professionals with service teams and support personnel located in three major regions offering 24-hour processing and coverage. Client service teams are comprised of senior consultants who have more than 15 years of experience and possess either a graduate degree and/or a CFA designation. These professionals typically have prior experience working at investment management firms, outside consulting firms, plan sponsor organizations, and other areas within Northern Trust.
- **Powerful technology** – Our proprietary, single, multi-currency platform is tightly integrated within our single global operating platform, and provides daily and monthly performance measurement and related analytics to our clients worldwide, regardless of their geographical location. Integration with our custody accounting records ensures consistent processing, data integrity, a full audit trail, and fast turnaround times.
- **Sophisticated reporting** – Northern Trust provides analysis on a daily, monthly, and quarterly basis. All performance returns and analytics are integrated and available on-line in one module using Passport[®], which provides clients with daily, easy to use, interactive access. In other words, when analyzing a single manager or asset class, it is not necessary to move from module to module to retrieve a complete set of analysis (i.e. from attribution module to universe module to characteristics module, etc.). Our reporting has the flexibility to customize content, display, and formatting of data that populates our standard template-based reporting with the particular strategy employed by an investment manager. Other reporting features include:
 - ◆ A custom benchmark builder that allows us to create virtually any blended benchmark requested. It features flexible rebalancing intervals and component weighting schemes.
 - ◆ Support of custom categorization requests. For example, a client may wish to create a non-standard region for both an account and its benchmark.
 - ◆ In addition to creating the standard universes listed above, our universe module can support requests for parameter-driven custom universes. Clients can also create custom universes on-the-fly on Passport[®].
 - ◆ We offer a full set of attribution capabilities including total fund, equity, and fixed income. Our attribution reporting has a “carve out” feature that is used for investment accounts that employ multiple strategies. This feature allows clients to view results for a specific segment of the portfolio in isolation (in other words, the “carve out” is prorated to 100%). Another useful feature we have added to our attribution reporting is the ability to replace the index with a portfolio (portfolio vs. portfolio attribution), which makes it easier to compare differing results of two fund managers with the same mandate.



- ◆ As an extension of our attribution capabilities and using standard deviation, tracking error and information ratios, we also offer risk adjusted attribution.
- ◆ Leg level returns and exposures for derivatives
- ◆ Optional “Cost of Carry” return calculation for options and futures.
- ◆ Lagged and non-lagged performance results for alternative investments

Coupled with our 24-hour servicing and support infrastructure, we believe we are able to provide our clients with superior quality decision support content on a daily basis.

21. Detail Northern Trust's perspective of SamCERA's performance expectations for Northern's performance group, as spelled out in the contract and how Northern Trust is doing relative to those expectations.

Please see question 15 for details.



Outlook/Conclusion

22. What is Northern Trust's outlook for the Global Custodial marketplace?

Over the next couple of years, Corporate and Institutional Services (C&IS) has a straightforward plan to grow our asset servicing business:

- **Be where our clients need us, when they need us.** Northern Trust has global operating hubs in Chicago, London, Singapore and Bangalore. Supplemented by 18 additional worldwide offices, all locations are connected on a global technology platform that allows us to “pass the book” and provide 24/7 support around the world. We intend to expand our international presence, capabilities and client base to keep pace with globalization and client demand.
- **Leverage global expertise.** We maintain expert global staff and a top-tier subcustodian network which we expand in response to client demand. We aggregate local market expertise to strengthen our services, and share it with clients to support informed investment decisions.
- **Maintain our position of industry leadership.** Service excellence is a function of first rate people and peerless decision support technology. Sustained investment in such tools as risk management, compliance, performance measurement and online reporting is a central tenet of our plan. By investing in technology and services that alleviate the administrative burdens of our clients, we will continue to help them focus on their core strategies.
- **Execute plans for strategic growth.** We are deliberate in our growth strategy, balancing our expansion plans with a commitment to sustaining client service. Our clients appreciate this approach, as they derive benefits from added capability, while retaining attentive service.
- **Remember all of our stakeholders.** Supporting clients is our first priority. As part of that, we must also support shareholders by generating strong, stable returns, as well as provide employees with a positive work environment, competitive benefits and opportunities for professional growth.

23. What issues are other clients concerned with in regards to products, markets, education and governance?

Please see the chart on next page for trend of client concerns, although many such as those referencing 401(k)/457 defined contributions will not necessarily correlate with SamCERA's profile.



Facing market pressures

- Investment in alternative assets continues with heightened risk management challenges
- Increasing in-house management of investments with pressures to meet returns
- Pressure to reduce discount rates negatively impact funding ratios
- Continued pressure to lower costs or change cost structures

Meeting complex regulatory governance

- New GASB standards require more and more disclosures
- Need for greater transparency around private equity, hedge funds, derivatives and valuation techniques (fair value inputs)
- State legislatures continue to debate move to DC models
- Some have and others look to create DB/DC hybrids that pool managers as a cost-savings feature.

Greater need for education

- Enhanced transparency is key to monitoring and management of program risk
- Increasing importance in understanding all layers of risk
- Implementing asset allocations based on economics to met or exceed funding ratio
- Smoothing techniques, timeline and related impacts.

24. Describe your outlook on strategic partnerships.

Our outlook to effective strategic partnership is to marry our strengths with the operations needs of the SamCERA staff. With focus on custody services, the four cells that follow serve as a synopsis of ways that we partner with clients as a way that allows operational tasks to be virtually outsourced to Northern Trust:

Accounting	NTAM Investment and Brokerage Reps	Passport® and Web-based data access	Support to Investment Managers appointed by SamCERA
A pivotal service that brings to the forefront the truest value of Northern Trust's relationship SamCERA. That includes GAAP practices, but also regulatory support.	Focal contacts for investment services, including daily sweep of idle cash and also for investment index as well as brokerage related products, like commission recapture – all under one institution.t	Expert in the use of our online Web portal. Available to provide training to the staff of SamCERA and SIS., in the use of the system, aid in designing custom report packages, and working with technology staff to build out custom technology when and where required .	Primary contact for investment managers appointed by City of Atlanta. The IMLG team oversees Northern Trust's relationship with investment managers and serves as a point of escalation for resolving reconciliation or trade related issues.



25. Describe your assessment of the relationship between The Northern Trust and SamCERA. How can we better take advantage of your firm’s capabilities?

We believe we have developed a productive way of working together; a way that provides you with a high quality and responsive relationship while looking to minimize burden on staff. Reflecting on our experiences with SamCERA, we believe the following are of importance to you as well:

A strategist who works to track your return on investment

- Flexible tools for in-depth analysis of performance, risk and alternative assets
- Consultative support from industry experts who understand the public fund sector
- Technological and personnel resources to support derivatives, private equity, hedge funds, and other sophisticated assets in your investment strategy

A partner who understands superior service

- Information and communication tools that are customized to help you focus on what’s important
- Individualized service solutions built around your needs as a public fund
- Access to expert professionals who understand your organization and who deliver real value

An industry leader who meets both current and future needs

- A consultative approach that delivers value through top-quality products, services and people
- Integrated, flexible solutions for corporate actions, class actions, and risk management
- Reporting that gives you control over what you see and when you see it
An extensive suite of tools to help SamCERA fulfil regulatory reporting obligations accurately and with minimal disruption. SamCERA will continue to benefit from reporting packages and data analysis tools to facilitate reporting for GASB, and any other regulatory reporting required. As these requirements change, our product and accounting experts are looking ahead to your future needs, and are positioned to develop new solutions
- Better ways to take advantage of Northern Trust services include this operational and service oriented review. Other ways include product enhancement discussions of items like such as DataDirect (overview is attached as Exhibit 5). We also recommend:

Consultative: Hedge Funds Service and Outlook Publications

Board presentations on Class Actions, particularly on the class suit landscape in eth global markets and how Northern is positioned to support its US based clients.

Other periodic presentations to staff and/or the Board to discuss specific industry trends and direction that may clients are taking and product updates.



San Mateo County Employees' Retirement Association

SamCERA

Annual Custody Service Review

March 5, 2015

Gary Guibert
Client Executive for SamCERA

Patrick Fitzgibbons
Account Manager for SamCERA

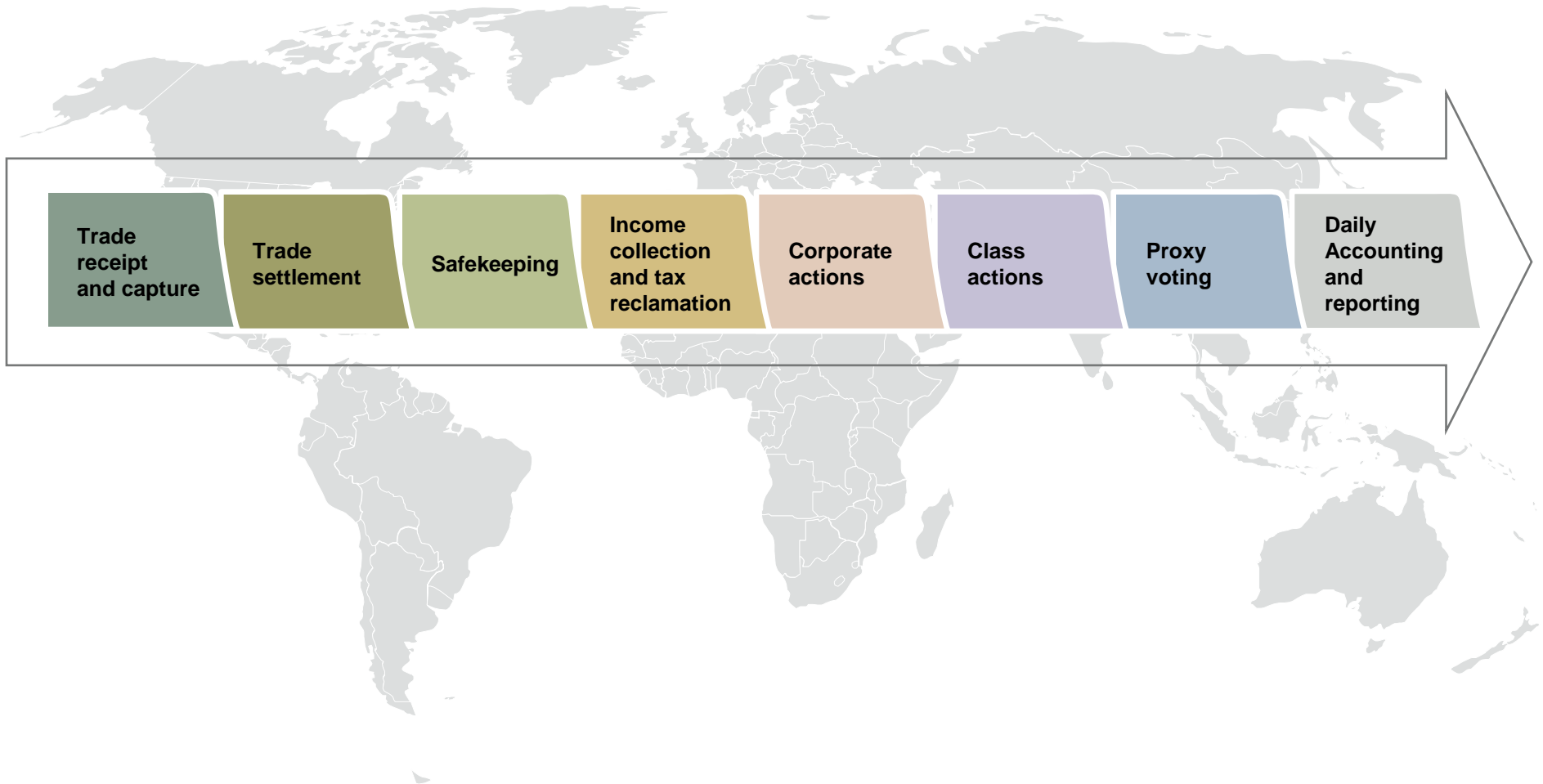
Patrick Mauloff
Investment Risk Consultant to SamCERA





Core Custody Service Suite

Northern Trust delivers process efficiencies, automation, scale and flexibility through our comprehensive asset servicing product offering.





Expertise Across The Full Custody Spectrum

Emphasis on automation, straight-through processing (STP), accuracy and timeliness...

reducing risk, enhancing efficiency, minimizing cost and ensuring transparency.

Trade receipt and capture

- Over 18.6 million trades processed globally annually
- A dedicated global team servicing alternative assets and non-STP investments

Safekeeping

- US \$4.76 trillion in assets under custody, US \$1.9 trillion in cross-border assets
- Covering over 100 markets

Class actions

- Gathering information, providing timely notifications, filing claims and posting disbursements

Web trade services

- Connected to over 2,700 end-points in the global brokerage community with automated communications to over 40 major custodians globally
- Hitting > 60,000 trades/month

Income collection and tax reclamation

- Income on payable date in 35 markets
- Tax reclamation and relief at source

Proxy voting

- On-line proxy voting in 48 markets

Trade settlement

- 98% of trades captured electronically across markets
- Contractual settlement in approximately 40 countries

Corporate actions

- Global processing in excess of 80,000 corporate actions every year

Accounting and reporting

- Single global, integrated, multi-currency platform servicing all investment participants





Award Winning Services Delivered Across A Single Platform

Leading edge technology

- Single global platform
- Round the clock processing, reporting and service provision with integrated data flow
- Delivery of daily and intraday data to client desktops via one portal; Passport.

Scale, experience, knowledge

- Processing about 19 million trades per annum (updated annually)*
- Fully integrated sub-custodian network, covering 102 markets
- Contractual settlement in 46 countries
- Income on payable date in 35 countries
- Proxy voting in 48 markets
- Industry leadership via active participation with DTC, ISITC, ISDA, Omgeo, SWIFT

Client satisfaction

- **Global Custodian Global Custody Survey (2011)**
 - ◆ Commended or top-rated in every rated category
- **Financial Times Pension & Investment Provider Awards**
Global Custodian of the Year (2011, 2009, 2008)
- **Professional Pensions Awards**
Custodian of the Year (2011, 2010)
- **Global Pensions Awards**
Custodian of the Year (2011)
- **The Asset**
Best Custody Specialist (2012)

As at 12/31/2012 (updated quarterly) unless otherwise stated
*Source: Northern Trust





Global Coverage, Local Expertise



20 global locations
 15,078 staff worldwide
 Services in **105** markets
 Clients in **46** countries



Supporting standard industry formats for communication.

Streamlined and efficient processing to support standard industry formats for communications

- Processed over US\$19.4 million trades globally in 2013
- 98.13% of trades are received electronically
- A dedicated global team for alternative assets and non-STP investments such as **private equity, infrastructure, real estate and over-the-counter derivatives**

Flexible options for automated trade receipt

- Deliver round the clock processing and support, not impacted by global holidays
- Support for standard industry formats for communication, including the receipt and delivery of ISO15022 SWIFT messages
- Flexible alternative communication methods and formats, including File Transfer Protocol (FTP)
- Ability to upload trade details directly into our Trade Notification application within Northern Trust Passport®
- Work with 3rd party trade matching and settlement vendors and automate the trade communication to Northern Trust
- Capture faxed trades electronically onto our PC imaging and workflow system, minimizing manual intervention and maximizing efficiencies
- Automated trade capture through Web Trade Services, Northern Trust's trade processing innovation with electronic connection to more than 2,700 end points in the global brokerage community





Trade Settlement

Broad market coverage across our global network.

Timely and accurate settlement

- Provide settlement for a broad spectrum of securities in over 100 markets
- Deliver 24-hour processing and settlement, with regional hubs in Chicago, Bangalore and London
- Partner with a network of sub-custodians and depositories to manage settlement in local markets
- Expert support teams for settlement of private market assets
- Support industry communication standards such as SWIFT
- Daily access to online reporting on settlement activity via Northern Trust Passport®
- Keep you up-to-date with local settlement procedures through regular AtlasSM bulletins

Controls delivering quality

- Drive enhanced settlement and STP rates through robust controls and procedures
- Perform pre-matching across more than 16 markets to resolve any trade discrepancies
- Employ automated daily reconciliations for securities and cash with sub-custodians and/or depositories
- Provide contractual and actual settlement date accounting for clients
- Use consistent processes with root cause analysis and clear escalation procedures to quickly identify and resolve any discrepancies





Safekeeping: Global Network Capabilities

Working with an established global network to protect and administer your assets.

Global coverage and oversight

- Over 100 markets open for investment
- Banks evaluated on credit, service and price
- Continuous monitoring by country managers
- Self-custody in Canada, Ireland, U.K. and U.S.

Experienced global team

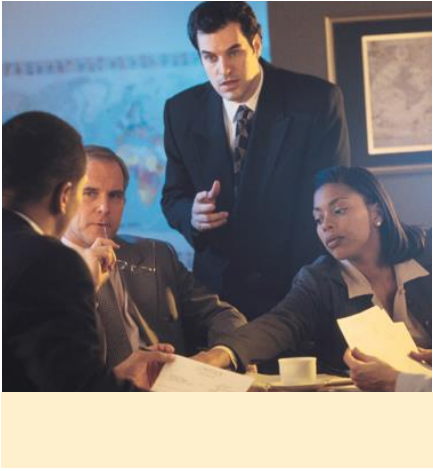
- 18 member team with extensive relevant industry experience
- Global support with team located in Guernsey, London and Singapore
- Regional coverage of market events
- Activities monitored by an oversight committee

Philosophy

- Best-of-breed selection approach
- Risk management
- Client focus
- Events analysis
- Continual monitoring and evaluation



Extensive Pricing Across Traditional and Alternatives Assets



Accurate pricing through a broad network of vendors and controlled processes.

Flexible pricing services

- Last traded, bid and offer basis for close of business or intra-day pricing
- Support for client-specific pricing vendor or source

Extensive experience in pricing esoteric, bespoke, illiquid and derivative assets

- Vendor feeds, primary and secondary broker quotations, in-house Bloomberg models
- Investments in technology and training

Global pricing policy with clear controls

- Global and local pricing committee
- Policy development - pricing policy is subject to constant review and is developed in line with changes in market practices
- Clear process for challenging prices
 - ◆ The “Northern Trust Price Challenge Form” is used
 - ◆ Dedicated team that maintains responsibility for receiving and responding to all price challenge requests
 - ◆ Price challenges are reviewed and if the manager price prevails, it is highlighted on your report





Reconciling Your Assets



Employing automated daily reconciliations for securities and cash with sub-custodians and/or depositories.

Tightly controlled reconciliation procedures

- We operate a daily, rolling reconciliation process for managing, controlling and monitoring our clients' stock and cash positions
- We reconcile, in many cases automatically, the securities and cash positions held on our custody system against the positions reflected by our subcustodians and local market depositories





Income Collection and Tax Reclamation



Support across multiple markets.

Income collection

- Income on payable date in 35 markets
- Direct links to income and corporate event sources such as DTC, Bloomberg, Extel, and Telekurs
- Contractual market claims on payable date
- Income posting process is fully automated
- Online accruals-based reporting

Tax reclaim

- Specialized team of tax experts focusing on securing relief at source arrangements
- Reclamation of withholding tax where necessary
- Regular reporting regarding the status of tax reclaims





Corporate Actions

A fully automated processing solution.

- Over 100 staff process corporate actions globally with specialist teams in Bangalore, Chicago and London
- Employing extensive information sources to capture and scrub / cleanse global corporate actions data
- Facilitating information via Corporate Actions Delivery and Response (online notification/voting application) and SWIFT
- Timely and accurate electronic notification of events within 24 hours of us receiving confirmed information from the market
- Zero tolerance policy on investment decisions, ensuring all elections are submitted within the required framework
- Rigorous operational oversight, including risk categorization at event level as well as additional levels of validation and sign-offs for complex events

Corporate Actions
Northern Trust
Passport Online Services
Help

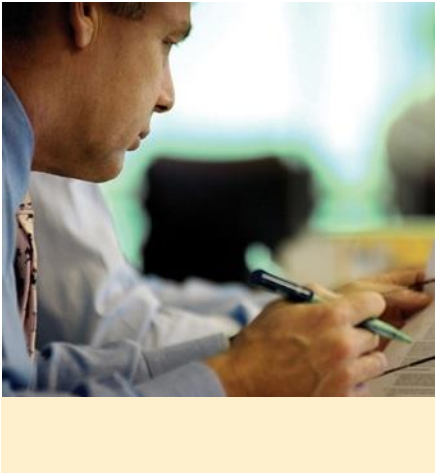
- Inbox
- Advice
- Entitlement
- Instruction
- Folder Options
- Refresh Messages
- Preferences
 - General Settings
 - Detail Settings
 - E-Mail Settings
- Print Options
 - Decision Sheet
 - Summary
 - Multiple Offers
 - Print Schedule
- Utilities
 - Mark Read
 - Mark Unread
- Exit

Date Sent	Chnry	Security	Offer Type	Date/Time	Msg. Type/Response	Rvwrd/ Priority/Message Status	Man/ Vol/Sl Ind	Upd Ind
Offer ID	Code	Description						
MAY 09 2003 5	2222CDR SEDOL	CDR WEB PHONE CONNECT LTD USD	ALLOTMENT OF BONUS	MAR 21 2009 11:59 PM GMT Etc-DATE	ADVCE	UNREAD	M	
MAY 09 2003 2	111111111 CUSIP	ILLINOIS ST TOLL CDR WEB TEST INTERNATIO USD	BID TENDER	MAR 27 2009 10:00 PM ET INSTRUCTION DATE	INSTRUCTION NO RESPONSE	UNREAD	V	
MAY 09 2003 3	222222222 CUSIP	CDR WEB HOLDING CORP USD	CASH MERGER	FEB 12 2009 10:00 PM ET CSTDN SWING DATE	ADVCE	UNREAD	M	
MAY 09 2003 6	3333CDR SEDOL	CDR WEB INTL MANAGERS INC USD	CONVERSION	MAR 22 2009 11:59 PM GMT Etc-DATE	ENTITLMENT	UNREAD	M	

Offers Expiring Today 06/11/2008												
Security Description	CUSIP	Offer Type	Protect Dt	Exp Time	Status	Discrepant Offer	Lending	Market Value	DTC Elg	Vol Proc	CAL Proc	Priority
TRCC CAP CORP RT	87244T117	Rights Subscription With Overstap	6/18/2008	1:15PM	Open	16	2	14,124.15	Y	VR7	VW2	HIGH
ST BARBARA LIMITED NPV	Q8744Q108	Rights Subscription		1:15PM	First Proof	0	0	212,048.80	N	CB12	JH14	REG9
CCH II LLC / CCH II CAP CORP 12502CAD3		Bid Tender		4:00PM	Open	0	0	22,246,000.00	Y	VR7	CLM	HIGH
CCH II LLC / CCH II CAP CORP 12502CAM		Bid Tender		4:00PM	Open	0	0	12,670,818.75	Y	MP44	CLM	HIGH
SR NT SER B												
AMERICAN WTR CAP CORP SR NT 144A 6.085%	03040WAA	144A Voluntary Exchange	6/16/2008	4:00PM	First Proof	0	0	78,847,190.66	Y	VR7	VW2	HIGH
AMERICAN WTR CAP CORP SR NT 144A 6.893%	03040WAC	144A Voluntary Exchange	6/16/2008	4:00PM	First Proof	0	0	51,536,163.06	Y	AT89	VW2	HIGH
GRAND BRS ENERGY CORPCOM	38522T105	Tender Offer	6/16/2008	4:00PM	First Proof	0	0	5,658.80	Y	DR65	EMT2	
SHAW COMMUNICATIONS INC CL B CONV	82028K200	Optional Dividend		4:00PM	First Proof	0	0	31,679,242.24	N	AT89	JH14	REG9
EATON VANCE OHIO MUN INCOME TR SH BEN	27826G109	Optional Dividend		4:00PM	Audited	0	0	13,816.00	Y	CB12	JG11	
BMK HIGH INCOME FD INC COM SIS	74963B105	Optional Dividend		4:00PM	Audited	0	0	12,987.45	Y	MP44	JH14	
BMK ADVANTAGE INCOME FD INC COM	74963L103	Optional Dividend		4:00PM	Audited	0	0	504,504.00	Y	DR65	JH14	
Number of Offers Expiring Today = 11								Total Market Value	197,742,553.91			

Automated notification and response technology via the Corporate Action and Delivery Response system (CDR)

12 A conversation with SamCERA



To provide you with “best-of-breed” solution, Northern Trust outsources the management of its proxy voting services to ISS for global proxy and Broadridge for U.S. proxy.

- Receive around-the-clock processing with global support from centers in London, Chicago and Singapore
- Global expertise supplemented with local servicing on the group
- Voting coverage in 48 markets
- A dedicated global proxy voting servicing team
- On-line proxy voting via Northern Trust Passport®
- Secure, straight-through processing of meeting notifications and voting instructions between you and your voting agent
- Provision of detailed and timely information
- Broad range of reports on a daily basis including:
 - ◆ Details of all meetings that have taken place that day
 - ◆ The votes that have been lodged on your behalf that day
 - ◆ Meetings where your proxy voting provider is still awaiting your instructions





Proxy Voting

We offer our worldwide proxy service in the following markets in conjunction with ISS.

Our service consists of immediate notification with full details and voting for these 48 non-U.S. markets.

Argentina	France	Luxembourg	South Africa
Australia	Germany	Malaysia	South Korea
Austria	Greece	Mexico	Spain
Belgium	Hong Kong	Netherlands	Sri Lanka
Brazil	Hungary	New Zealand	Sweden
Canada	India	Norway	Switzerland
China (Shanghai and Shenzhen)	Indonesia	Philippines	Taiwan
Czech Republic	Ireland	Poland	Thailand
Denmark	Israel	Portugal	Turkey
Euroclear	Italy	Russia	United Kingdom
Egypt	Japan	Singapore	Venezuela
Finland	Kenya	Slovak Republic	

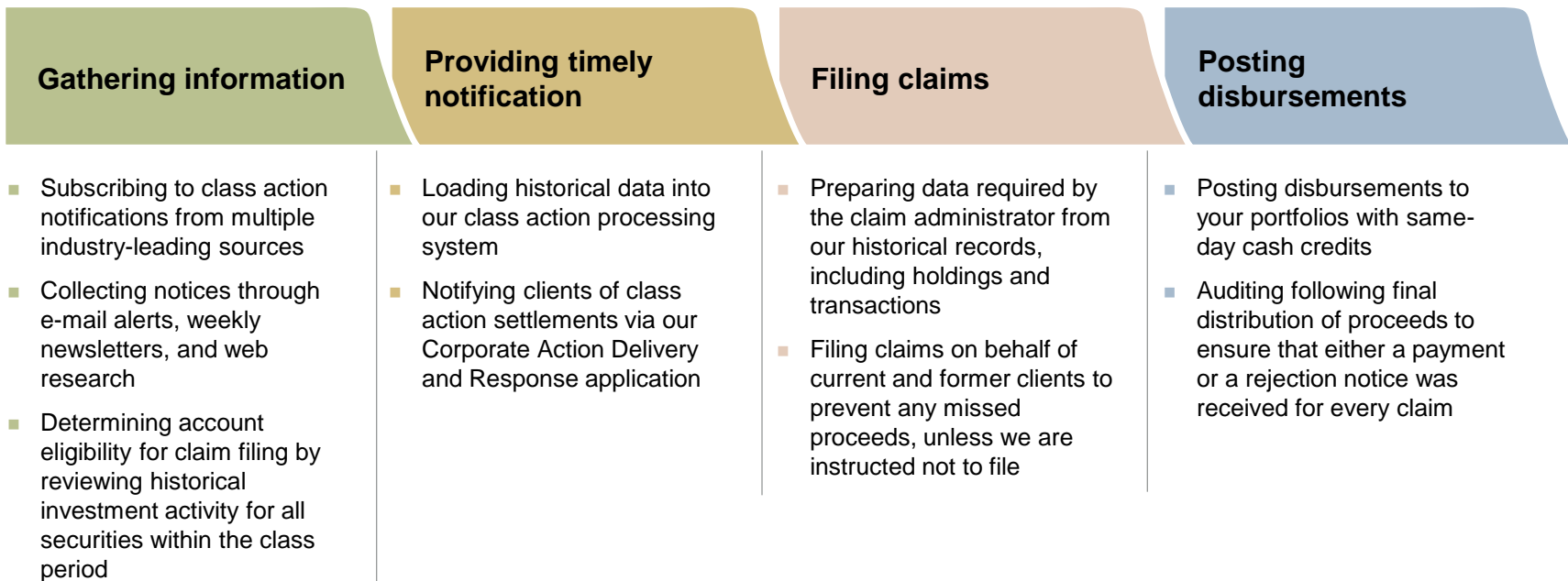




Class Actions

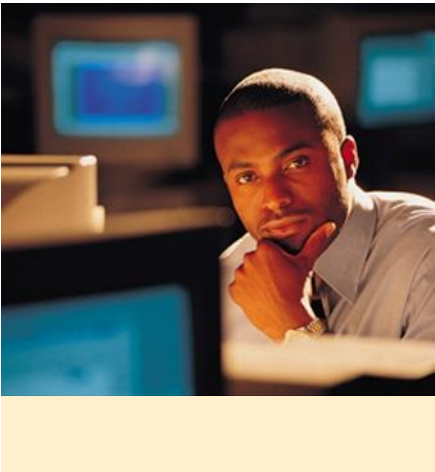
Our dedicated class action group focus on helping you receive settlement proceeds for any class actions settled in the U.S. courts.

As class action lawsuits and settlement funds continue to grow, working with an experienced partner gives you peace of mind that your business interests are being protected.



*We use multiple industry-leading sources for class action notification to ensure we can quickly identify and notify you of events that impact you. Through our integrated approach, we access and act on information quickly and efficiently on your behalf. **We have NEVER missed a class action settlement.***





Daily trade date accounting and multi-currency reporting solutions tailored to meet individual needs.

- Daily accounting and multi-currency reporting
- Accounting and performance from a single integrated data source, facilitating data accuracy and consistency
- Extensive range of derivatives reporting
- Daily information audits using Web-based automation tools
- A single source for all your information and reporting requirements through Northern Trust Passport®
- Daily unitized interface with T. Rowe Price, as record keeper to the Plan
- Suite of reports to help meet the reporting requirements set by Generally Accepted Accounting Principles (GAAP), Governmental Accounting Standards Board (GASB),
- Workshops and 'toolkits' to help clients understand and meet reporting requirements, e.g. GASB 53 and 67 'toolkit'





Northern Trust

125
YEARS



Trends and Challenges Facing Retirement Plan Sponsors

Achieving financial growth

- Funding ratios remain a challenge; sponsors respond by evaluating risk transfer options
- Growing use of diverse asset classes and strategies to increase alpha
- Continued pressure to lower costs or change cost structures
- Increasing in-house management by traditional asset owners

Meeting regulatory requirements

- Enhanced internal/external reporting requires automated solutions to replace manual processes
- Plan sponsors have a fiduciary duty to ensure that plan costs are reasonable
- Economic and political issues as well as complexity have increased the need for transparency and governance

Increasing focus on risk governance

- Asset mix continues to shift from the traditional equity/fixed income to include more derivative and alternative investments
- Increasing importance of counterparty/credit risk
- Heightened awareness and oversight of performance and risk measurement

Where Northern Trust adds value to SamCERA

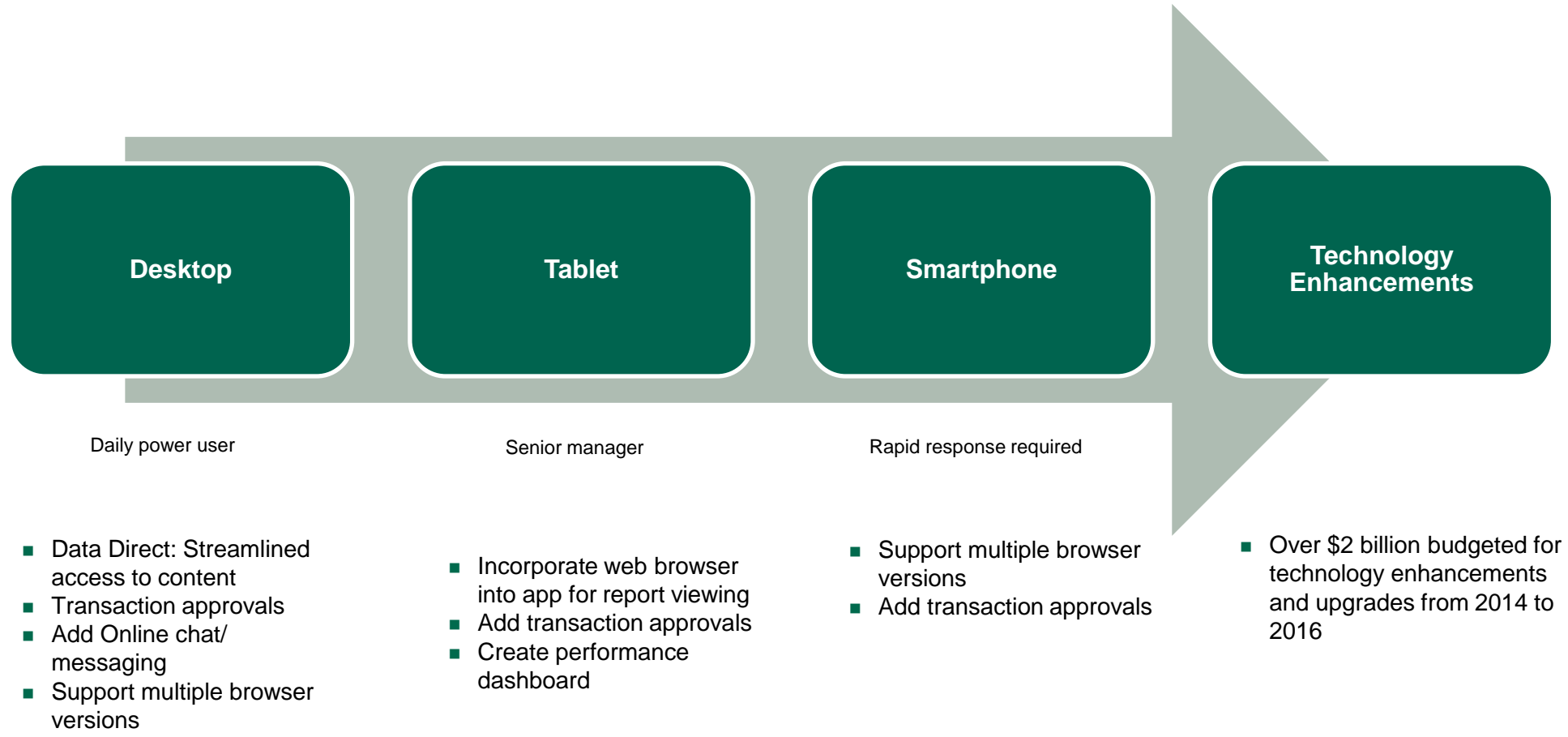
- Global technology platform enables clients to capture opportunities in markets across the globe
- Integrated portfolio information delivered quickly and efficiently in your designated format
- Ability to deliver information about total holdings in any one entity across exposure types, asset types and accounts with Policy Tree
- Specialized tools for alternative assets –, Preliminary Hedge Fund Services, etc.





Northern Trust Delivering Solutions: *Access to Answers*

A focus on SamCERA...real time data availability from multiple avenues



Differentiated Technology

Data Direct is an exciting new solution that saves you time and delivers you significant business value



“

Ultimately this is all about people. People who are motivated to excel on your behalf. The team at Northern Trust will deliver on our commitments. We will meet your needs today and exceed your future expectations.

”

Rick Waddell
Chairman and Chief Executive Officer



Northern Trust



Senior Management Oversight

Rick Waddell (fhw)
Chairman/CEO of Northern Trust Company

David W. Fox (dwf2)
Head of North America

Relationship Management

Jeffrey Porta (jmp6)
Manager, Public Funds Division
(312) 557-0474

Gary Guibert (gjj1)
Client Executive
(312) 444-5913

Client Servicing Team

Day-to-day Contacts

Patrick Fitzgibbons (pjf2)
Custody Account Administrator
(312) 557-1819

PFAAdmin@ntrs.com
Back-up Account Manager
Lindsay Amborski (lc39)
Account Administrator Management
(312) 557-4052

Don Anderson (dsa3)
Sec. Lending Relationship Manager
Patrick Mauloff (pm50)
Investment Performance Returns
(312) 557-0983

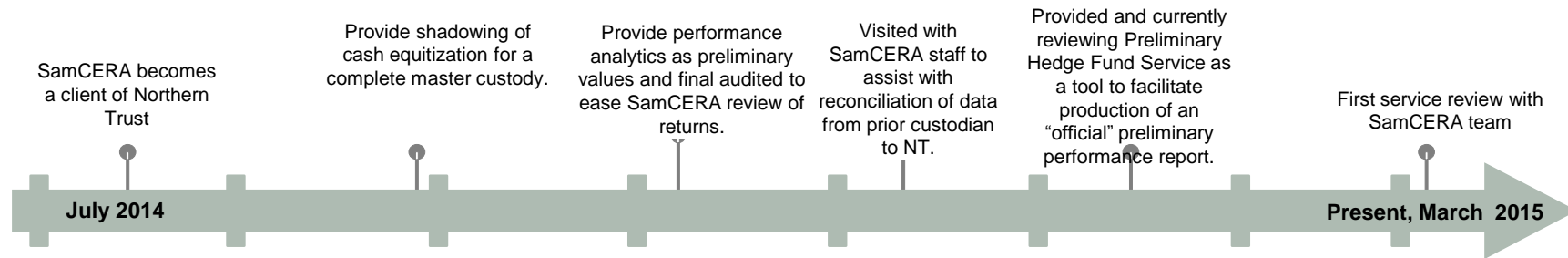
Custody Book of Record	Audited Accounting Record
Daily Core Custody	Monthly Accounting Reporting
Post Trade Compliance	Consolidated Reporting
Cash Management	Annual Audit Reporting
Securities Lending Earnings	GASB Reporting and Consulting
Foreign Exchange	CAFR Support
Global Investments	Automated Data Feed

Service Delivery Teams

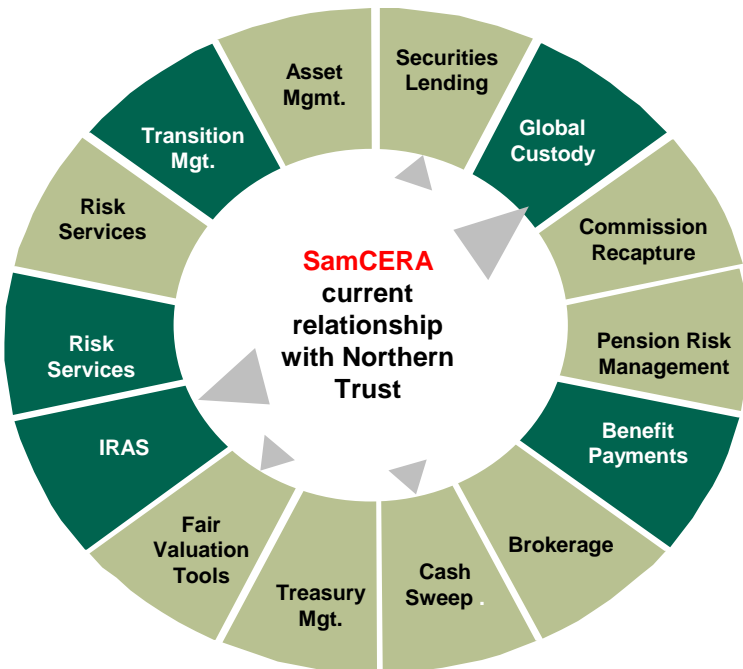
	Global Custody Operations	Investment Management Liaison Group	Private Equity, LP, Alternatives	Tax Reclamation	
Asset Pricing & Coding	Trade & Cash Processing	Accounting & Regulatory Reporting	Income Processing	Corporate & Class Actions	Proxy Services
	Technology Support	Passport Consulting	New Business Consulting	Transition Management	

Our Relationship in Summary

Relationship Timeline



Services Provided



Key Highlights

- Implemented shadow-posting of cash program managed by the County to offer a master custody consolidation to SamCERA
- Tracked statement related timelines for all "alternatives" held in the account to improve reporting efficiencies.
- Striving to enhance performance reporting to provide additional analytics to enhance "risk" governance

Adding Value Highlights

- **Helping clients manage risk:** enhanced pricing, expense, and fee reporting to provide more transparency
- **Enhancing client connections and data security:** added Passport capabilities to securely initiate transaction globally and to provide cash movement alerts to stay connected to your portfolio
- **Addressing regulatory and accounting change:** created reporting to assist you with accounting standards – GASB 40, 53, 67 and Fair Value.



Important Information

Northern Trust Corporation, Head Office: 50 South La Salle Street, Chicago, Illinois 60603 U.S.A., incorporated with limited liability in the U.S.

The Northern Trust Company, London Branch (reg. no. BR001960), Northern Trust Global Investments Limited (reg. no. 03929218) and Northern Trust Global Services Limited (reg. no. 04795756) are authorised and regulated by the Financial Services Authority.

The material within and any linked material accessed via this communication is directed to eligible counterparties and professional clients only and should not be distributed to or relied upon by retail investors. For Asia Pacific markets, it is directed to institutional investors, expert investors and professional investors only and should not be relied upon by retail investors.

Northern Trust (Guernsey) Limited, Northern Trust Fiduciary Services (Guernsey) Limited, and Northern Trust International Fund Administration Services (Guernsey) Limited are licensed by the Guernsey Financial Services Commission. Northern Trust International Fund Administrators (Jersey) Limited and Northern Trust Fiduciary Services (Jersey) Limited are regulated by the Jersey Financial Services Commission. Northern Trust International Fund Administration Services (Ireland) Limited, Northern Trust Securities Services (Ireland) Limited and Northern Trust Fiduciary Services (Ireland) Limited are regulated by the Central Bank of Ireland. Northern Trust Global Services Limited has a Luxembourg Branch, which is authorised and regulated by the Commission de Surveillance du Secteur Financier (CSSF). Northern Trust Luxembourg Management Company S.A. is regulated by the Commission de Surveillance du Secteur Financier (CSSF). Northern Trust Global Investments Limited has a Netherlands branch, which is authorised by the Financial Services Authority and subject to regulation in the Netherlands by the Autoriteit Financiële Markten. Northern Trust Global Services Limited has a Netherlands Branch, which is authorised and regulated in the Netherlands by De Nederlandsche Bank. Northern Trust Global Investments Limited has a Sweden branch, which is authorised by the Financial Services Authority and subject to regulation in Sweden by the Finansinspektionen. Northern Trust Global Services Ltd (UK) Sweden Filial is authorised by the Financial Services Authority and subject to regulation by the Finansinspektionen. Northern Trust Global Services Limited operates in Abu Dhabi as a Representative Office. Our registered office is authorized and regulated by the Central Bank of the United Arab Emirates. The Northern Trust Company operates in Australia as a foreign authorized deposit-taking institution (foreign ADI) and is regulated by the Australian Prudential Regulation Authority. The Northern Trust Company has a branch in China regulated by the China Banking Regulatory Commission. The Northern Trust Company of Hong Kong Limited is regulated by the Hong Kong Securities and Futures Commission. Northern Trust Global Investments Japan, K.K. is regulated by the Japan Financial Services Agency. The Northern Trust Company has a Singapore Branch, which is a foreign wholesale bank regulated by the Monetary Authority of Singapore. The Northern Trust Company operates in Canada as The Northern Trust Company, Canada Branch, which is an authorised foreign bank branch under the Bank Act (Canada). Trustee related services in Canada are provided by the wholly owned subsidiary The Northern Trust Company, Canada, an authorised trust company under the Trust & Loans Companies Act (Canada). Deposits with The Northern Trust Company and its affiliates and subsidiaries are not insured by the Canada Deposit Insurance Corporation.

IRS CIRCULAR 230 NOTICE: To the extent that this message or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law. For more information about this notice, see <http://www.northerntrust.com/circular230>.



SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 6.3

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer



SUBJECT: Report on Parametric / Clifton Group Overlay Annual Review

Staff Recommendation:

Review the report on the annual review of SamCERA's overlay manager.

Background:

Clifton was hired in May 2013 to provide overlay management services to SamCERA. Clifton provided securitization of total fund cash, manager cash equitization, and overlay transition management services initially, while portfolio rebalancing was added in January 2014.

The Clifton Group was acquired by Parametric Associates on December 31, 2012. Parametric has rebranded the Clifton Group operations as Parametric Minneapolis. All of the overlay activities are performed out of this office. SamCERA is in the process of relabeling Clifton Group as Parametric Minneapolis in its performance reports.

Discussion:

On March 5th, SamCERA staff held the annual review meeting in SamCERA's office for the Parametric Minneapolis Overlay strategy. Ben Lazarus and Dan Wamre attended from Parametric Minneapolis.

The meeting lasted approximately 1.5 hours, and consisted of a firm/organizational update, investment process review, and performance review and attribution.

There were no significant concerns identified during the portfolio review. Overall program results were positive for the year, and in-line with longer-term value-add projections. From inception through January 2015, the overlay activities added approximately \$5.4 million in gains, or 12 basis points to the total plan return.

Attachments:

- A. *Parametric Minneapolis Annual Review Questionnaire*
- B. *Parametric Minneapolis Performance Review Presentation*

PARAMETRIC MINNEAPOLIS PIOS CASH OVERLAY
SamCERA's ANNUAL REVIEW QUESTIONNAIRE

ORGANIZATIONAL UPDATE

- 1. Provide an update on your firm's organization, with particular emphasis on (a) changes to your structure over the past eighteen months, (b) growth and acquisition of assets under management, (c) clients gained or lost in the past year, and (d) recent corporate acquisitions, including negative and positive effects. All significant changes should be accompanied by an explanation.**

a) Changes to your structure over the past eighteen months

There have been no significant changes in Parametric's, ownership, structure, or financial condition during the last eighteen months. Parametric Seattle is currently in process of succession planning given the departure of David Stein, its Chief Investment Officer. Details of the succession planning are referenced below.

David Stein has announced his plan to retire from Parametric on October 31, 2015, after 19 years as Chief Investment Officer. In anticipation of this transition, Parametric made changes to its investment leadership that became effective November 1, 2014.

As of November 1, 2014, Tom Seto became Head of Investment Management and continues to lead portfolio management and trading activities. Paul Bouchey became Seattle Investment Center Co-Chief Investment Officer alongside David Stein. Tim Atwill became Head of Investment Strategy, reporting to the Seattle Investment Center's Chief Investment Officer. David Stein stepped down from the Executive Committee, and Tom Seto and Paul Bouchey joined.

For the six-month period ending April 30, 2015, David Stein and Paul Bouchey will share and transition Chief Investment Officer responsibilities, after which Paul will become sole Chief Investment Officer for the Seattle Investment Center. Following the Chief Investment Officer transition, David will continue at Parametric until his retirement as Senior Investment Advisor, and Tom and Paul will report to Parametric Chief Executive Officer, Brian Langstraat.

The changes in the management structure referenced above do not affect the strategy contemplated herein. The management group of the Minneapolis Investment Center, where the proposed strategy is managed, remains intact and there is no expected change in the foreseeable future.

b) Growth and acquisition of assets under management

Parametric Minneapolis has experienced consistent growth in new client relationship and assets under management for many years and expects this to continue in the foreseeable future. Our focus will continue to be on helping institutional investors create and implement custom risk management

solutions. We will continue to enhance our existing investment strategies and services and look for new strategies consistent with our rules based, transparent, and risk controlled investment philosophy.

c) **Clients gained or lost in the past year specific to the overlay strategy**

	Overlay Relationships Gained		Overlay Relationships Lost	
	# of	\$MM	# of Accounts	\$MM
2014	28	4,899	3	0

d) **Recent corporate acquisitions, including negative and positive effects. All significant changes should be accompanied by an explanation.**

The assets of The Clifton Group (“Clifton”) were acquired by Parametric Portfolio Associates LLC (“Parametric”) on December 31, 2012. At that time, all Clifton employees became employees of Parametric. Clifton’s office located in Minneapolis, MN is now referred to as the Minneapolis Investment Center of Parametric. The Minneapolis Investment Center operates as a separate P&L within Parametric and continues have its own investment, operations, client service and technology organizations that support its Minneapolis based investment strategies and products. Parametric’s acquisition of The Clifton Group has had a positive impact on Parametric’s Minneapolis Investment Center’s (formerly The Clifton Group) employees and clients. During the past two years as part of Parametric, the Minneapolis Investment Center has experienced record levels of new client acquisition and associated AUM growth while at the same time experiencing very low levels of client attrition. The physical office in Minneapolis has been expanded to accommodate the staff growth that has occurred to support this client growth. The Minneapolis Investment Center has continued to enhance its existing products and services as well as the functionality and capabilities of its proprietary technology. All of the senior leaders who managed The Clifton Group at the time of the acquisition continue to lead the Minneapolis Investment Center.

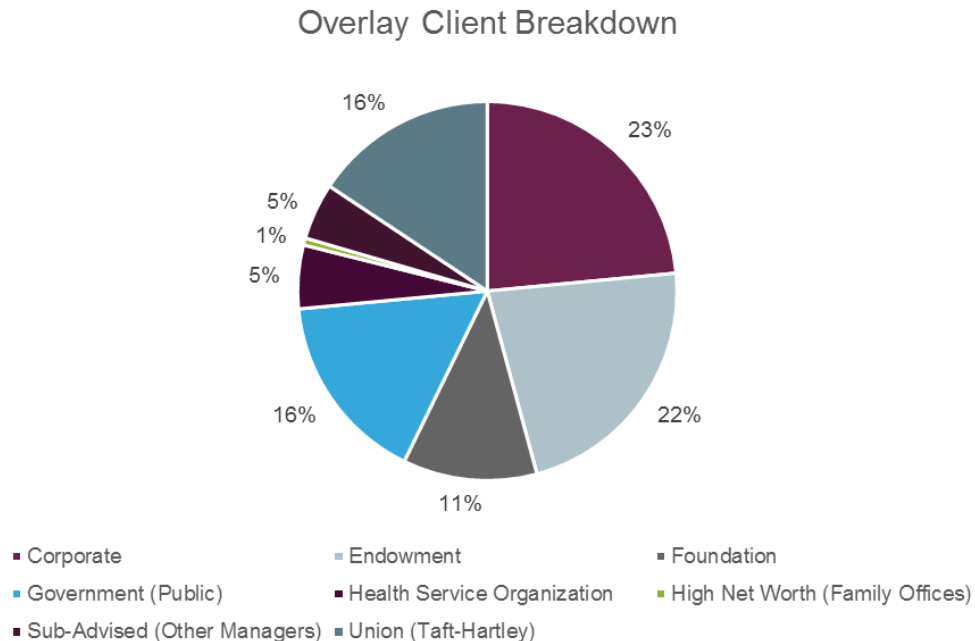
2. **Outline the firm’s strategic focus and growth targets over the next three years, including new investment strategies or products currently under consideration.**

Parametric Minneapolis has experienced consistent growth in new client relationships and assets under management for many years and expects this to continue for the foreseeable future. Our focus will continue to be on helping institutional investors create and implement custom risk management solutions. We will continue to enhance our existing investment strategies and services and look for new strategies consistent with our rules based, transparent, and risk controlled investment philosophy. Currently, the firm’s resources are focused on servicing clients and developing new relationships in our existing product offerings.

To manage this growth and control operational risks, the firm has made, and continues to make, significant investments in its proprietary technology platform that supports portfolio management, order management, operations, accounting, and compliance. We will also continue our past practice of hiring additional personnel in advance of our anticipated needs to make sure our growth in new clients does not negatively impact our ability to provide outstanding service and support to our existing clients.

3. Provide a breakdown of assets under management (AUM) by client and asset class/product type, in \$US millions.

As of December 31, 2014, Parametric Minneapolis manages over 160 overlay client relationships covering over \$52.24 billion in assets. Our current asset size and number of clients is a result of institutional investors demanding a comprehensive and customized risk management overlay program. As the product is managed in the Parametric Minneapolis Investment Center, a breakdown of overlay clients by product type is presented below:



4. Specify separately the individuals (up to ten) who you feel are key to the success of your firm. If the list has changed in the last eighteen months, identify and explain the change(s).

Below are the Minneapolis Investment Center heads of business:

Orison "Kip" Chaffee, CFA, Managing Principal

Jack Hansen, CFA, Chief Investment Officer

Justin Henne, CFA, Managing Director – Customized Exposure Management

Tom Lee, CFA, Managing Director – Investment Strategy & Research

Vlad Gomelsky, Chief Technology Officer

Eric Prawalsky, Operations Manager

Jennifer Diadoo, Marketing Manager

Jane Henning, Accounting Manager

Kelly Shelquist, Director of Operations

During the past eighteen months there were no changes to the heads of business.

- 5. Describe your firm's management succession plan. Have dates been established regarding the succession of any key personnel, specifically those reported in the preceding questions?**

Succession planning is a key element integrated in all functions at Parametric. The firm supports open communication and a collaborative environment between team members and with other departments at the firm. There is significant overlap between roles and responsibilities within each department at the firm; members work closely together, and can serve as backup for one another in the instance of a departure or absence. Importantly, continuous overlap and an openly collaborative environment support the continuity of Parametric's various departments and helps mitigate risks due to a departure.

Succession planning is also built into our investment process at Parametric. Our style of asset management does not rely on the investment perspectives of a single individual. Instead, Parametric uses a team format to manage its strategies, and the investment team structure differs from the conventional Portfolio Manager/Analyst setup seen at many firms. The overlay program in particular does not rely on any active decisions and is thus not susceptible to any key departures.

- 6. Has your firm or any of its employees been involved in regulatory or litigation actions related to your business in the past eighteen months? E-mail your firm's most recent ADV Parts I & II to investments@samcera.org.**

There are no currently pending lawsuits or arbitration proceedings against Parametric or any affiliate of Parametric controlled by it. There are also no current pending lawsuits or arbitration proceedings against any principal or employee of Parametric that relates to any such person's service as an employee of Parametric.

The firm's most recent ADV Part 1 and Part 2A & 2B are attached as **Appendices A & B**.

- 7. When did the Securities & Exchange Commission, Attorney General, or the Financial Industry Regulatory Authority (FINRA) last audit your firm? Please note any material findings or recommendations.**

The SEC conducted a routine examination in 2011 of Parametric's Minneapolis Investment Center (formerly The Clifton Group). Prior to the acquisition as of 12/31/12, recommendations included updating written policies and procedures and enhancing disclosures contained in the ADV Part 2. Information contained in a limited number of marketing pieces was changed as a result of the exam. All agreed upon recommendations from the SEC have been implemented.

The SEC conducted a routine examination of the Parametric Seattle Investment Center in 2010, prior to the acquisition of The Clifton Group.

Parametric Minneapolis received its deficiency letter in January of 2011. The examiners reported deficiencies relating to the following areas:

- Performance advertising: The SEC requested that Parametric add a representative example to our gross-of-fees disclosure and enhance its after-tax return disclosure.
- Cash payments for indirect client solicitation: Because our sales persons are paid a commission calculated as a percentage of the advisory fees received from clients obtained through their efforts, the SEC considered them to be solicitors under Rule 206(4)-3. To comply with the Rule, they advised that Parametric enter into written agreements with each of its sales persons.
- Code of Ethics: The SEC recommended that Parametric add independent contractors as access persons under our Code of Ethics. The SEC also commented that Parametric should be collecting Annual Holdings Reports, in addition to the quarterly Personal Trading Disclosures, from all access persons.
- Form ADV: The SEC recommended that Parametric describe in more detail the relationship and arrangements Parametric has with its parent company, Eaton Vance Corp.

In its response letter to the SEC, Parametric agreed to implement all of the SEC's recommended changes. The SEC wrote to Parametric shortly after to let it know that they had no further comments.

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

The Firm's insurance is attached as **Appendices C, D, and E**. Parametric Minneapolis currently maintains the following insurance coverage:

Type	Carrier	Amount
Investment Company Blanket Bond Insurance	ICI Mutual	\$85,000,000 Occurrence Limit in excess of \$150,000 Deductible amount
Directors & Officers/Errors & Omissions Liability Insurance	ICI Mutual Twin City Fire Alterra American Everest National Arch Insurance Companies Axis Ins. Co.	\$100,000,000 Aggregate Limit in excess of \$1,000,000 Deductible amount
ERISA Bond Insurance	Berkley Regional Federal Insurance Co. (Chubb) Great American Insurance Co. Continental Insurance Co. (C.N.A.) Hanover Insurance Co. Axis Insurance XL Specialty Insurance Co	Aggregate Limit: 10% OF ACCOUNT up to a maximum of \$500,000 per plan (\$1 million if plan holds employer securities), whichever is less.

Type	Carrier	Amount
Cyber Risk Liability Insurance	National Union Fire Insurance Co., a subsidiary of AIG	Up to \$5 million

9. Has your firm ever submitted a claim to your errors and omissions, liability, fiduciary or fidelity bond carrier(s)? If so, describe each instance.

Yes, Parametric Minneapolis (formerly The Clifton Group) had an insurance claim that was made in 2005; additional information can be provided subject to a confidentiality agreement.

10. Do you have a written policy on ethics? If so, please e-mail the policy to investments@samcera.org.

Please refer to **Appendix F** for a copy of the Firm's Code of Ethics.

11. Provide the location of your firm's investment and accounting back-office staff. Are any of your investment activities or operations outsourced? If the answer is yes, provide details regarding the firm(s) with which your firm has contracted. Are any of these firms considered affiliates of your firm?

The location of the investment and accounting back-office staff for the overlay strategy is in the Parametric Minneapolis Investment Center. Parametric Minneapolis does not outsource investment activities or operations.

12. What are your mission critical systems? Has your firm experienced any problems with these systems in the past eighteen months? When were these systems implemented and when were they last upgraded? Do you anticipate any changes to these systems in the next eighteen months?

Parametric Minneapolis uses our proprietary Investment Management System (IMS) to facilitate all aspects of our business including front and back office. All of Parametric Minneapolis' clients are housed in IMS, including corresponding contracts, rules, and guidelines. The portfolio management section of the system supports all of Parametric Minneapolis products and services. The system is used by Portfolio Managers and Investment Analysts to implement clients' objectives by applying client-specific configuration, rules and guidelines to existing positions, market data, and external manager data feeds.

13. Provide an overview of your firm's business continuity plan as it relates to the investment process.

Parametric Minneapolis' disaster recovery overview is attached as **Appendix G**.

14. E-mail your firm's most recent SSAE 16 Report or equivalent to investments@samcera.org.

In 2014, Parametric's Seattle Investment Center had a third-party service provider complete an SSAE 16 Type 1 audit of its institutional business operations. The SSAE 16 report is available upon request. The SSAE 16 does

not include the institutional business operations of the Parametric Minneapolis Investment Center.

Parametric's Minneapolis Investment Center currently does not have an SSAE 16 but has designed its systems, policies, and procedures around the protection of client assets and confidentiality. Parametric's Minneapolis Investment Center periodically reviews and tests investment strategies for client and firm guidelines. As a registered investment adviser, Parametric is regulated by the Securities and Exchange Commission and the Commodity Futures Trading Commission through the National Futures Association. The regulatory environment has increased certain requirements placed on registered advisors including controls in regards to client confidentiality, business continuity, and custody. On an annual basis, the Internal Audit Department of Eaton Vance Corp. ("EVC"), in conjunction with the Enterprise Risk Management Committee, completes a company-wide risk assessment, which includes Parametric. The results of the risk assessment are used to develop a risk-based audit plan, which is approved by the Audit Committee of the Board of Directors of EVC. The internal audit plan of EVC takes into consideration a multitude of factors, including the scale, nature, and complexity of individual operations and subsidiaries. The internal audit plan is refreshed quarterly and updates are made as circumstances dictate. In the 2nd quarter of 2014, the Internal Audit Department completed an audit of Parametric. Issues identified through internal audits are confidential and communicated to the business area under review, senior management, the Audit Committee and external audit. All issues raised through the audit are tracked through to resolution by Internal Audit and status is reported to the EVC Audit Committee.

INVESTMENT TEAM

- 15. Specify separately the individuals (up to five) who you feel are key to the success of SamCERA's product and describe their respective role(s) and experience. Also indicate the location(s) of these individuals. In addition, indicate other responsibilities, both in terms of investment products and management/administrative duties, for each of the named individuals and provide an estimate of the percentage of time each spends managing the strategy. If this list has changed in the last eighteen months, identify and explain the change(s).**

Jack Hansen

Chief Investment Officer – Minneapolis Investment Center

Mr. Hansen joined Parametric in 1985*. As Chief Investment Officer, his responsibilities include the management of investment operations and portfolio management. Jack has managed futures, swaps, options, and other derivative based programs since 1986. Jack earned a B.S. degree in finance and economics from Marquette University and a MS in finance from the University of Wisconsin, Madison. He is a CFA charterholder and member of the CFA Society of Minnesota. Jack writes and lectures on the use of derivatives in portfolio management. Mr. Hansen dedicates 75% of his time to the overlay strategy and 25% to Systematic Alpha.

Justin Henne

Managing Director – Customized Exposure Management

Mr. Henne joined Parametric in 2004*. Justin leads the investment team responsible for the implementation and enhancement of Parametric's Customized Exposure Management product. Justin has extensive experience trading a wide variety of derivative instruments in order to meet each client's unique exposure and risk management objectives. He continues to have responsibility to design, trade, and manage overlay programs. Justin holds a B.A. in Financial Management from the University of St. Thomas. He is a CFA charterholder and a member of the CFA Society of Minnesota. Mr. Henne dedicates 100% of his time to the Overlay strategy.

Dan Wamre

Senior Portfolio Manager

Mr. Wamre joined Parametric in 1995* working part-time in the company's internship program and started full-time in 1998. As a Senior Portfolio Manager, he is responsible for leading a team of investment professionals responsible for designing, trading, and managing overlay portfolios. Dan has extensive experience helping clients and consultants manage portfolio exposures and risk through futures and options-based strategies. Dan earned a B.S. from North Dakota State University and an MBA in finance from the University of Minnesota. Prior to joining Parametric, Dan spent four years as a Platoon Commander/ Executive Officer in the United States Marine Corps. Upon completion of graduate school, Dan spent ten months working as a commercial banking credit analyst for U.S. Bank in Minneapolis. He is a CFA charterholder and a member of the CFA Society of Minnesota. Mr. Wamre dedicates 100% of his time to the Overlay strategy.

Alex Braun

Assistant Portfolio Manager

Mr. Braun joined Parametric in June 2010* as an Investment Analyst. In 2013, he was promoted to Assistant Portfolio Manager working primarily in the PIOS®. His current responsibilities include designing, trading and managing overlay portfolios, as well as assisting in the commodities area as necessary. Mr. Braun holds an undergraduate B.S. degree in both Finance and Accounting from the Carlson School of Management at the University of Minnesota. He is a CFA charterholder and a member of the CFA Society of Minnesota. Mr. Braun dedicates 100% of his time to the Overlay strategy.

PERFORMANCE

- 16. Indicate established performance targets or expectations (e.g., absolute return, relative return, volatility, tracking error) for the strategy. Has the strategy achieved these targets on a net basis? Regarding the expected sources of relative positive return, how has expectations differed with actual results?**

Parametric Minneapolis is utilizing a passive strategy that seeks to track the customized benchmark, less the embedded financing and trading costs associated with using futures to manage liquidity pools with best levels of tracking error.

17. Are SamCERA's investment guidelines adequate? Do the guidelines impose constraints on the portfolio that would result in a significant dispersion from other portfolios? If so, please provide details.

To the best of our knowledge, SamCERA's investment guidelines are adequate. We do not believe the guidelines impose constraints on the portfolio that would result in a significant dispersion from other portfolios.

Parametric Minneapolis assisted in customizing SamCERA's overlay investment philosophy through the Investment Policy Guidelines template to reflect specific fund objectives. Items included: assets to be incorporated in the program, target allocations, fund rebalancing thresholds, asset class benchmarks, and reporting needs. This document is posted to Parametric Minneapolis' secure website for SamCERA/consultant viewing, and is used to determine how overlay positions are adjusted as markets, fund exposures, and cash balances change.

18. Please discuss the strategy's performance relative to the benchmark for the one, three and five year periods ending March 31, 2014.

SamCERA's March 2014 monthly performance report is attached as [Appendix H](#).

The program's inception was 8/6/2013 and the March 2014 report captures approximately 8 months of performance. Since the program's inception the return is approximately 6 bps (gross of fees) over the benchmark return.

OPERATIONS, TRADING, CONTROLS & RISK MANAGEMENT

19. Describe your trading procedures in detail. What trading platforms does your firm use? How many brokers were used during calendar year 2014?

Parametric Minneapolis' trading process:

Parametric Minneapolis utilizes a Daily Tracking Report to track asset class and manager positions of client portfolios as well as required overlay positions. Investment Guideline parameters are coded into an internal system during account setup. These parameters are utilized to calculate the asset allocation, target overlay positions, required daily trades, cash flows, fund rebalancing thresholds, margin, and other required variables, as delineated in the Investment Policy Guidelines.

Each day, a new Daily Tracking Report is generated and reviewed by analysts for accuracy and completeness. Analysts verify changes between target and actual overlay positions based on market and cash flow data, and calculate the required trades to maintain account compliance with guidelines. Data used to create the Daily Tracking Report is accessed beginning at 5 a.m. central time to ensure the report is posted by 10:30 a.m. central time for client viewing via a secure website. The Portfolio Management Team (PMT) will establish a process for communicating information regarding anticipated cash inflows and outflows. This cash flow management system enables Parametric Minneapolis to implement the client's predetermined Investment Policy Guidelines efficiently and anticipate any margin requirement changes.

A trade may be entered into the system only by an authorized trader. The trade is subject to passing all pre-coded compliance checks before it may be submitted

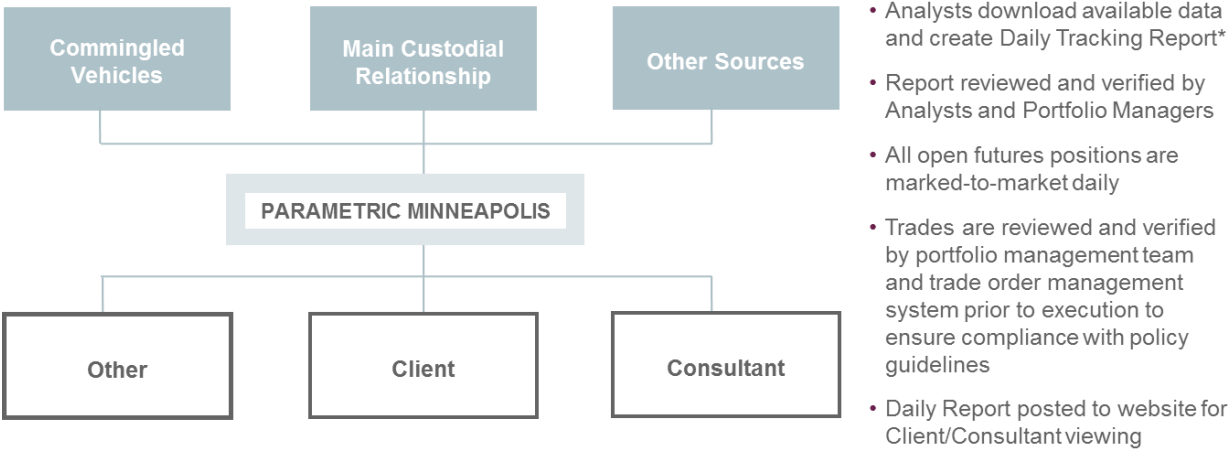
for approval. An authorized trader other than the individual who created the trade must also approve the trade before execution. This trading process significantly reduces the risk of error in implementing an overlay program.

Upon approval, the vast majority of trades are sent for execution to the electronic trading platform via FIX protocol (an industry standard messaging protocol). The electronic trading platform gives Parametric Minneapolis access to several trading algorithms which are used to minimize the trading cost of implementing a particular trade. Upon execution, the details of the order fill are returned to Parametric Minneapolis via FIX, the fill details are affixed to the trade and booked to the general ledger, and positions are recorded in Parametric Minneapolis' Investment Management System (IMS).

Managing transaction costs while factoring in tracking error considerations is important in the implementation of an overlay program. Parametric Minneapolis seeks to minimize transaction costs on both an explicit and implicit basis. Parametric Minneapolis maintains several Futures Commission Merchant (FCM) relationships which facilitates competitively negotiated commission schedules. This schedule is renegotiated on an ongoing basis to ensure that fair and competitive pricing is in place (Parametric Minneapolis does not trade with any affiliates and earns no revenue from trading). Additionally, transaction costs can be minimized by having a thoughtful framework for the overlay program. The use of tolerance bands, under which trading commences only after a band has been breached can significantly reduce the number of trades. This reduction favorably affects the level of transaction costs without sacrificing the core benefits of an overlay program. Finally, by understanding the objectives and constraints of the client, Parametric Minneapolis can tailor the overlay program to employ instruments that best serve the client while minimizing transaction costs. For example, a client who experiences numerous cash flows that require position adjustments will use a different set of futures contracts and cash tolerance bands than a client who has a more stable cash position.

A performance report detailing market returns, average overlay exposures, overlay gain/loss data, overlay program returns, and customized benchmark returns is produced on a monthly basis and is posted to Parametric Minneapolis' secure website.

Figure 1



**In some cases, data may not be available on a daily basis or is not accessible because the balance is held by a manager who does not make information available electronically. (For illustrative purposes only.)*

Parametric Minneapolis' overlay investment management process has been continually enhanced over the last 29 years. Parametric Minneapolis continues to make ongoing improvements to the current investment process with a focus on reducing the risk of managing an overlay program and improving client outcomes. Recent advancements in technology have allowed Parametric Minneapolis to enhance and automate much of the daily investment process. Through policy driven system controls, PIOS® has become more scalable while simultaneously improving risk controls.

Seven brokers were used for futures during the 2014 calendar year.

20. Does your firm monitor trade effectiveness? If so, how is that documented? To whom does trading report?

Parametric Portfolio Associates LLC's Minneapolis Investment Center ("Parametric Minneapolis") has a fiduciary duty to seek to obtain best execution when it is effecting trades on behalf of its advisory clients. This means that the client's total cost or proceeds for a particular transaction is "the most favorable under the circumstances". For each transaction, the trader or executing portfolio manager must evaluate the capabilities and services of the trading counterparty from the Parametric Minneapolis' Approved Trading Counterparty List.

Most contracts utilized are highly liquid so execution realizations reflect the price available. All contracts that may be used for overlay clients are efficiently priced and highly liquid. Our trading staff constantly monitors trading volume and bid/offer spreads to ensure fair execution. Parametric's large overlay account base can create improved price realizations on certain orders. For example, future calendar roll trades may be traded "mid-market" for the benefit of clients who need to roll short and long contract positions forward.

Parametric Minneapolis has incorporated a Best Execution Committee whose members consist of representatives from trading and operations. The Best Execution Committee meets on a quarterly basis and reviews execution both qualitatively and quantitatively.

Parametric Minneapolis has not engaged a third party service provider to report on best execution but does rely on information provided by Goldman Sachs to review its execution practices related to futures contracts that are executed through the trading platform.

21. How many brokers were used during calendar year 2014? List the top ten brokers used during that period. Have you discontinued the use of any broker in the last eighteen months?

Below is a list of the top brokers used for futures during 2014. Seven brokers were used for futures during the 2014 calendar year. Parametric has not discontinued the use of any broker in the last eighteen months.

1	Goldman Sachs & Co.
2	Merrill Lynch Pierce Fenner & Smith Inc.

3	Deutsche Bank Securities Inc.
4	Citigroup Global Markets Inc.
5	Morgan Stanley & Co. Inc.
6	UBS Securities, LLC
7	J.P. Morgan Securities LLC

22. Describe your firm's policies regarding the use of soft dollars. If soft dollar arrangements were not used to acquire products and services in 2013, what would be the dollar increase in your firms total operating expenses?

Parametric's Minneapolis Investment Center may request and receive specific research products or services from a broker-dealer in exchange for soft dollar commissions. All soft dollar arrangements must comply with the Securities Exchange Act of 1934, Section 28e "Safe Harbor." Parametric's Minneapolis Investment Center does not believe it pays brokerage commissions higher than those obtainable from other brokers in return for research products or services provided by broker-dealers. These arrangements are for options and stock trading only. Soft dollar arrangements are not used for futures trading.

23. Describe how your firm obtains and pays for outside research reports. Please list the primary sources of research upon which your firm relies.

Investment professionals at Parametric Minneapolis undertake research directly. Ideas for research are generated from discussions either internally or externally with clients and prospects, market observations, and articles. The ideas are then vetted internally and once a specific research topic is agreed upon, a team including at least one Portfolio Manager and one Analyst is assigned to research the matter and report findings back to the broader investment team. Parametric Minneapolis does not outsource any research but does have access to industry publications, white papers and research professionals at banks and broker dealers. Additionally, investment professionals are given opportunities to attend conferences and produce articles related to their research.

Parametric explicitly pays for access to general research. This includes but is not limited to subscriptions to periodicals like the Financial Analyst Journal or the Journal of Finance. Parametric will also explicitly pay for data that is uses to conduct research. For example, Parametric subscribes to the option metrics data base and other data made available through Bloomberg. Parametric has access to their research resources of its trading partners. In this case Parametric is implicitly paying for access to street research through trade flow. Lastly, Parametric uses all of the sources to develop solutions that meet the needs of our clients.

24. Provide an overview of your trade allocation protocols and procedures for controlling performance dispersion between accounts with substantially the same guidelines.

Please refer to **Appendix I** for a copy of the Firm's trade aggregation and allocation procedures.

25. Provide an overview of your pre- and post-trade investment guideline monitoring practices. Is a separate, independent group responsible for ensuring guideline compliance?

Pre and Post-Trade Compliance: Portfolio Management teams are assisted with pre-trade and Portfolio level batch compliance by Parametric Minneapolis' proprietary Investment Management System (IMS). Upon commencement of a new client relationship, an Investment Analyst from the applicable team and Compliance will input client specific trade rules as stated in client directions or Investment Policy Guidelines into the system. The rules that are input are then reviewed by Portfolio Managers and/or Assistant Portfolio Managers prior to trading to ensure accuracy and consistent understanding of the Client Guidelines. These rules allow the system to flag certain violations prior to execution at both the portfolio and global level. Each trade is reviewed by a team of Portfolio Managers. Exposure modification trades will only occur due to new cash flow balance information, rebalancing needs, or receipt of a new client directive. The Portfolio Management Team will not execute a trade until the reason for the trade is carefully reviewed.

Trading activity for all accounts is confirmed and reconciled on a daily basis by operations staff and account positions and values are reconciled on a monthly basis. In addition, the firm seeks to complete comprehensive audits for each account at least twice a year which is conducted by staff not working directly on the account.

The daily reports reviewed by analysts and portfolio managers serve as another post trade compliance check.

In the last three years, there have been no trade errors that have materially affected the firm or its institutional advisory clients in a negative way. Immaterial operational and administrative events may occasionally arise, often in brokerage or similar account rebalancing instances. It is Parametric Minneapolis' policy to promptly resolve any errors and to make the client whole, which may include reimbursement, if the client's account incurred a loss as a result of the error. If a client is unable to receive the profit, Parametric Minneapolis will forward the amount to a recognized charitable institution. Trade errors are resolved as soon as possible and the CIO, Managing Principal, and CCO are all informed at that time. Once corrective action has been taken, all errors are duly recorded and reviewed by the Risk Committee. Follow-up sessions with all applicable groups are held to address any communication or systems issues to mitigate future situations.

The combination of Parametric Minneapolis' proprietary Investment Management System, IMS, which was designed for overlay management, and Parametric Minneapolis' experience provides a process that facilitates a tight cash overlay process seeking to ensure compliance with client specific Investment Policy Guidelines. IMS, which includes portfolio management, accounting, operations, and compliance platforms, plays a critical role in the risk management process. This process includes:

Validation - Thousands of data quality checks are conducted in real time. These checks prevent invalid data from entering the system and provide immediate notifications to the necessary group. For example, the portfolio management platform will not allow trading of restricted instruments and the accounting

platform includes automatic checks and balances to ensure that the sum of debits equals the sum of credits, greatly reducing the opportunity for error.

Compliance Rules - Client-specific and global rules enforce compliance with client Investment Policy Guidelines and external regulations, respectively. For example, a Portfolio Manager may not trade an instrument for a client unless it has been entered as an allowable contract in IMS. Other examples include disallowing short positions for an account, setting client level maximum exposure limits, and ensuring that Parametric Minneapolis never exceeds firm-wide exchange position limits. By coding client specific Investment Policy Guideline rules into IMS, appropriate controls are in place.

Trade Instruction/Workflows - Workflows are defined to enforce business processes. For example, each trade must pass all validation checks before becoming available for approval and must be approved by two separate Portfolio Managers (the first enters the trade; the second verifies the trade before execution).

System Warnings - Hundreds of system rules are tightly integrated with specific business processes and are implemented via workflows. Rules may be hard, in which the user cannot proceed until the warning is resolved, or soft, in which case the user may enter an explanation for an exception. For a client account that has predefined rebalancing thresholds, for instance, the system will issue a warning if a threshold is breached.

System Notifications - Predefined global checks within the system search in real time for invalid data or conditions that may require action. Examples include: a missing closing price for a security with active positions, a negative cash balance in a non-futures brokerage account, or a significant difference between the trade price and closing price for a same-day close.

Automated Processes - Most business processes are fully automated in order to increase productivity and eliminate duplicate entry. Automated processes include trade/position/mark-to-market/collateral reconciliation, trade execution, client policy rules processing, and entries generated on the system's investment calendar.

Authentication and Authorization - Access to our systems is restricted to authorized users only through robust password rules. Furthermore, the system is configured to allow read/write/delete access only to user groups that are responsible for specified areas, allowing Parametric Minneapolis to segregate responsibilities of each user or group of users.

Audit Trail - IMS tracks all changes including field level auditing (e.g. old value, new value, user, date, time). Comprehensive internal audits are conducted on a regular basis by investment staff not directly associated with the account.

Parametric Minneapolis can ensure compliance of the exposure target with pre-specified policy ranges by entering Investment Policy Guidelines rules into IMS. If a range is not in compliance, IMS will notify the relevant group. No further action can occur in a client account when a notification is outstanding.

26. Regarding counterparties:

1. List all counterparties you have engaged to execute trades/establish positions within the strategy over the most recent 12 month period and provide an estimate of the percentage of trades allocated to each.

Below are the brokers used in the last twelve months for futures.

Executing Broker	Total	Percentage
Goldman Sachs & Co.	51,348	81.41%
Merrill Lynch Pierce Fenner & Smith Inc.	5,669	8.99%
Deutsche Bank Securities Inc.	2,517	3.99%
Citigroup Global Markets Inc.	1,936	3.07%
Morgan Stanley & Co. Inc.	1,013	1.61%
UBS Securities, LLC	324	0.51%
J.P. Morgan Securities LLC	266	0.42%
BNP Paribas Securities Corp.	4	0.01%
Total	63,077	100.00%

2. How are your trading counterparties selected, monitored and evaluated?

As an investment adviser, Parametric has a fiduciary duty to seek “best execution” for transactions in clients’ accounts based on the circumstances at the time of the transaction.

Parametric considers the full range and quality of each broker-dealer’s services when executing transactions, including, but not limited to, the value of research provided, execution capability and quality, commission (brokerage) fees, financial responsibility, credit quality of the firm, and overall responsiveness to Parametric. The determinative factor is not the lowest possible commission cost, but rather that the transaction represents the best qualitative execution for the managed account at the time. Parametric must periodically and systematically evaluate the execution performance of broker-dealers executing the transactions.

In circumstances where a client directs Parametric to use a certain broker-dealer, the Securities and Exchange Commission (“SEC”) has held that Parametric retains its fiduciary duty for best execution. Thus, if applicable, Parametric must disclose its inability under these circumstances to negotiate commissions, inability to obtain volume discounts or best execution, disparity in commission charges, and potential conflicts of interest arising from brokerage firm referrals.

Parametric Minneapolis’ Bi-Lateral OTC Counterparty Risk policy and procedures is attached as [Appendix J](#).

3. Are there any firm-wide or strategy-specific guidelines/restrictions related to counterparties? If so, please outline them.

Parametric Minneapolis maintains and periodically updates a list of approved Trading Counterparties who, in the Firm’s judgment, are capable of providing best price and execution and are, in the Firm’s opinion, financially stable. Team members with any type of trading responsibility are directed to use only brokers on the approved list, except in instances in where prior approval has been granted or a client has designated a particular broker to affect their transactions. If direction by the client is provided to Parametric Minneapolis to trade with a specific counterparty, the same trade documentation procedures should be

followed with any differences noted in the file and communicated to the client. However, it is the responsibility of the Portfolio Manager to ensure that based on a reasonable belief that the client can be expected to obtain “best execution” when directing trades to a specific counterparty.

In the event a team member wishes to execute a trade with broker not on the Approved Counterparty List (ACL), the member must complete and submit a Request to Open a Brokerage Trading Account Form (“the form”). This form memorializes the evaluation of the broker prior to commencing trading with the broker and requires the team member to review and provide information to be used in the approval. Information used will include but not limited to: Broker’s Infrastructure, Clearing and Settlement Capabilities, Liquidity, Deal Availability, Reputational Quality, Research, Commissions and Financial Stability. The Form is signed by the team member, a Managing Director and the Chief Investment Officer. The completed form is then forwarded to compliance for final approval and then operations for entry into the IMS system and insurance that the settlement process is established. Only after the form has been completed and notification from Operations of final setup in the system, or in limited circumstances where prior approval has been given, may the broker be placed on the approved list and a trade be placed with the broker.

27. Do you have a policy regarding the selection and review of brokers and counterparties? If you do, please e-mail a copy to investments@samcera.org

Parametric Minneapolis maintains and periodically updates a list of approved Trading Counterparties who, in the Firm’s judgment, are capable of providing best price and execution and are, in the Firm’s opinion, financially stable. Team members with any type of trading responsibility are directed to use only brokers on the approved list, except in instances in where prior approval has been granted or a client has designated a particular broker to affect their transactions. If direction by the client is provided to Parametric Minneapolis to trade with a specific counterparty, the same trade documentation procedures should be followed with any differences noted in the file and communicated to the client. However, it is the responsibility of the Portfolio Manager to ensure that based on a reasonable belief that the client can be expected to obtain “best execution” when directing trades to a specific counterparty.

In the event a team member wishes to execute a trade with broker not on the Approved Counterparty List (ACL), the member must complete and submit a Request to Open a Brokerage Trading Account Form (“the form”). This form memorializes the evaluation of the broker prior to commencing trading with the broker and requires the team member to review and provide information to be used in the approval. Information used will include but not limited to: Broker’s Infrastructure, Clearing and Settlement Capabilities, Liquidity, Deal Availability, Reputational Quality, Research, Commissions and Financial Stability. The Form is signed by the team member, a Managing Director and the Chief Investment Officer. The completed form is then forwarded to compliance for final approval and then operations for entry into the IMS system and insurance that the settlement process is established. Only after the form has been completed and notification from Operations of final setup in the system, or in limited circumstances where prior approval has been given, may the broker be placed on the approved list and a trade be placed with the broker.

The brokers utilized are informally evaluated on an ongoing basis. Broker executions are discussed in the Best Execution committee on a no less than quarterly basis, with a formal review of the brokers completed on a semi-annual basis. Review of a broker may take place outside of the describe timeframe as needed by the Best Execution Committee as issues are brought to their attention.

28. Please forward your proxy voting policy to investments@samcera.org.

The requirement or request for proxy voting, as they pertain to parametric Minneapolis' clients, are infrequent due to the nature of securities Parametric Minneapolis utilizes in its investment process. When they do occur, Parametric Minneapolis has adopted policies and procedures that it believes are reasonably designed to ensure that proxies are voted in the best interest of clients, in accordance with its fiduciary duties and Rule 206(4)-6 under the Act.

Parametric Minneapolis' proxy voting policy is attached as **Appendix K**.

29. Regarding risk management:

- a. List the main risks associated with the strategy and describe how each is explicitly measured and managed at both the individual security and aggregate portfolio level.**

Risk management is Parametric Minneapolis' highest priority, and is not viewed as a discrete function. Instead, it is an integral part of our business model and is woven through all functions including trading, operations, investment technology, and accounting. Senior management and investment staff meet at least monthly to discuss risk management issues within the firm. Kip Chaffee, Managing Principal, is responsible for managing Parametric Minneapolis' overall operations risk and enhancing internal controls. Mr. Chaffee does not have trading responsibilities, nor does he have day-to-day operations or accounting tasks. His attention is solely focused on firm management.

Parametric Minneapolis' Risk Management Committee meets formally *at least* quarterly. It was established to explore and evaluate various opportunities for enhancing Parametric Minneapolis' risk management capabilities. Mr. Chaffee as well as representatives from trading, operations, investment technology, legal, and compliance are active participants of the Risk Management Committee. There are often ad hoc gatherings of members of the group and their staffs to address any items between the scheduled meetings.

Please note that the Chief Compliance Officer and her staff function independently of the investment and operations teams to ensure that impartiality is maintained in administering compliance and compliance monitoring program.

The list below described the risks involved in an overlay strategy and how Parametric Minneapolis monitors and controls them:

Market Risk: The risk that the market performs in a way that was not anticipated. For example, cash outperforms capital markets. Systematic market risk is an inherent part of the PIOS® program and can neither be diversified away nor mitigated. Client specific policy guidelines are established to clearly define desired market risk based on client asset allocation targets.

Data/Communication Risk: The risk that information received from outside sources is inaccurate, incomplete, or stale. Parametric Minneapolis establishes an electronic link to the custodial bank, third-party, and other custody providers

on a daily basis. Fund data is downloaded into Investment Management System (IMS). Automation reduces the potential for human error in data transmission.

Investment Management System has numerous business rules against which data is checked automatically. Investment Analysts also utilize a detailed checklist to “scrub” the raw data for accuracy. Portfolio holdings such as commingled vehicles are updated via proxy to mutual fund or index returns as agreed to by the client. Analysts also review individual manager security and cash balance changes versus the previous day, as well as total account percentage change, for reasonableness. For example, if a manager account changes by more than 3% in a day, the account is reviewed to determine the nature of the change. Changes can be attributable to a market move, pricing error, cash flow, or other events. Parametric Minneapolis will investigate changes that appear unreasonable based on market conditions. Each manager’s daily change is also compared to a benchmark change as a continuity check. Parametric Minneapolis will coordinate with the client and consultant regarding anticipated changes in cash and asset balances in the fund.

Trades are not initiated until Parametric Minneapolis is confident that the data fairly represents fund exposures. We may verify fund positions by contacting the custodial bank, individual managers, and/or the client/consultant. The independent review of the fund’s positions and daily customized reports on those positions provide the client, consultant, and any third-party with a valuable monitoring tool to address information errors originating from outside sources. Parametric Minneapolis has been providing an independent review of third party custodial data for over 20 years and will continue to do so in the future. This review is critical to the effective execution of the overlay program.

Margin/Liquidity Risk: The risk that market movements will result in the need for the posting of incremental variation margin or the accumulation of excess collateral in the margin pool. A section of the Daily Tracking Report is dedicated to margin required, the excess amount available and an estimate of the magnitude of an adverse market move which would require additional funds. Investment staff monitor this report daily. When market moves dictate, a Portfolio Manager will attempt to notify the client and/or consultant that either additional margin is needed or that excessive margin collateral exists. Parametric Minneapolis will work proactively with all parties to maintain adequate liquidity for the program.

Cash Flow Risk: The risk that unexpected cash flows result in sub-optimal overlay execution. Parametric Minneapolis will work with the client and consultant to establish a communication system to track anticipated cash flow moves into and out of the fund along with any reallocation of manager positions.

Recognition of these flows in advance of their occurrence will result in more efficient exposure maintenance. This process is not time intensive and usually involves copying Parametric Minneapolis on current communication. Generally, clients and third-parties communicate with Parametric Minneapolis via email, fax, or telephone when flows are expected. Emails are received by our central email address set up to receive client information (MN-Info@paraport.com). All investment professionals view this information. Faxes are automatically scanned and sent to this address. Telephone direction is verified by confirming emails. This information is posted to Parametric Minneapolis’ master internal electronic trading calendar which all investment personnel monitor continuously to ensure proper exposure maintenance. The calendar is audited daily and then again each week. Diligent maintenance of important client information in a central location

provides important risk management control. If an unexpected cash flow should occur, Parametric Minneapolis will investigate. Through communication of anticipated cash flows and Parametric Minneapolis' monitoring of the portfolio's positions, Parametric Minneapolis seeks to ensure that data is correct and the overlay program is implemented correctly and efficiently.

Tracking Error Risk: The risk that synthetic exposure of an index has tracking error to the cash index. Parametric Minneapolis seeks to minimize tracking error by utilizing optimized futures baskets of very liquid futures contracts. All derivative contracts will have some tracking error that cannot be mitigated by an overlay manager.

Trading Risk: The risk that an error is made in the execution of a trade on behalf of the client. Parametric Minneapolis' first step in minimizing trading risk is to accurately collect and analyze data. Investment staff then enter and review trades for compliance. The review process helps to ensure that trades executed fulfill Investment Policy Guidelines and no errors have been made. Trades are settled by back office staff within hours using continuously updated electronic trade reconciliation systems. Parametric Minneapolis has limited the number of brokers it works with to help maintain strong relationships which, in turn, promote back office accuracy, trading capabilities, and timely pricing. Through the institution of multiple levels of risk management, Parametric Minneapolis seeks to ensure that trade executions are correct. Trading activity is a relatively low risk area for an overlay program because of the infrequency and size of trades relative to total portfolio size. No trades are executed until two separate Portfolio Managers review the trade. Investment staff members physically sit next to each other in the trading room so communication flows are frequent and direct.

Parametric Minneapolis' proprietary system, IMS, has integrated trade error verification functionality into the trade management process. Client-specific guideline parameters, or "business rules," and compliance guideline rules are coded into the system during account set-up, and can include a wide range of rule-based factors to prevent unauthorized trades and/or trade allocations from occurring within a client portfolio. For example, client-prohibited contract types are prevented from reaching trade execution and, thus, allocation to client accounts. Various parameters related to trade size limits, short positions, purchase/sale of previously un-held or unauthorized contract types, and long-short transition trades can be constructed during account set-up to minimize the risk of trading errors.

Overlay Management Investment Policy Guidelines: A set of comprehensive guidelines will be created. These guidelines will detail specific exposure targets, policy ranges, and other unique risk targets for each overlay strategy employed. The Investment Policy Guidelines serve as the base document from which the overlay strategies will be executed and managed. Upon review and approval by all parties, overlay strategy parameters are entered into the Investment Management System, and the guidelines are posted to the client-specific webpage for easy access. As exposure targets, ranges, client-specific risk targets, or other parameters changes are communicated by the consultant and/or the client, the investment guidelines and IMS are amended accordingly. On a daily basis, the client's portfolio data is obtained, processed by IMS, verified for accuracy, and reviewed by investment staff. Overlay exposure modifications necessary to maintain compliance with client targets are automatically calculated as part of the daily process.

In addition to the risk management strategies identified above, Parametric Minneapolis employs the following safeguards:

- All futures contracts are marked-to-market daily and clients receive a summary of the daily gain or loss for periods extending back to program inception.
- Daily Tracking Reports have several internal risk management sections which confirm compliance with guidelines or flag inconsistencies that need to be resolved.
- Parametric Minneapolis can provide the client direct electronic access to the clearing account for independent confirmation of exchange-traded derivative positions.
- All key Parametric Minneapolis personnel are available to respond to the client and all stakeholders' questions or inquiries.
- All positions for the client will be held with a single clearing broker thus lowering the risk of back office errors or the accumulation of positions outside of the guidelines.

Finally, Parametric Minneapolis provides detailed analysis and reporting to ensure compliance with client-specific risk targets. Additionally, any client-specific risk thresholds can be incorporated into the Daily Tracking Report and automated with respect to execution. It is important to note, however, that Parametric Minneapolis cannot assure timely execution of required transactions due to market disruptions or force majeure.

b. Identify the person(s) or group primarily responsible for the risk management function.

Parametric Minneapolis has a committee that oversees the risk of the firm. Parametric Minneapolis' firm management (Kip Chaffee, Jack Hansen, and Tom Lee) meet at least monthly to discuss risk management issues within the firm. Parametric Minneapolis' Managing Principal, Kip Chaffee, is responsible for managing the firm's overall operations risk and enhancing internal controls. Mr. Chaffee neither has trading responsibilities nor does he have day-to-day operations or accounting tasks. His attention is focused on firm management.

In addition, the management team, the Director of Compliance, the Director of Operations, Attorney, Compliance Associate, and the Chief Technology Officer comprise the Risk Management Committee, which was established to explore and evaluate various opportunities for enhancing Parametric Minneapolis' risk management capabilities. As directed by the Risk Management Committee, the Director of Compliance working with staff throughout the firm, coordinates any ongoing improvements.

The members of the Risk Management Committee have developed a working list of risk issues to address. This list includes broad "macro" concerns as well as more specific "micro" concerns. The Risk Management Committee seeks to be proactive in order to manage any concerns before any negative outcomes occur. This committee meets at least quarterly.

c. Discuss how risk management both interacts with and maintains independence from the other aspects of the investment process.

The members of the Risk Management Committee have developed a working list of risk issues to address. This list includes broad “macro” concerns as well as more specific “micro” concerns. The Risk Management Committee seeks to be proactive in order to manage any concerns before any negative outcomes occur.

As described above, risk assessments are ongoing. Senior management meetings occur at least monthly and Risk Management Committee meetings are scheduled periodically throughout the year, no less than quarterly, to assess and discuss the risks associated with Parametric Minneapolis’ business.

An independent review of the Firm’s overall risks is computed on an annual basis by compliance. Compliance findings are presented to the Executive Committee of Parametric. Any changes to controls and procedures that are needed to reasonably monitor and detect risks are made to the compliance program is determined after the review.

30. Discuss any material changes that have been made to the investment process or risk management techniques since inception of the strategy. Were these changes considered normal enhancements, or were they made in response to the macroeconomic environment and/or specific market events?

Parametric Minneapolis’ overlay investment management process has been continually enhanced over the last 29 years. Parametric Minneapolis continues to make ongoing improvements to the current investment process with a focus on reducing the risk of managing an overlay program and improving client outcomes. Recent advancements in technology have allowed Parametric Minneapolis to enhance and automate much of the daily investment process. Through policy driven system controls, PIOS® has become more scalable while simultaneously improving risk controls.

CONCLUSION

31. What issues are other clients concerned with in regards to products, markets, education and governance?

Because of the nature of our relationship with our overlay clients, the biggest client concern that we look to address is increasing efficiencies in the portfolio. We help with this:

- By securitizing unwanted cash exposures
- Through a disciplined synthetic rebalancing program
- By helping maintain market exposures throughout manager transitions
- By utilizing currency hedging and rate hedging

Through our overlay program, we help clients manage their portfolios more efficiently to the internal guidelines.

Although it is not as common, some clients use the program to express a market view by purposely underweighting or overweighting different market bets through the overlay. Also, there are clients that use the program to hedge out certain portfolio risks such as foreign currency exposure or to synthetically de-risk the portfolio by removing riskier beta exposures and replacing them with lower risk betas.

An important part of our relationship with clients is helping them to get comfortable with using derivatives in a risk reducing capacity and to help them determine the effect of the program on portfolio returns. We often work with clients, custodians, and auditors to answer derivative specific questions.

32. Describe your assessment of the relationship between your firm and SamCERA. How can we better utilize your firm's capabilities?

SamCERA staff and Parametric have a strong working relationship. SamCERA is always very responsive and willing to promptly answer any questions we may have. They have used us for multiple transitions and synthetic rebalancing trades and have been extremely thorough in providing the necessary information. The team has identified the importance of several overlay components and are aware of the available elements they are not currently using.

33. Is there any information that would be timely pursuant to SamCERA's Investment Policy, the Investment Management Agreement with SamCERA, and this annual review?

Since the overlay relationship was recently implemented (inception of 8/2013), the Investment Policy and Investment Management Agreement are both up to date and complete. As other overlay elements are added or as other potential instruments become available to trade, these documents may need to be revisited. Parametric will proactively reach out if any adjustments are necessary.

34. Are your clients making significant changes in their asset mixes? Please describe these changes.

Most of the changes we have been seeing recently in client portfolios have been subtle. We have seen de-risking in corporate pension portfolios as funding levels improve. We have also seen an interest in Liability Driven Investing (LDI) in corporate pension portfolios with a designated glide path to follow based on funded status and interest rate levels. Also, we have seen more clients adopting a global focus to their portfolios both in equity and fixed income holdings. Finally, we have seen a great deal of interest recently in currency hedging.

35. What market opportunities should SamCERA consider?

Since Parametric Minneapolis is a passive overlay manager, the market opportunities that we pursue are primarily portfolio efficiency improvements. Clients and/or consultants often come to us with potential market opportunities that they would like to pursue and we help them identify potential overlay solutions that may be appropriate for the specific situation.



Parametric™
Engineered Portfolio Solutions

**SAN MATEO COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION
(SAMCERA)**

PERFORMANCE REVIEW

March 5, 2015

TABLE OF CONTENTS

Firm Overview	3
PIOS [®] (Policy Implementation Overlay Service)	
– Program Review for SamCERA	10
Risks	20
Appendices	22

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.



FIRM OVERVIEW



This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

WHO WE ARE

We provide systematic, disciplined portfolio management solutions

- > Parametric Portfolio Associates LLC (“Parametric”) is a majority-owned subsidiary of Eaton Vance Corp.
- > Parametric equity ownership is broadly distributed among senior management and investment professionals.
- > Approximately \$136.7 Billion in assets under management; 78 investment professionals*.

We offer investment solutions through our three investment centers:

Seattle, WA	Minneapolis, MN	Westport, CT
<ul style="list-style-type: none">• Leaders in rules-based, engineered portfolio solutions• Strategies ranging from index tracking portfolios to managed smart beta• Founded 1987• A subsidiary of Eaton Vance Corp. since 2003	<ul style="list-style-type: none">• Pioneers in overlay strategies and custom risk management solutions (formerly The Clifton Group)• Innovative product solutions in real asset and liquid alternatives• Founded 1972• Acquired by Parametric in 2012	<ul style="list-style-type: none">• Specialists in option portfolio management**• Provide product-based and custom option overlay solutions• Founded 2003• A part of Parametric since 2007

Parametric is divided into two segments: Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management. For compliance with the Global Investment Performance Standards (GIPS®), the Firm is defined and held out to the public as Parametric Investment & Overlay Strategies.

*As of 12/31/2014, includes the investment professionals and AUM of Parametric’s wholly-owned subsidiary, Parametric Risk Advisors LLC (“PRA”), an SEC-registered investment adviser.

**The Westport, CT investment center is home to PRA (formerly Managed Risk Advisors prior to 2007).

This material has been prepared for the exclusive use of San Mateo County Employees’ Retirement Association in a one-on-one presentation only.

KEY DIFFERENTIATORS

Aligned investment philosophy across three investment centers, where we:

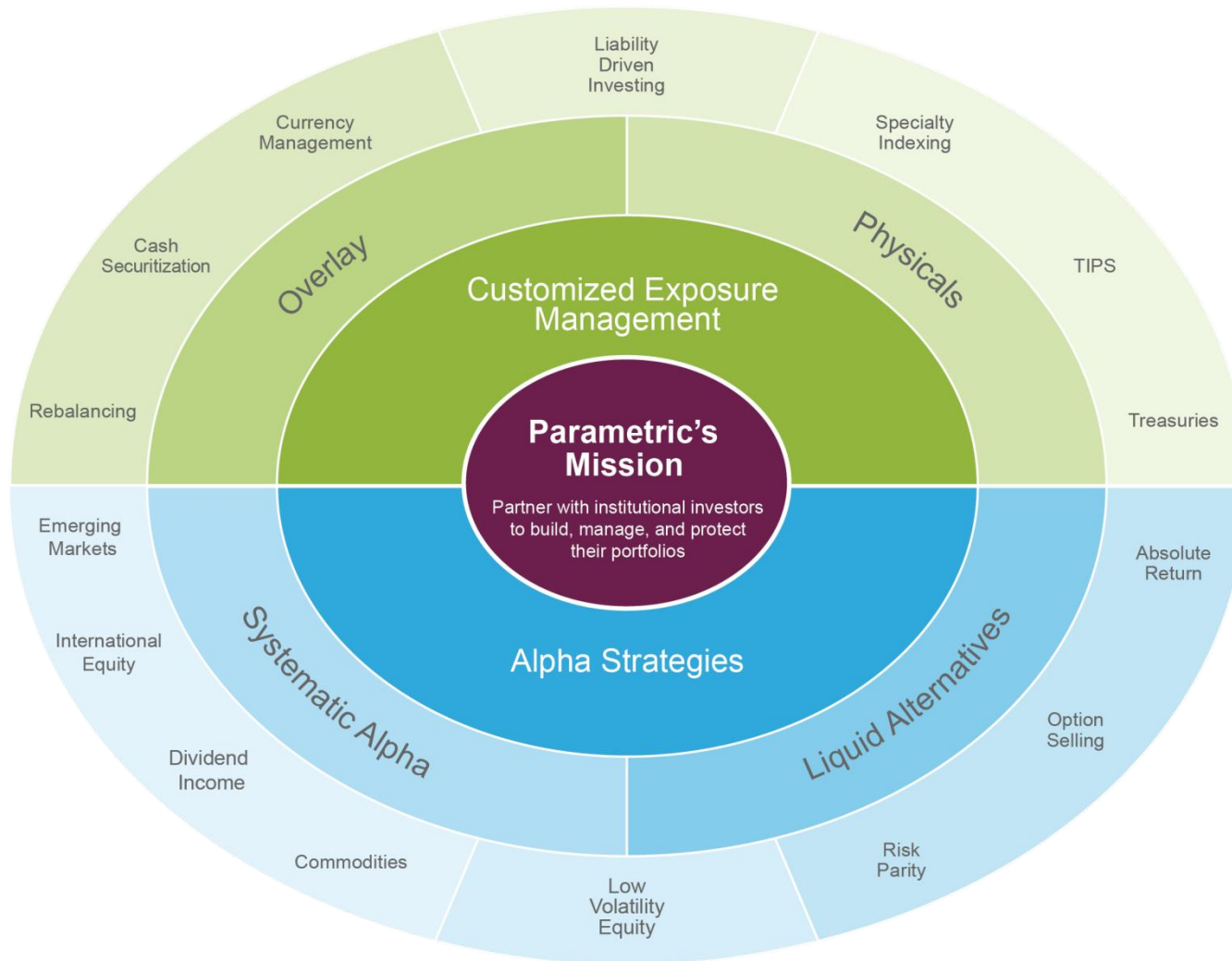
- Dismiss traditional market forecasts
- Seek to add value through portfolio construction
- Implement a rules-based, transparent investment process, with extensive risk management

Self-managed, boutique environment with a culture of innovation and pragmatism

Deep, experienced, and stable team

Client-centered with a focus on service

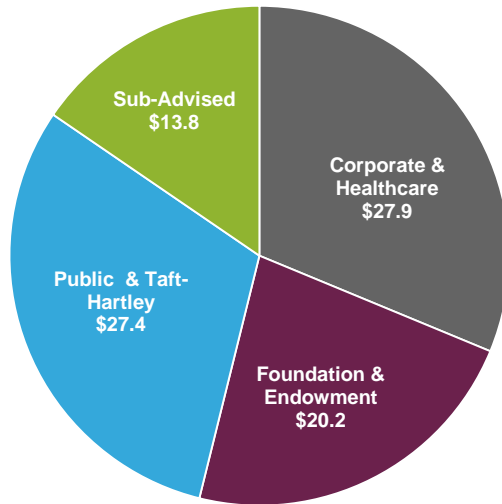
PARAMETRIC INVESTMENT PLATFORM



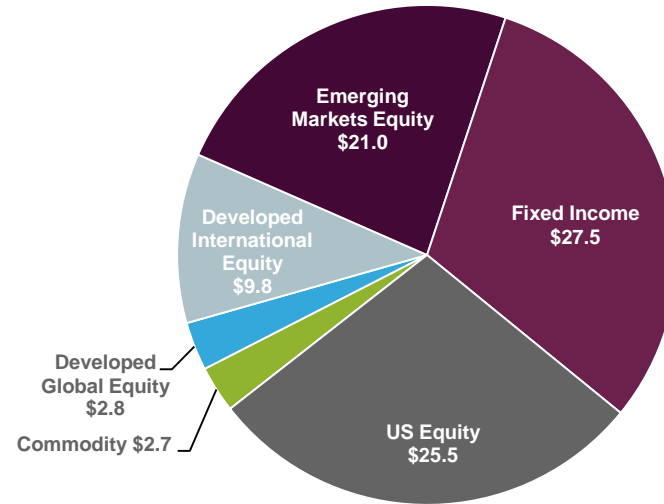
This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

ASSETS UNDER MANAGEMENT AS OF DECEMBER 31, 2014

Institutional Assets by Client Type



Institutional Assets by Asset Class



Total Institutional Assets \$89.3 Billion
Consists of Funded and Overlay Assets

All numbers are approximate as of 12/31/2014 and include PRA's assets.

Parametric is divided into two segments: Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management. For compliance with the Global Investment Performance Standards (GIPS®), the Firm is defined and held out to the public as Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies provides rules-based investment management services to institutional investors, individual clients and registered investment vehicles. For a complete list and description of composites, please contact us at 206.694.5575. Total Institutional Assets presented above include assets from the Parametric Investment & Overlay Strategies segment. Please refer to the GIPS® Presentation and the Disclosures included at the end of this presentation for additional important information.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PARAMETRIC (MINNEAPOLIS) UPDATE DECEMBER 31, 2014

Organization Personnel Totals	Total
Investment Professionals	30
Marketing and Sales Support	9
Operations/Accounting	21
Information Technology	8
Compliance/Legal* (Parametric/Eaton Vance)	3
Total	71

New Client Relationships	Initiated 2014
PIOS® (Policy Implementation Overlay Service)	28
Defensive Equity	26
Commodities	1
Total	55

Parametric Minneapolis 2014 Highlights

- Assets under management were approximately \$59.9** billion and we welcomed 55 new clients, including 28 clients to our PIOS® strategy, and 26 clients to our Defensive Equity strategy, and one client to our Commodities strategy in 2014.
- Noteworthy New Hires:
 - Marc Baumel joined the institutional team as the Product Manager dedicated to Options Strategies, which includes Defensive Equity and Dynamic Put Selling, as well as our Global Balanced Risk Strategy. Marc is responsible for managing, enhancing and communicating Parametric's Managed Options and Risk Parity strategies.
 - We also hired a Senior Researcher, Wei Ge, to join the Product and Strategy Team. Wei will be working with members of the Investment Strategy Team to support existing strategies and contribute to the development of new ones.
- After a year of operating under the Parametric Clifton name, we have decided to operate solely under the Parametric name, effective January 1, 2015. Clifton was added to the Parametric name to associate the Parametric brand with the positive reputation Clifton already enjoyed in the institutional marketplace, and to minimize any potential confusion that existing Clifton clients might have had in connection with the acquisition. The Parametric Clifton combination has been well received by the institutional marketplace, and because of this, we now feel that a natural step in projecting the firm as a cohesive, combined group, is to consolidate under the Parametric name.

*Dedicated resources at Parametric Minneapolis location with additional compliance and legal resources available in Seattle and Boston.

**Note: For overlay services programs, the absolute value of futures and swap based synthetic index exposure is included as assets under management. For Enhancement/Risk Control programs, the notional hedge target value of the options positions held for clients is included in assets under management.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

REPRESENTATIVE CLIENT LIST AS OF DECEMBER 31, 2014

>Public

Alaska Retirement Management Board
Arizona State Retirement System
East Bay Municipal Utility District
Fairfax County Employees' Retirement System
Houston Police Officers' Pension System
Manhattan and Bronx Surface Transit Operating Authority Pension Plan
Marin County Employees' Retirement Association
Massachusetts Pension Reserves Investment Management Board
New Mexico Public Employees' Retirement Association
Oakland Police and Fire Retirement System
San Joaquin County Employees' Retirement Association
San Luis Obispo County
Seattle City Employees' Retirement System
State of Wisconsin Investment Board

>Endowments

Baylor University
Pepperdine University
Texas Christian University
The University of Pittsburgh
University of Missouri System
University of St. Thomas
Regents of the University of Michigan

>Corporate

Cargill, Inc.
Macy's, Inc.
Minnesota Mining and Manufacturing Company
Nestlé in the USA Pension Trust
Northeast Utilities
Target Corporation
United Technologies Corporation Master Retirement Trust

>Healthcare

Advocate Health and Hospitals Corporation
Cook Children's Health Care System
North Memorial Health Care
OhioHealth Corporation
Rochester General Master Investment Trust
Trinity Health Corporation

>Taft-Hartley

1199 SEIU Health Care Employees' Pension Fund
Boilermaker-Blacksmith National Pension Trust
Central Laborers' Pension Fund
National Automatic Sprinkler Pension Fund
National Retirement Fund

>Foundations

Auburn University
The California Endowment
Doris Duke Charitable Foundation
The John D. & Catherine T. MacArthur Foundation
Indiana University Foundation
The McKnight Foundation
The Minneapolis Foundation
University of Minnesota Foundation
W.K. Kellogg Foundation Trust

>Faith Based

Covenant Ministries of Benevolence
The Minister & Missionaries' Benefit Board of American Baptist Churches
Pension Fund of the Christian Church

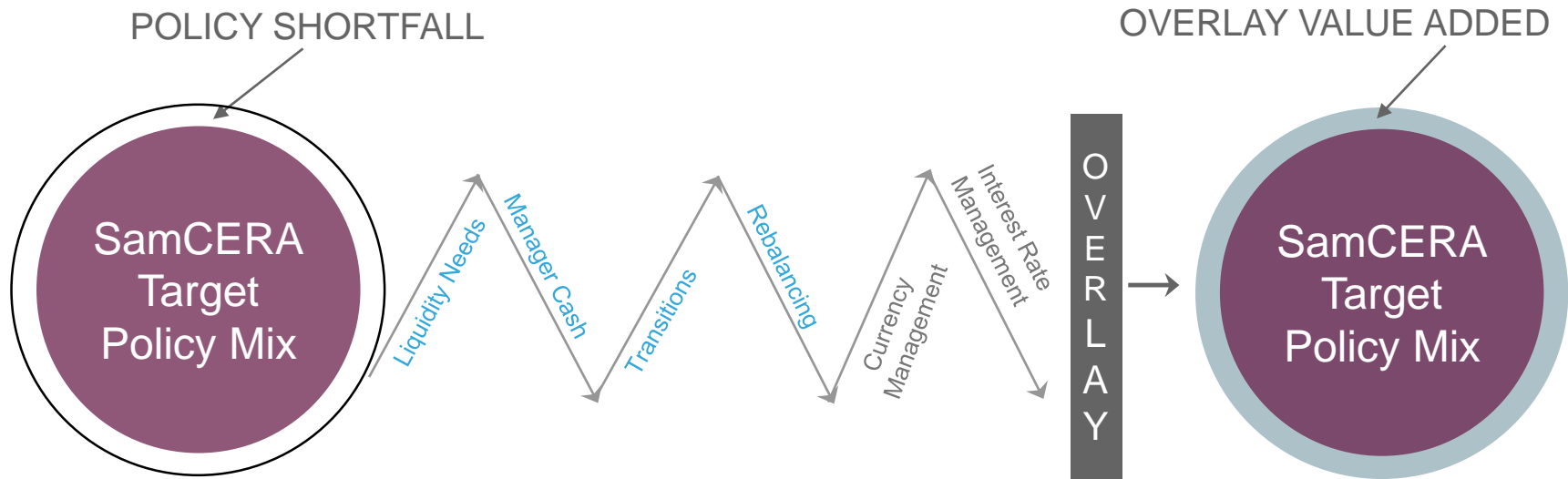
It is not known whether the listed clients approve or disapprove of the adviser. The partial list of clients included herein were selected as being representative of the different types of institutional clients and businesses serviced by Parametric. Performance-based data was not a determining factor in their selection. This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.



PROGRAM REVIEW FOR SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PERFORMANCE ENHANCEMENT AND RISK CONTROL



Each Client selects one, a combination, or all of the overlay components to best satisfy their specific needs. SamCERA is currently using the highlighted components.

OVERALL PROGRAM RESULTS

Program Results

- Unwanted cash exposure was dramatically reduced.
- Market environment through January 2015 produced a synthetic index overlay return of \$5,444,743* or 0.12% of fund assets since inception.
- Increased liquidity and flexibility (e.g. transitions) in fund management.
- Portfolio tracking working well with high level of confidence in portfolio reports.
- Improved tracking error versus benchmark index thus lowering performance risk.

*Gross of management fees and net of transaction costs. Past performance is not indicative of future results.
Please refer to disclosures on the last page.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PROGRAM HIGHLIGHTS

- SamCERA had four synthetic rebalancing events in 2014
 - Synthetic rebalancing component of the overlay program was added in January 2014 in conjunction with the new policy targets
- Parametric assisted SamCERA in securitizing multiple cash inflows during the year and with helping to maintain liquidity for multiple cash outflows
 - Two large inflows in January and July
 - Approximately \$10 million benefit payments each month
- Parametric assisted with multiple manager transitions during the year
- As SamCERA physically rebalanced the portfolio throughout the year, Parametric removed the synthetic rebalancing positions

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

SECURITIZE LIQUIDITY NEEDS

Challenge

- Holding cash to facilitate liquidity needs results in tracking error relative to the investment policy and creates long-term expected performance drag

SamCERA Implementation

- Fund level cash balances are invested based upon the policy mix allocation.

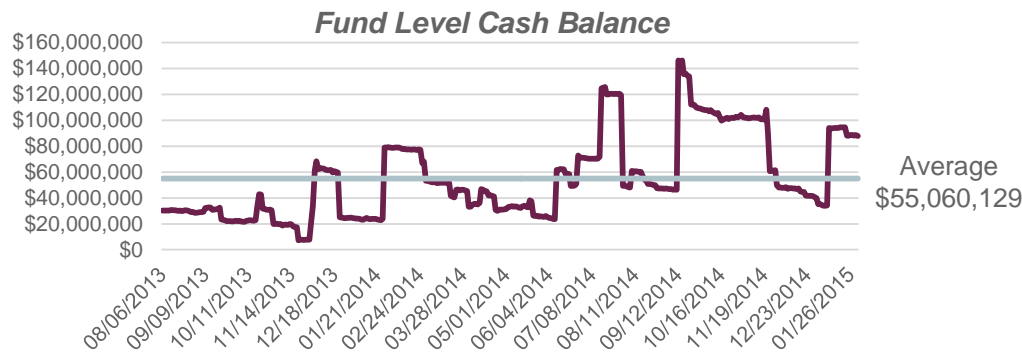
SamCERA Fund Level Policy Mix

Asset Class	Target %	Benchmark Index
Domestic Equity Large Cap	37.49%	Russell 1000 Total Return Index
Domestic Equity Small Cap	9.37%	Russell 2000 Total Return Index
International Equity	26.57%	MSCI ACWI ex. US IMI Index
Fixed Income	26.57%	Barclays Capital Aggregate

Expected Benefits

- Increase expected return
- Increase day-to-day liquidity
- Reduced transaction costs
- Simplify the management of inflows and outflows resulting in time savings for staff

Manager Cash Results*



Gain/Loss

Incremental gain/loss of approximately
\$5,572,780 since 8/6/2013*

*Returns are through 1/31/2015 and gross of management fees.

Please refer to disclosures in Appendices.

Source: Parametric Minneapolis; Date created: February 25, 2015.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

SECURITIZE RESIDUAL MANAGER CASH

Challenge

- Residual or transactional manager cash exposure (e.g. 1-3% of portfolio) creates an expected long-term performance drag

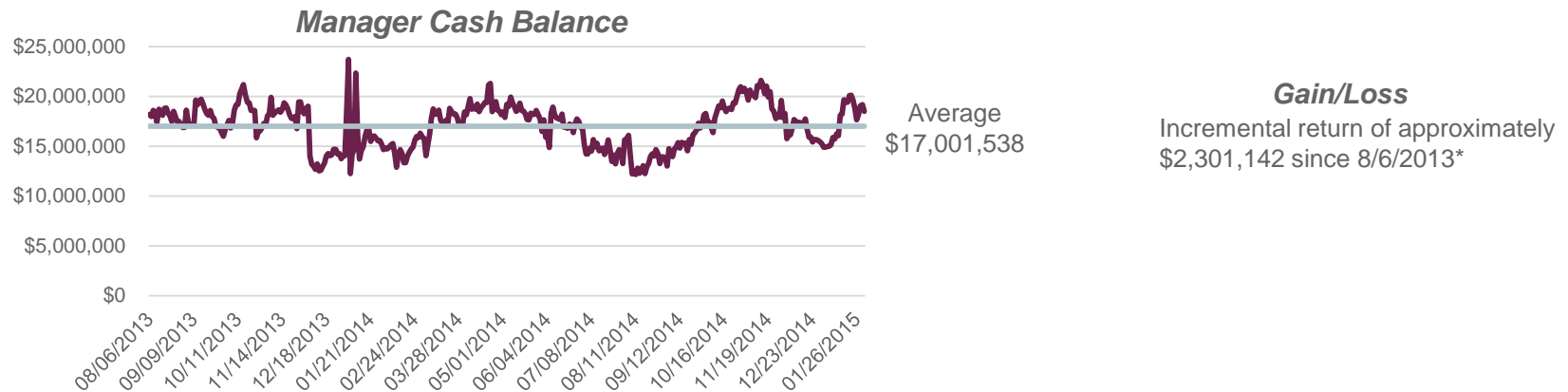
SamCERA Implementation

- Manager cash balances are invested in the managers benchmark index

Expected Benefits

- Increase expected return
- Ability to customize cash overlay for each manager
- Maintain exposure across multiple asset classes

Manager Cash Results*



*Returns are through 1/31/2015 and gross of management fees.

Please refer to disclosures in Appendices. The deduction of an advisory fee would reduce an investor's return. Past performance is not indicative of future results. For illustrative purposes only.

Source: Parametric Minneapolis; Date created: February 25, 2015.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

OVERLAY TRANSITION MANAGEMENT*

Challenge

- Manager changes, manager reallocations, liquidation of illiquid holdings (e.g. hedge funds), change to target allocations, etc. which cause the fund to meaningfully deviate from target exposures

SamCERA Implementation

- Reduce or eliminate exposure gaps using index overlays or ETF's

Expected Benefits

- Mitigation of exposure gaps which reduces performance risk
- The manager termination point can be accelerated or new manager search period can be extended as long as needed without losing targeted market exposure

Transition Results*

- Since 8/6/2013 transition management has returned -\$90,277**

*Parametric Minneapolis works closely with transition service providers but does not transition physical portfolio holdings

**Through 1/31/2015. Returns are gross of management fees.

Please refer to disclosures in Appendices. The deduction of an advisory fee would reduce an investor's return. Past performance is not indicative of future results. For illustrative purposes only.

Source: Parametric Minneapolis; Date created: February 25, 2015.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

REBALANCING

Challenge

- Asset class exposures which deviate meaningfully from long-term policy targets or short-term tactical preferences results in unwanted exposures and increased tracking error

SamCERA Implementation

- In addition to using cash to move exposures closer to the Fund's target asset allocation, short futures positions can be utilized for rebalancing purposes. Additionally, if the Fund's exposures deviate from target by a predetermined threshold, a full rebalance trade is implemented.

Expected Benefits

- Reduced transaction costs
- Timely and efficient reallocation of portfolio exposures
- Reduction of tracking error

Rebalancing Results*

- Rebalancing via the overlay program has returned approximately -\$2,338,902 since 8/6/2013

*Through 1/31/2015. Returns are gross of management fees.

Please refer to disclosures in Appendices.

Source: Parametric Minneapolis; Date created: February 25, 2015.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

CLIENT PERFORMANCE SUMMARY

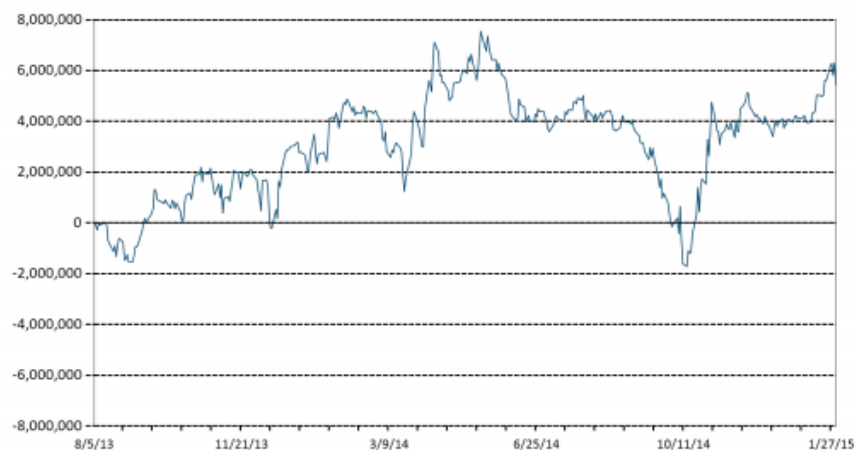
Market Returns

	Syn Russell 1000	Russell 1000	Syn Russell 2000	Russell 2000	Syn ACWI ex US	ACWI ex US	Syn BCA	BCA	LIBOR 3-Month
January	-3.00 %	-2.75 %	-3.26 %	-3.22 %	-0.36 %	-0.15 %	2.55 %	2.10 %	0.02 %
QTD	-3.00 %	-2.75 %	-3.26 %	-3.22 %	-0.36 %	-0.15 %	2.55 %	2.10 %	0.02 %
YTD	-3.00 %	-2.75 %	-3.26 %	-3.22 %	-0.36 %	-0.15 %	2.55 %	2.10 %	0.02 %
Inception 08/06/2013	12.89 %	13.33 %	8.61 %	7.76 %	2.44 %	2.95 %	5.04 %	5.71 %	0.24 %

PIOS Objectives

1. Securitize Fund Level Cash and Cash Equivalents
2. Securitize Manager Cash
3. Provide Disciplined Rebalancing
4. Securitize Cash Associated with Manager Transitions

PIOS Incremental Return (Inception to Date)



Portfolio Performance	Client Return	Benchmark Return	Difference
January	0.86 %	0.80 %	0.06 %
QTD	0.86 %	0.80 %	0.06 %
YTD	0.86 %	0.80 %	0.06 %
Inception	5.18 %	4.78 %	0.40 %

Average Target Overlay Balance	Domestic Equity Large Cap	Domestic Equity Small Cap	International Equity	Fixed Income
1/1/2015 to 1/31/2015	-22,828,374	23,750,101	36,048,759	56,911,277

Parametric Portfolio Gain/Loss	Domestic Equity	International	Fixed Income	Interest	Total Gain/Loss	PIOS Only Gain/Loss	PIOS Only %
January	-231,124	80,081	1,387,169	1,735	1,237,862	1,236,127	0.04 %
QTD	-231,124	80,081	1,387,169	1,735	1,237,862	1,236,127	0.04 %
YTD	-231,124	80,081	1,387,169	1,735	1,237,862	1,236,127	0.04 %
Inception	-1,874,079	1,341,659	5,977,164	13,552	5,458,296	5,444,743	0.12 %

Past performance is no guarantee of future results

Note 1: Market Returns Source: Goldman Sachs, Bloomberg and Parametric Minneapolis

Note 2: PIOS Only %: Linked monthly PIOS returns relative to total fund size

Returns are gross of management fees. The deduction of an advisory fee would reduce investor's return. Information subject to change. It is not possible to invest directly in an index. All investments subject to loss. Material provided is supplemental to the GIPS® compliant presentation. Please refer to the GIPS® compliant presentation and other disclosures at the end of this presentation. Source: Goldman Sachs, Bloomberg and Parametric; Date created: February 24, 2015.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PROGRAM OBJECTIVES

Policy Implementation Overlay Objectives

- Increases day-to-day availability of cash
- Eliminates expected performance drag due to unintended cash
- Provides timely exposure on large cash in-flows
- Provides improved daily monitoring of fund exposures
- Enables staff to obtain a daily snapshot of total fund exposure
- Provides operational efficiency for staff by enabling a convenient process for managing cash flows
- Maintain asset class exposure during time sensitive manager changes
- Increases long-term expected return on total fund by over .10%, compounded annually
- Provides synthetic rebalancing of fund exposures in an efficient and cost effective manner

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.



RISKS



OVERLAY SERVICES: WHAT ARE THE RISKS?

Risk	Description	How Parametric Minneapolis Mitigates
<i>Market</i>	Market performs in a way that was not anticipated. For example, cash outperforms capital markets.	Systematic market risk is an inherent part of the PIOS® program and can neither be diversified away nor mitigated. Client specific policy guidelines are established to clearly define desired market risk based on client asset allocation targets.
<i>Communication/ Information</i>	Overlay index exposures are maintained based on underlying investment values provided by one or more third parties. There are often delays in the receipt of updated information which can lead to exposure imbalance risks. Inadequate communication regarding cash flow moves into and out of fund and manager changes can lead to unwanted asset class exposures and loss.	Parametric Minneapolis establishes communication links with custodial, manager, and other sources to obtain and verify positions and cash flow data as soon as it is available. Suspect data may be researched and staff notified.
<i>Leverage</i>	Creation of market exposure in excess of underlying collateral value may lead to significant capital losses and result in position liquidation.	Parametric Minneapolis obtains daily collateral pool values and adjusts beta overlay positions to maintain the ratio of total exposure to collateral within a pre-defined client determined band.
<i>Margin/Liquidity</i>	Potential that the market moves in a manner adverse to the overlay position causing a mark-to-market loss of capital to the fund and a resulting need to raise liquidity or to close positions; this situation could happen at a time when underlying fund or positions are also declining in value.	Parametric Minneapolis strives to be aware of potential collateral and cash requirements to reduce the risk of needing to remove positions. Additional margin requirements are communicated via electronic mail and margin adequacy is available to the client daily.
<i>Tracking Error</i>	Futures (synthetic) index returns do not perfectly track benchmark index returns. This divergence between the price behavior of a position or portfolio and the price behavior of a benchmark is tracking error and impacts performance.	Parametric Minneapolis seeks to minimize tracking error by utilizing liquid futures contracts with sufficient daily trading volume and open interest. All derivative contracts will have some tracking error that cannot be mitigated by an overlay manager.
<i>Counterparty</i>	Counterparty credit risk on OTC trading. Note: Bilateral centrally cleared OTC counterparty risk is similar to the clearing risk of holding futures investments.	Parametric Minneapolis can facilitate the negotiation of ISDA documentation that seeks to reduce the potential credit risk associated with OTC counterparties. Parametric Minneapolis monitors credit ratings and credit default swap spreads for all counterparties used and will inform staff of developments which may negatively impact credit risk.
<i>Collateral</i>	The program may experience losses on the underlying designated assets in addition to potential losses on the index market exposure overlaying these assets.	This risk cannot be mitigated by an overlay manager. Parametric Minneapolis discusses the potential for negative performance in the collateral used for the overlay prior to alpha transport applications with client.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.



APPENDICES



EXCHANGE TRADED FUTURES

Characteristics

- Standardized
- Regulated
- Small initial margin
- Marked to market daily (virtually eliminating credit risk)
- Liquid (on average, more notional dollar volume is traded in S&P 500 futures than the average daily volume of the NYSE each day)
- Efficiently priced with very low transaction costs
- Commonly used by Money Managers, Fund Sponsors, Index Funds, and Hedgers

Counterparty Risk Controls

- All Futures Commission Merchants (“FCM”) (e.g. Goldman Sachs, Citigroup, etc.) post a performance bond, or deposit, with the clearing house in order to trade
- Performance bonds help to ensure that the FCMs will meet the contractual obligations of the trades they make
- Brokerage firms require performance bonds, in the form of initial margin, from both the contract buyer and contract seller
- FCMs must post a security deposit and pledge their assigned shares and memberships to the relevant exchange thus providing additional incremental credit protection

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PASSIVE PORTFOLIO DESCRIPTION

Methodology

- Parametric Minneapolis' PIOS® (Policy Implementation Overlay Service) calculates asset class target balances each day which are to be invested in specific asset classes as directed by the Client's PIOS® management guidelines. The benchmarking process recognizes the target exposure positions and produces a daily gain or loss for each asset class based on the index's reported total return. This benchmark result is then compared to the actual gain or loss on futures positions combined with an estimate of interest income earned on the securitized (overlaid) cash balance.

Sources of Variation

- Execution level versus previous day's closing index levels
- Transaction costs
- Change in relative futures premium
- Strategy tracking error
- Residual cash exposure (non-leveraged program) related to contract size
- Mid-day information flows (e.g. transitions)

Over the long-term, actual performance should closely track the passive benchmark return pattern. Long-term realized performance is expected to approximately equal index results less the cost of adjusting and maintaining market exposure through the use of an overlay management approach. Transaction costs will vary based on overlay activity and asset class(es) utilized. In general, aggregate transaction costs would be expected to equal 0.10 - 0.20% per year.

SYNTHETIC INDICES

The most often used index benchmarks are as follows:

>Domestic Equity*

- S&P 500 Index
- S&P 400 Mid Cap Index
- MSCI USA IMI Index
- MSCI USA Small Cap Index
- Russell 1000 Index
- Russell 2000 Index
- Russell 3000 Index
- Wilshire 5000 Index

>Fixed Income

- Barclays Capital Aggregate Index
- Barclays Capital Gov't/Credit Index
- Barclays Capital Intermediate Gov't/Credit Index
- Barclays Capital Long Gov't/Credit Index
- Barclays Capital Long Treasury Index
- Barclays Capital Universal Index
- Citigroup BIG Index
- Merrill 1-3 Index
- Various Constant Duration Benchmarks

>International Equity

- MSCI EAFE Index
- MSCI ACWI ex. US
- MSCI ACWI ex. US IMI
- MSCI Emerging Markets Index
- MSCI World ex. US
- Citigroup Broad Market Index
- Citigroup PMI EPAC

>Global Equity

- MSCI ACWI IMI
- MSCI World

>Commodities

- Goldman Sachs Commodity Index
- Bloomberg Commodities Index (BCOM)
- Custom Commodity Baskets

>International Fixed Income

- Citigroup WGBI (ex. US)
- Barclays Capital Global Aggregate Index (ex. US)

>Currency

- Indexes
- Individual Currency Exposure

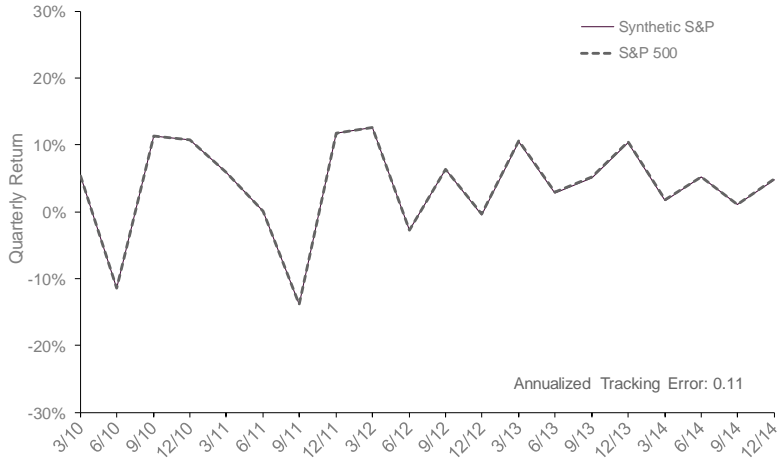
*In the case of style asset exposure needs (i.e. small cap growth), Parametric Minneapolis can manage ETF exposures to fulfill client needs. Customized nonstandard indexes can be replicated using swaps.

Please note that only broad market (e.g. versus style) futures are available and/or liquid enough for use. Individuals may not invest directly into indexes.

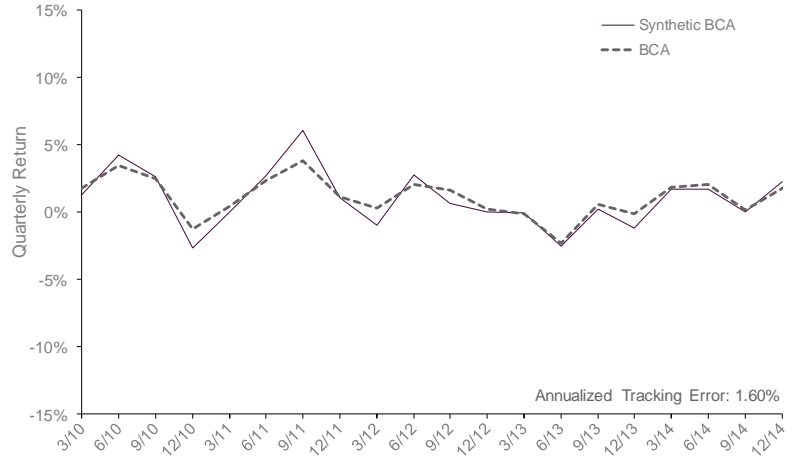
This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

SYNTHETIC INDEX MODEL RESULTS – (3/31/10 – 12/31/14)

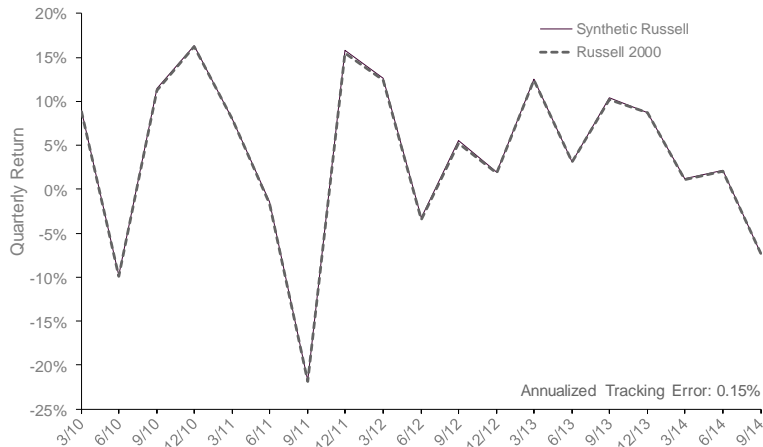
S&P 500 Index



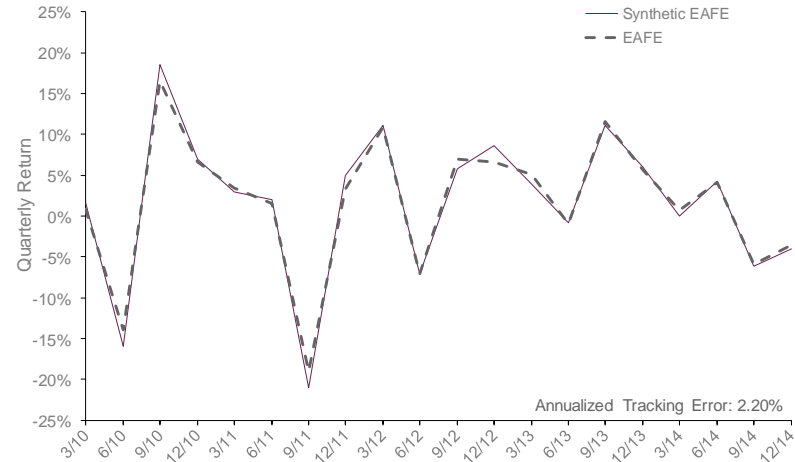
Barclays Capital Aggregate Index



Russell 2000 Index



EAFE Index



Data based on the past twenty quarters.

Simulated presentations are for illustrative purposes only, do not represent actual returns of any investor, and may not be considered for investing purposes. It is not possible to invest directly in an index. Investments are subject to loss. Past performance is not indicative of future results. . Please refer to the disclosures at the end of this presentation.

Source: Goldman Sachs, Bloomberg and Parametric Minneapolis Date created: January 15, 2015

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC MINNEAPOLIS INVESTMENT CENTER

Orison “Kip” Chaffee, CFA

Managing Principal

Mr. Chaffee joined Parametric in 2008* as Managing Principal. His responsibilities include formulating strategic direction and day-to-day management of the Minneapolis Investment Center. Kip has held a number of executive positions within the financial services industry including VP of Corporate Strategy and Development for Ameriprise Financial Services and President and COO of Hantz Financial Services. Kip earned his BS in Economics from Harvard University and an MBA with a finance concentration from The Wharton School of Business. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Jack Hansen, CFA

Chief Investment Officer

Mr. Hansen joined Parametric in 1985*. As Chief Investment Officer, his responsibilities include the management of investment operations and portfolio management. Jack has managed futures, swaps, options, and other derivative based programs since 1986. Jack earned a BS degree in finance and economics from Marquette University and a MS in finance from the University of Wisconsin, Madison. He is a CFA charterholder and member of the CFA Society of Minnesota. Jack writes and lectures on the use of derivatives in portfolio management.

Thomas Lee, CFA

Managing Director - Investment Strategy and Research

Mr. Lee joined Parametric in 1994*. Tom is currently responsible for managing a team that oversees all of the Parametric Minneapolis Investment Center's investment strategies. In his current position, he chairs the Investment Committee that has oversight responsibility of all the Parametric Minneapolis Investment Center's investment strategies and leads the research efforts that support all existing and new strategies. He was instrumental in the creation and development of the firm's implementation service. Tom took the lead developing customized solutions for many of the firm's clients. The solutions ranged from custom liability driven mandates to creation of fund wide risk balanced allocations. Tom has co-authored articles on topics ranging from liability driven investments to risk parity. Prior to joining Parametric, he spent two years working for the Federal Reserve in Washington, D.C. In this position, he gained experience in modeling and forecasting interest rates and related monetary variables. Tom earned a BS in economics and an MBA in finance from the University of Minnesota. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Justin Henne, CFA

Managing Director – Customized Exposure Management

Mr. Henne joined Parametric in 2004*. Justin leads the investment team responsible for the implementation and enhancement of Parametric's Customized Exposure Management product. Justin has extensive experience trading a wide variety of derivative instruments in order to meet each client's unique exposure and risk management objectives. He continues to have responsibility to design, trade, and manage overlay programs. Justin holds a BA in Financial Management from the University of St. Thomas. He is a CFA charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates LLC on December 31, 2012.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC MINNEAPOLIS INVESTMENT CENTER

Jay Strohmaier, CFA

Senior Portfolio Manager

Mr. Strohmaier returned to Parametric in 2009*. Jay has extensive experience with futures and options-based strategies and has been active in the investment industry since 1984. As a Sr. Portfolio Manager, Jay leads a team of investment professionals responsible for designing, trading and managing overlay portfolios with an emphasis on Defensive Equity, hedging, and other asymmetric strategies. Prior to rejoining Parametric, Jay worked for Cargill, Peregrine Capital Management, and Advantus Capital Management where his responsibilities included research, portfolio management, trading, marketing, and client service. He holds a BS degree in Agricultural Economics from Washington State University and MS in Applied Economics from the University of Minnesota. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Daniel Wamre, CFA

Senior Portfolio Manager

Mr. Wamre joined Parametric in 1995* working part-time in the company's internship program and started full-time in 1998. As Senior Portfolio Manager, he is responsible for leading a team of investment professionals responsible for designing, trading, and managing overlay portfolios. Dan has extensive experience helping clients and consultants manage portfolio exposures and risk through futures and options-based strategies. Dan earned a BS from North Dakota State University and an MBA in finance from the University of Minnesota. Prior to joining Parametric, Dan spent four years as a Platoon Commander/Executive Officer in the United States Marine Corps. Upon completion of graduate school, Dan spent ten months working as a commercial banking credit analyst for U.S. Bank in Minneapolis. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Amanda Barhite Carter, CFA

Portfolio Manager

Ms. Barhite Carter joined Parametric in 2004* as the Project Manager. In that role, she coordinated over-the-counter documentation, served as the Dodd-Frank implementation manager, and led the Risk Management Committee. In 2013, she was promoted to Portfolio Manager where she works primarily on overlay programs used to meet client risk management needs. Prior to joining Parametric, Amanda was a Senior Consultant with Global Markets Consultants Ltd. training investment banking clients in the areas of derivatives and capital markets. Previously, Amanda worked at JP Morgan as a Vice President in Global Derivatives Sales and Trading where she executed over-the-counter transactions for institutional clients. Amanda has a BA in Economics from Yale and an MBA with a concentration in Finance from Wharton. She is a CFA charterholder and a member of the CFA Society of Minnesota.

Richard Fong, CFA

Portfolio Manager

Mr. Fong joined Parametric in 2010* as an Investment Analyst, and in 2014 he was promoted to Portfolio Manager. His current responsibilities include designing, trading, and managing overlay portfolios. He also has experience with LDI and options-based risk management solutions. Mr. Fong holds a BA in Financial Economics from Gustavus Adolphus College. He is a CFA charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates LLC on December 31, 2012.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC MINNEAPOLIS INVESTMENT CENTER

Alex Gomelsky, CFA

Portfolio Manager

Mr. Gomelsky joined Parametric in 2009* as an Investment & Corporate Finance Analyst, and in 2013 he was promoted to Portfolio Manager. His current responsibilities include designing, trading and managing overlay portfolios as well as serving as an IT leader for the investment area. Mr. Gomelsky holds a BS degree in Finance and History from Boston College. Prior to joining Parametric, Alex worked for Johnson Controls as a Business Analyst within Global Operations and FP&A departments. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Chris Haskamp, CFA

Portfolio Manager

Mr. Haskamp joined Parametric in 2006*. Chris is dedicated to portfolio management and leading research projects in the area of risk management. Chris manages portfolios for the risk parity program as well as for the enhanced index programs. Chris functions as part of the team that developed and launched Parametric's risk parity strategy, Global Balanced Risk, and continues to manage and enhance the strategy. Prior to joining Parametric, he spent three years as a scientist at the medical device firm Beckman Coulter Inc. Chris earned a BS in Biochemistry from the University of Minnesota and a MS in chemistry from the University of California, San Diego. Chris earned an MBA in finance from the University of Minnesota, Carlson School of Management in May of 2007 and started full time at Parametric in June of 2007. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Gregory Liebl, CFA

Portfolio Manager

Mr. Liebl joined Parametric in 2010*. Greg is currently the Portfolio Manager for all Parametric proprietary and non-discretionary commodity strategies. Previously, Greg had been dedicated to providing Portfolio Management in the areas of risk and exposure management and customized implementation solutions. In this capacity, he was responsible for managing and trading overlay and physical portfolios designed to meet specific client risk management needs. Greg functions as part of the team that developed and launched Parametric's initial commodity programs, including index strategies, custom solutions, and Parametric's proprietary offerings. Greg holds a B.S. in Business Administration with a Finance concentration from North Dakota State University. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Matthew Liebl, CFA

Portfolio Manager

Mr. Liebl joined Parametric in May 2007* as an Investment Analyst. In 2012, he was promoted to Portfolio Manager working primarily in PIOS® (Policy Implementation Overlay Service). His current responsibilities include designing, trading and managing overlay portfolios with an emphasis on international index strategies. He also assists in the currency and commodities areas as necessary. Mr. Liebl holds a BA in Finance from the University of Minnesota Duluth. He is a CFA charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates LLC on December 31, 2012.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC MINNEAPOLIS INVESTMENT CENTER

Clint Talmo, CFA

Portfolio Manager

Mr. Talmo joined Parametric in 2014 as an Assistant Portfolio Manager and shortly after was promoted to Portfolio Manager. His current responsibilities include designing, trading, and managing overlay portfolios with an emphasis on options and OTC swaps. Prior to joining Parametric, Clint was a Partner at Aerwulf Asset Management. Previously, he worked for Interlachen Capital Group and EBF & Associates where his responsibilities included research, trading, and portfolio management. Mr. Talmo holds a BS in Finance from the University of Colorado. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Alex Zweber, CFA

Portfolio Manager

Mr. Zweber joined Parametric in 2006*. As a Portfolio Manager, Alex is responsible for the design and implementation of several of Parametric's options-based risk management solutions, including the Defensive Equity strategy. Additionally, he conducts research in the areas of option modeling, scenario analysis, stress testing and portfolio construction in support of existing investment strategies, as well as potential new product offerings. Alex has considerable experience with both futures and options-based solutions, and works closely with institutional clients and consultants to address investment and overlay servicing needs. Alex holds a BA in Economics from Macalester College. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Wei Ge, Ph.D., CFA

Senior Researcher

Mr. Ge joined Parametric in 2014 as a senior researcher. He is responsible for leading all quantitative modeling and analysis to support the company's investment products and new product development. He oversees and plans the long-term research agenda of the firm, works closely with portfolio managers conducting research to improve product design and management, and serves as a liaison between the Minneapolis office and Parametric's research team in Seattle. Prior to joining Parametric, Wei was a quantitative research analyst at UBS Global Asset Management, where he worked on quantitative modeling and analysis, multi-asset portfolio construction and management, analytics systems development, and manager research, focusing on equity, quantitative, and alternative asset managers. Before entering the investment industry, Wei served as a senior researcher in the biotechnology industry working on quantitative modeling to address biomedical problems. Wei holds an MBA in Analytic Finance and Economics from the University of Chicago Booth School of Business and a Ph.D. in Computational Molecular Biology from Rutgers University. He is a CFA charter holder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates LLC on December 31, 2012.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC INSTITUTIONAL INVESTMENT SOLUTIONS

Gregory Baranivsky, CFA

Director, Institutional Relationships – Central North America

Mr. Baranivsky joined the firm in 2010*. He is responsible for developing, coordinating, and executing the sales and marketing strategies for Parametric's unique family of products in the Central sales territory. Prior to joining Parametric, Greg spent 12 years at First American Funds/FAF Advisors (now Nuveen Asset Management) in various sales, national accounts, and product management leadership roles. Before joining First American Funds in 1998, he spent over three years at Van Kampen Investments (today INVESCO) finishing in the product management department. Greg holds a B.A. from Benedictine University and an M.B.A. from the Illinois Institute of Technology. Greg is a CFA charterholder, is a member of the CFA Institute and the CFA Society of Minnesota where he previously served as a member of its board of directors.

Benjamin Lazarus, CFA

Director, Institutional Relationships – Western North America

Mr. Lazarus joined the firm in 2004*. He is responsible for developing, coordinating, and executing the business development and client services plan for Parametric's unique family of products with emphasis on the Western region of the United States and Canada. In addition, Ben works on developing new strategies for Parametric and has presented on the use of derivatives at different industry events. Prior to joining Parametric, he was the Director of Sales Strategy at Deluxe Corporation in St. Paul, Minnesota. Ben holds a B.A. in Psychology from the University of California, San Diego and an M.B.A. in Marketing and Strategic Management from the University of Minnesota. He is a CFA charterholder and a member of the CFA Society of Minnesota.

Doug Miller

Director, Institutional Relationships – Southeast North America

Mr. Miller is responsible for institutional business development and relationships in the U.S. Southeast region. Prior to joining Parametric in 2014, Doug was a regional director for Russell Investments' Americas institutional business. Before that, he was a Regional Director of U.S. Sales for several different business units within Bank of New York Mellon Corporation. Doug holds a B.A. in Political Science from the University of Washington.

Christopher Uhas, CFA

Director, Institutional Relationships – Eastern North America

Mr. Uhas joined the firm in 2007*. He is responsible for developing, coordinating, and executing the sales and marketing strategies for Parametric's unique family of products with special emphasis on business development in the Eastern region of the United States and Canada. Prior to joining Parametric, Chris was involved in public and private equity portfolio management with a boutique asset management firm. Before entering the investment management field Chris served as the Director of New Product Launch for Seagate Technology, based in Singapore. Additionally, he spent five years as a nuclear-trained submarine officer in the United States Navy. Chris holds a B.S. in Electrical Engineering from the University of Notre Dame, and an M.B.A. from the University of Chicago Booth School of Business. He is a CFA charterholder and a member of the CFA Society of Minnesota.

*Reflects the year employee was hired by The Clifton Group, which was acquired by Parametric Portfolio Associates LLC on December 31, 2012.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

BIOGRAPHIES: PARAMETRIC INSTITUTIONAL INVESTMENT SOLUTIONS

Michi McDonough, CFA

Director – Consultant Relations

Ms. McDonough is a Director on the Consultant Relations team. In this capacity, Michi is responsible for developing and maintaining relationships within the institutional investment consultant community. She serves as a key contact for consultant inquiries and coordinates new business opportunities, working in conjunction with the Sales and Portfolio Management teams. Prior to joining Parametric, Michi was previously Vice President and Consultant Relations Manager at Wellington Management and began her professional career at MFS Investment Management. She holds a B.A. in Economics from Emory University and an M.B.A., magna cum laude, from Babson College. She is a CFA charterholder and a member of the CFA Society of Boston.

Christopher Wisdom, CFA

Director – Consultant Relations

Mr. Wisdom is a Director on the Consultant Relations team. In this capacity, he is responsible for developing and maintaining relationships within the institutional investment consultant community. He serves as a key contact for consultant inquiries and coordinates new business opportunities, working in conjunction with the Sales and Portfolio Management teams. Prior to joining Parametric, Chris held various roles at Dimensional Fund Advisors, MSCI, and Towers Watson. Chris holds a B.A. in Mathematics and Statistics from the University of Windsor. He is a CFA charterholder and a member of the CFA Society of Seattle.

Jason Chalmers

Director – Client Relationship Management

Mr. Chalmers is a Director on the institutional Client Relationship Management team. Jason is based in Boston and is responsible for managing client relationships throughout the Eastern United States. He joined Parametric after 15 years at Acadian Asset Management LLC. Jason earned a B.S., Economics, Northeastern University, and a M.S., Finance, Boston College Carroll School of Management.

Daniel Ryan

Director – Client Relationship Management

Mr. Ryan is a Director on the Client Relationship Management team. In this capacity, Dan is responsible for managing client relationships throughout the western U.S. Prior to joining Parametric, Dan was Vice President and Senior Relationship Manager at State Street Global Advisors. He holds a B.A. in History from the University of Michigan.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

DISCLOSURE

Parametric, headquartered in Seattle, WA, is a leading global asset management firm, providing investment strategies and customized exposure management to institutions and individual investors around the world. Parametric offers a variety of rules-based, risk-controlled investment strategies, including alpha-seeking equity, alternative and options strategies, as well as implementation services, including customized equity, traditional overlay and centralized portfolio management. Parametric is a majority-owned subsidiary of Eaton Vance Corp. and offers these capabilities through investment centers in Seattle, WA, Minneapolis, MN and Westport, CT (home to Parametric subsidiary Parametric Risk Advisors LLC, an SEC-registered investment adviser).

Parametric is divided into two segments: Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management. For compliance with the Global Investment Performance Standards (GIPS®), the Firm is defined and held out to the public as Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies provides rules-based investment management services to institutional investors, individual clients and registered investment vehicles, including Engineered Alpha Strategies, Specialty Index, and PIOS® (Policy Implementation Overlay Service). The Firm has complied with the GIPS standards retroactive to January 1, 2000.

The PIOS® Composite is offered through the Parametric Investment & Overlay Strategies segment of Parametric. Parametric Investment & Overlay Strategies AUM as of 12/31/2014 is \$94.5 billion. GIPS® compliant presentations are included along with other supplemental materials that further define or explain the strategy, investment process or composite.

This information is intended solely to report on investment strategies and opportunities identified by Parametric. Opinions and estimates offered constitute our judgment and are subject to change without notice, as are statements of financial market trends, which are based on current market conditions. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material is not intended as an offer or solicitation for the purchase or sale of any financial instrument. Past performance does not indicate future returns. The views and strategies described may not be suitable for all investors. Parametric does not provide legal, tax and/or accounting advice or services. Clients should consult with their own tax or legal advisor prior to entering into any transaction or strategy described here.

Charts, graphs and other visual presentations and text information were derived from internal, proprietary, and/or service vendor technology sources and/or may have been extracted from other firm data bases. As a result, the tabulation of certain reports may not precisely match other published data. Data may have originated from various sources including but not limited to Bloomberg, MSCI/Barra, FactSet, and/or other systems and programs. Please refer to the specific service provider's web site for complete details on all indices. Parametric makes no representation or endorsement concerning the accuracy or propriety of information received from any other third party.

This presentation contains back-tested hypothetical and/or model performance data and may not be relied upon for investment decisions. This material may contain confidential and/or proprietary information and/or assumptions and may only be relied on for this report. Detailed account inclusion/exclusion policies and back-tested data are available upon request. Perspectives, opinions, and testing data may change without notice. Decisions and information were based on available research at the time and as data may contain back-tested hypothetical results, returns may not be realized and specific action or lack of action is not known for certainty. No securities, sectors, industries, or other information mentioned herein may be considered as an offer to purchase or sell a firm product or security. The information presented, including, but not limited to, objectives, allocations and portfolio characteristics, is intended to provide a general example of the implementation of the strategy and does not represent the experience of any particular client. Actual client portfolio holdings, performance, allocations and portfolio characteristics will vary for each client. Any positive comments regarding specific data may no longer be applicable and should not be relied on for investment purposes.

Returns presented were generated using Parametric's proprietary investment methodology as described in Parametric's Form ADV Part 2A. Returns are unaudited, and may not correspond to quarterly calculated performance for any other client account in the stated discipline. Returns are calculated in U.S. dollars using the internal rate of return, reflect the reinvestment of dividends, interest, gains and other income, include transaction costs but exclude account and custodial services fees, and do not take individual investor tax categories into consideration. After-tax estimates are a "best scenario" provision for illustrative purposes. Specific periods of returns are not meant to imply that the portfolio would have been profitable had the client only invested in the market for this time period. All investments are subject to loss.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

DISCLOSURE

Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual results subsequently achieved by any particular trading program. One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, simulated trading does not involve financial risk, and no simulated trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results. Because there are no actual trading results to compare to the simulated performance results, clients should be particularly wary of placing undue reliance on these simulated results.

Benchmark/index information provided is for illustrative purposes only. Investors cannot invest directly in an index. Returns for indexes are calculated gross of management fees. Deviations from the benchmarks provided herein may include but are not limited to factors such as: the purchase of higher risk securities, over/under weighting specific sectors and countries, limitations in market capitalization, company revenue sources, and/or client restrictions. Parametric's proprietary investment process considers factors such as additional guidelines, restrictions, weightings, allocations, market conditions and other investment characteristics. Thus returns may at times materially differ from the stated benchmark and/or other disciplines and funds provided for comparison

Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period.

The Russell 1000 Index consists of the largest 1000 companies in the Russell 3000 Index. This index represents the universe of large capitalization stocks from which most active money managers typically select. The index was developed with a base value of 130.00 as of December 31, 1986.

The Russell 2000 Index is comprised of the smallest 2000 companies in the Russell 3000 Index, representing approximately 8% of the Russell 3000 total market capitalization. The index was developed with a base value of 135.00 as of December 31, 1986.

The MSCI EAFE Index (Europe, Australasia, Far East) is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the US & Canada. The MSCI EAFE Index consists of the following 21 developed market country indexes: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, the Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom*.

The MSCI ACWI Index Ex USA (IMI Index) is a free float weighted equity index.

The Barclays Capital Aggregate Bond Index ("BarCap Agg") is a market-capitalization-weighted index, maintained by Barclays Capital and is often used to represent investment grade bonds being traded in the United States.

All contents copyright 2014-2015 Parametric Portfolio Associates LLC. All rights reserved. Parametric Portfolio Associates, PIOS, and Parametric with the iris flower logo are all trademarks registered in the US Patent and Trademark Office.

Parametric is headquartered at 1918 8th Avenue, Suite 3100, Seattle, WA 98101. Parametric's Minneapolis investment center is located at 3600 Minnesota Drive, Suite 325, Minneapolis, MN 55435. For more information regarding Parametric and its investment strategies, or to request a copy of Parametric's Form ADV, please contact us at 206.694.5575 (Seattle) or 612.870.8800 (Minneapolis), or visit our website, www.parametricportfolio.com.

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

Parametric Investment & Overlay Strategies

PIOS Composite Performance Presentation

As of December 31, 2014

Period	Returns			3 Yr. Annualized Standard Deviation		Dispersion	Number of Portfolios *	Assets	
	Total Gross Return AWR	Total Net Return AWR	Index	Composite	Index	Internal Equal Wtd.		Composite (MM) *	Total Firm (MM) *
2005	1.05%	0.90%	-	-	-	3.45%	55	7,991	-
2006	1.43%	1.28%	-	-	-	3.73%	74	11,057	-
2007	4.02%	3.86%	-	-	-	2.20%	96	16,819	-
2008	-8.04%	-8.18%	-	-	-	13.57%	100	13,863	-
2009	8.70%	8.54%	-	-	-	13.65%	128	23,043	-
2010	6.59%	6.43%	-	6.19%	-	7.23%	140	24,695	-
2011	2.80%	2.65%	-	5.60%	-	7.14%	188	22,088	-
2012	5.20%	5.04%	-	4.56%	-	5.24%	206	23,543	63,431
2013	4.84%	4.69%	-	3.60%	-	9.48%	213	33,037	80,896
2014	3.24%	3.09%	-	2.77%	-	6.08%	268	45,916	94,545

* The composite was not included in the Firm Assets prior to 2012 as it was being managed by a prior firm.

Index: None

Parametric Portfolio Associates LLC and Parametric Risk Advisors LLC (collectively "Parametric") are affiliated investment advisory firms separately registered with the U.S. Securities and Exchange Commission. Parametric Portfolio Associates LLC is headquartered in Seattle, Washington and has investment centers in Seattle, Washington; Minneapolis, Minnesota; and Westport, Connecticut providing investment management services. The Minneapolis investment center resulted after the purchase of Clifton Group Investment Management in December 2012. The Westport investment center, Parametric Risk Advisors LLC was formed in 2007.

Parametric is divided into two segments: Parametric Investment & Overlay Strategies and Parametric Custom Tax-Managed & Centralized Portfolio Management. For compliance with the Global Investment Performance Standards (GIPS®), the Firm is defined and held out to the public as Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies provides rules-based investment management services to institutional investors, individual clients and registered investment vehicles, including Engineered Alpha Strategies, Specialty Index, and Policy Implementation Overlay Service (PIOS). The Firm has complied with the GIPS standards retroactive to January 1, 2000.

Parametric Investment & Overlay Strategies claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Parametric Investment & Overlay Strategies has been independently verified for the periods January 1, 2000 to September 30, 2014. The verification report is available upon request.

Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

Parametric Investment & Overlay Strategies Division

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

PIOS[®] COMPOSITE (CONTINUED)

Parametric Investment & Overlay Strategies

The PIOS (Policy Implementation Overlay Service) Composite is comprised of all fully discretionary separate accounts that create custom overlay solutions designed to help investors achieve policy objectives. The PIOS strategy utilizes an array of investment instruments to achieve client objectives through adherence to detailed investment guidelines. Objectives can include Interest Rate Management, Currency Management, Rebalancing, Transition Management, Cash Securitization and Neutralizing Policy Performance Shortfalls.

Composite creation date is December 2013.

No benchmark is presented as our strategy composite dynamically invests in a wide variety of investments. The strategy may invest in domestic and international markets, and utilizes derivative instruments. We do not believe that any benchmark is a proper point of reference for our strategy.

Derivative securities are used in the accounts which comprise this composite. The firm's strategies contain derivatives such as futures, options, swaps, and other investment strategies that may involve certain advantages and risks. Futures require the posting of initial and variation margin. Therefore, a portion of risk capital must be preserved for this purpose rather than being allocated to a manager. Swaps require periodic payments, which may be less liquid than futures, and certain swaps may have counterparty/credit risk. Some investment strategies may require a collateral investment equal to the desired amount of exposure.

Portfolio returns are calculated based on the sum of the daily gain/loss in the client account divided by the total portfolio value of the previous month end. The total portfolio value is the market value of the Client's manager portfolios, as defined in the guidelines. The client account Overlay Target value at the prior month end is used for the composite asset weighted performance calculation.

Portfolio returns reflect the reinvestment of dividend and interest income.

Performance results are expressed in U.S. dollars.

Composite gross returns are after transaction costs and other direct expenses, but before management fees. Net returns reflect the deduction of model investment management fees, 0.15%. The fees for the investment management services herein are described in the fee schedule.

The separate account management fee schedule is as follows: First \$50M @ 0.15%; Thereafter @ 0.10%.

The dispersion of annual returns is measured by equal-weighted standard deviation of portfolio returns within the Composite for the full year.

Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

A list of composite descriptions is available upon request.

Performance prior to January 2013 was achieved by the Clifton Group Investment Management prior to its merger with Parametric Portfolio Associates, LLC and has been linked to the performance history of Parametric Investment & Overlay Strategies. Performance results prior to January 2013 should not be interpreted as the actual historical performance of Parametric Investment & Overlay Strategies. Parametric Investment & Overlay Strategies has adhered to the performance record portability requirements of the GIPS standards in regard to the presentation and linking of this performance track record.

Past performance is not a guarantee of future results.

Parametric Investment & Overlay Strategies Division

This material has been prepared for the exclusive use of San Mateo County Employees' Retirement Association in a one-on-one presentation only.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 6.4

TO: Board of Retirement

FROM: Michael Coultrip, Chief Investment Officer



SUBJECT: Educational Presentation on the Current Energy Market and Potential
Investment Opportunities

Staff Recommendation

Review the attached presentation materials from SIS regarding an update on the current energy market and resulting potential investment opportunities.

Background

Given the precipitous drop in oil prices since its recent peak in June 2014 (the oil price has fallen over 50% from \$114 per barrel to around \$50 per barrel), and the corresponding re-pricing of risk in the energy market, certain energy sub-sectors have begun to present investors with potential investment opportunities.

John Nicolini from SIS will review the current energy market in relation to past boom and bust cycles, discuss the potential impact of the current dislocation on U.S. producers, and present opportunities that SIS sees in energy going forward.

Attachments

- A. *SIS Energy Education Presentation*



SamCERA Energy Education

John Nicolini, CFA
Vice President

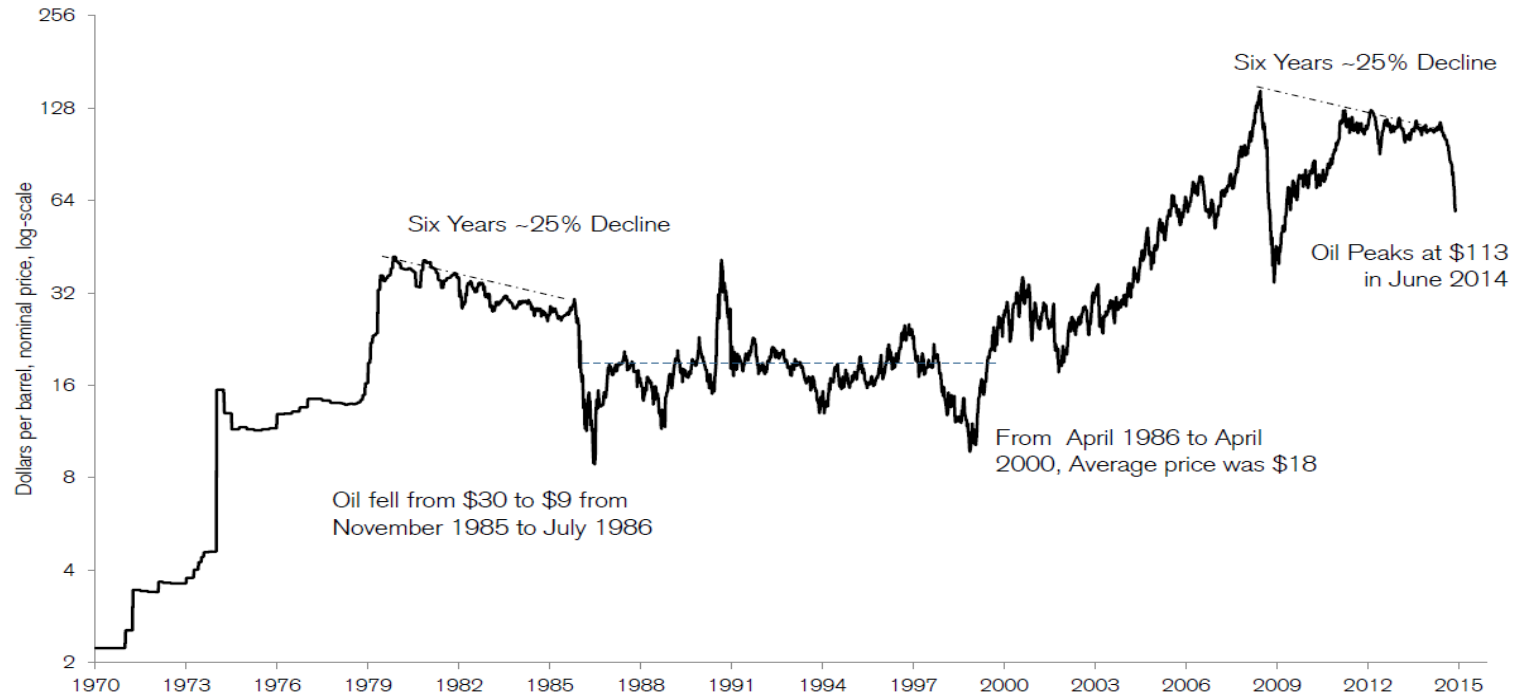
Discussion Topics

Energy

- History of a Boom and Bust Cycle
- Today's Bust and Impact on US Producers
- Opportunities We See in Energy

History of Oil Price Boom and Bust

Brent Oil—Historical Price Declines



Historical and predicted performance indications and financial market scenarios are not reliable indicators of current or future performance.
Sources: Credit Suisse, Datastream

- There have been six major sell-offs in the oil market since the '80s; defined as a greater than 40% decline in oil prices
- Two biggest price drops:
 - In 1986, oil declined 67% and stayed at depressed levels for 15 years
 - The credit crisis in 2008 saw oil fall 79% in a matter of months
- Oil has fallen some 60% since the recent peak in June 2014

Energy Sector is Trading at Depressed Levels

	8/1/2014	1/22/2015	% Change
WTI 12-Month Strip	\$94.86	\$51.04	-44.8%
Nat Gas 12-Month Strip	\$3.86	\$2.96	-21.0%
E&P Equity Index	517.1	336.7	-34.9%
Energy "B" High Yields	5.6%	11.7%	+108.9%
Energy "CCC" High Yields	8.9%	21.8%	+144.9%

- Broad re-pricing of risk has taken place in the energy markets
- Credit markets are pricing in a large increase in forward default rates
 - Average high yield energy default rate—1.0%
 - Average high yield market default rate—3.7%

WTI – West Texas Intermediate is a grade of oil used as a benchmark for pricing US oil

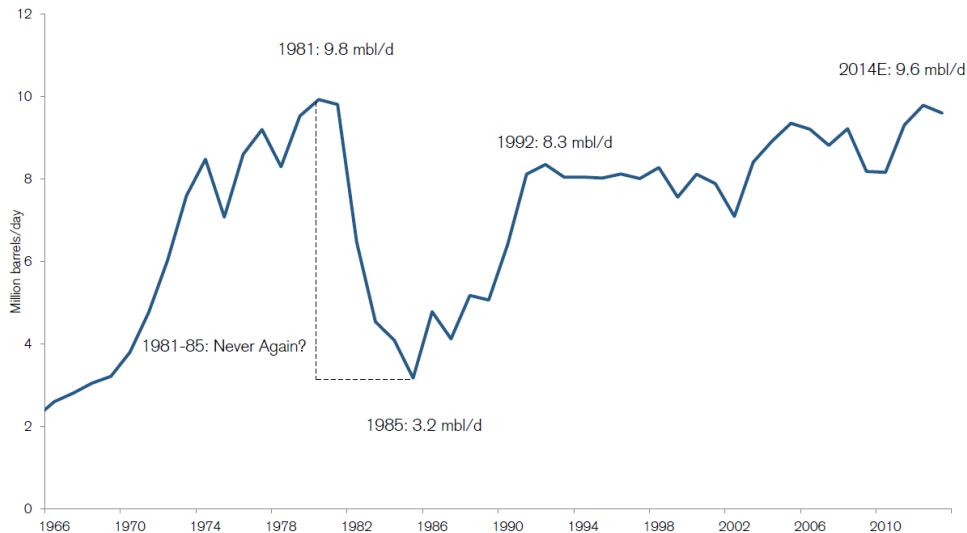
Brent – is a grade of oil from the North Sea used as a benchmark for global oil prices

Oil Collapse in 1986

Oil prices declined 67% in the mid '80s

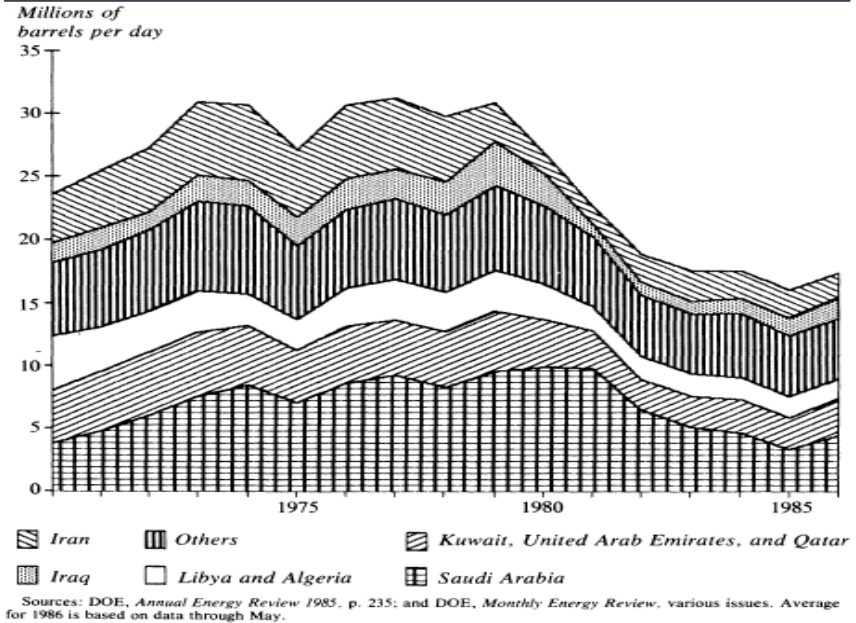
- Saudi Arabia/OPEC agreed to cut production for several years in the early '80s to support prices
- Saudi Arabia switched course in '86 to punish non-compliant OPEC members and deter new drilling in areas like the North Sea.
- Small U.S. and marginal producers globally were forced to cut production in the face of collapsing oil prices

Saudi Arabia Oil Production, mbl/d



Historical and predicted performance indications and financial market scenarios are not reliable indicators of current or future performance.
Sources: Credit Suisse, Datastream

OPEC Production up to 1986

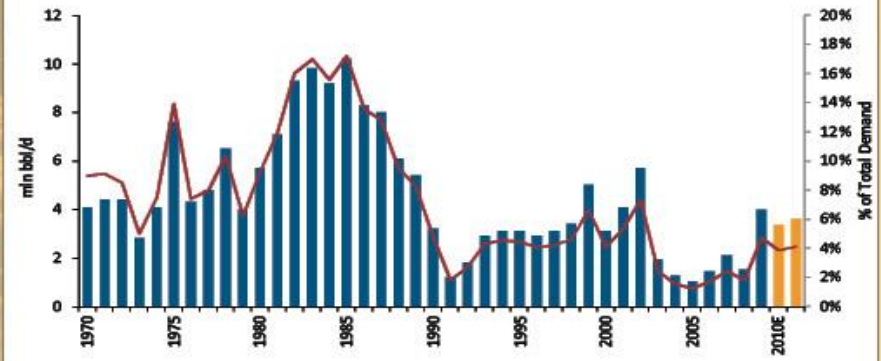


Source: Brookings Institution

Today versus 1986

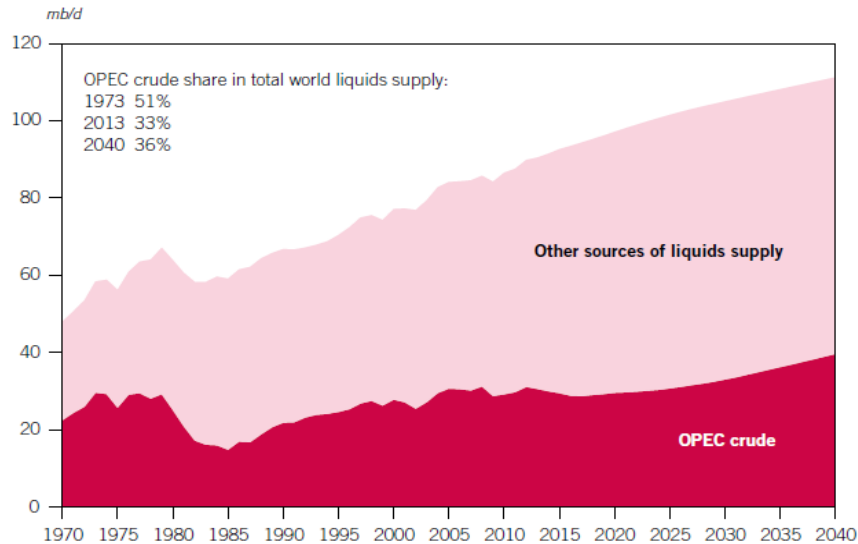
- Spare capacity has a large impact on medium to long-term price levels
- OPEC spare capacity was around 15% in the mid '80s; spare capacity today is 2%–3%
- Today's supply/demand differential is 1–2 mb/d
- OPEC supplied ~50% of the World's oil production in the '80s; today they represent one-third

Historical OPEC Spare Capacity



Sources: BP Statistical Review, EIA, IEA

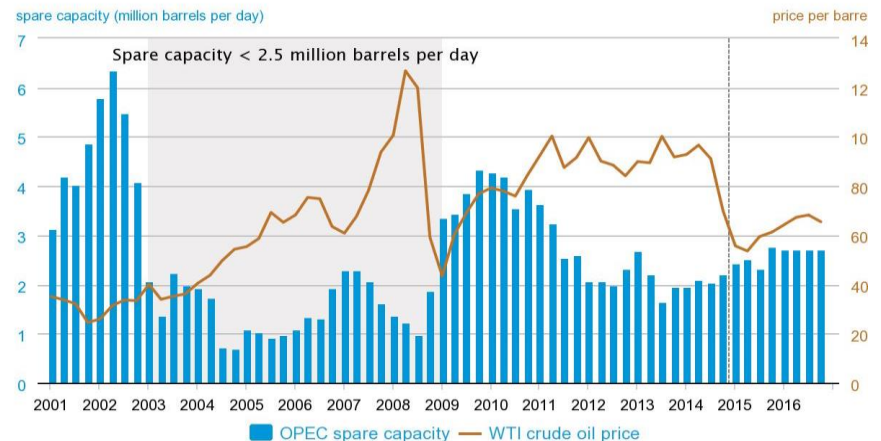
OPEC's Share of Global Crude Supply



Source: OPEC

OPEC Spare Capacity Today

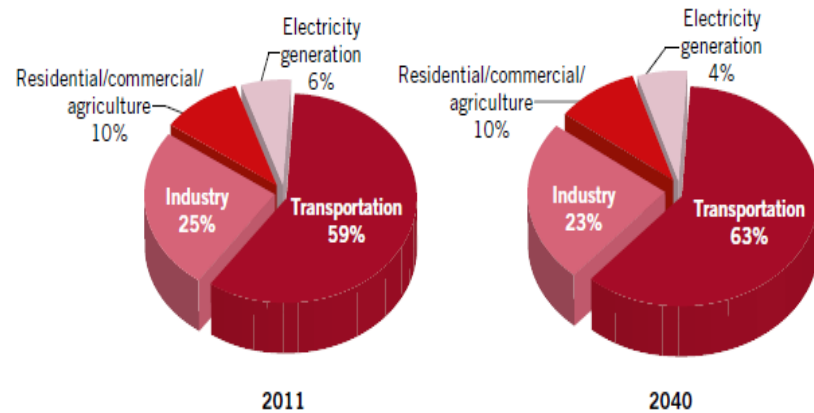
OPEC spare production capacity and WTI crude oil prices



Source: U.S. Energy Information Administration, Thomson Reuters.
Updated: Monthly | Last Updated: 01/13/2015

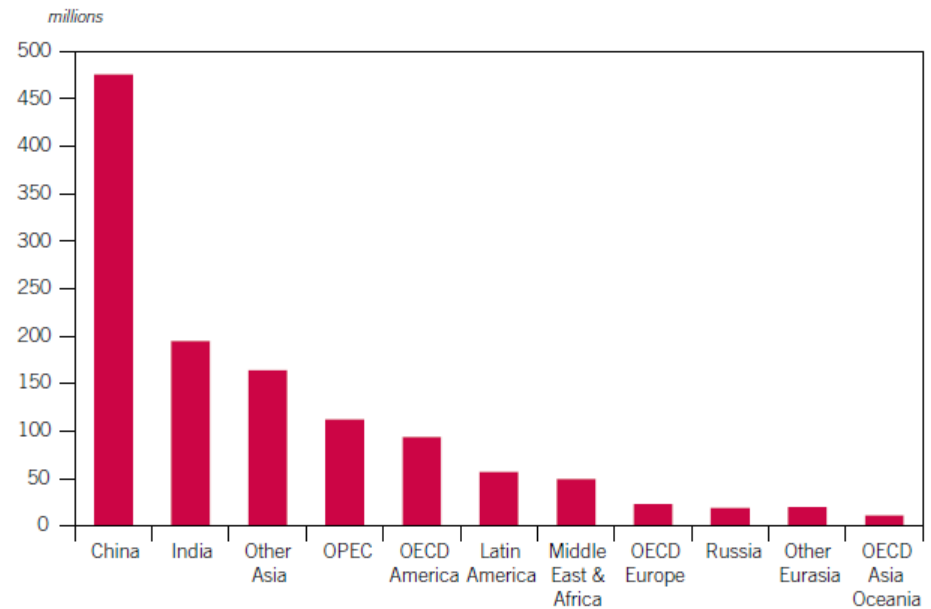
Oil Market Consumption Today

Percentage share of oil demand by sector in 2011 and 2040, World



Sources: OECD/IEA Energy Balances of OECD/Non-OECD Countries, 2013; OPEC Secretariat calculations.

Increase in number of passenger cars, 2011–2040



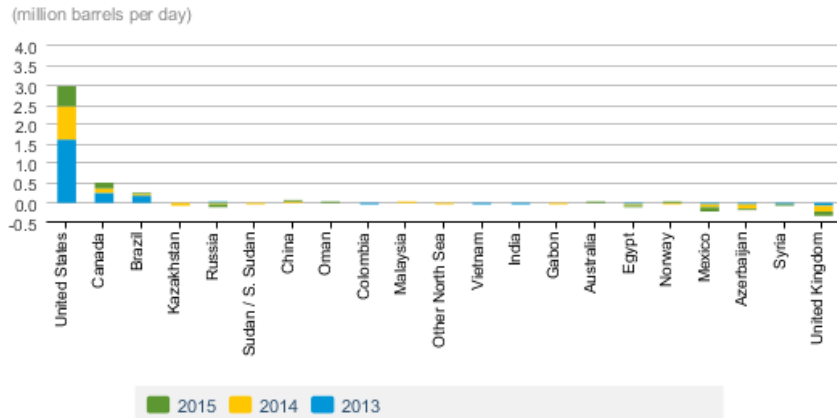
Source: OPEC

- Transportation is the largest component of oil demand
- China, India, and developing nations are driving the growth in oil consumption (no pun intended)
- Demand tends to be fairly inelastic to price changes, at least in the short-term
- Global growth has been slower since the credit crises but demand fundamentals remain strong

Supply-Driven Dislocation

US and Canada Driving Supply Growth

Non-OPEC Crude Oil and Liquid Fuels Production Growth

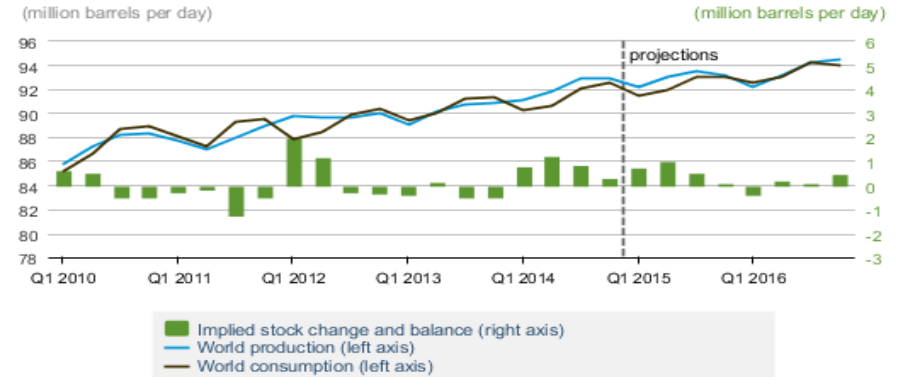


Source: Short-Term Energy Outlook, January 2015

- Price correction driven by growth in supply; primarily from North America
- OPEC's willingness to absorb new supply waned and prices corrected to the new supply/demand equilibrium
- North American shale has a high decline rate so without additional drilling, production levels will fall

World Production Exceeded Supply in 2014

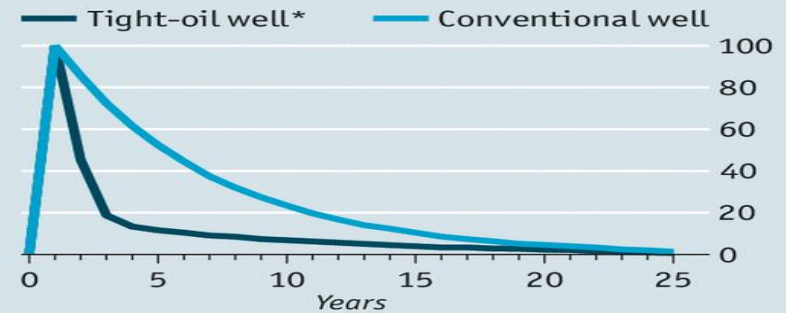
World Liquid Fuels Production and Consumption Balance



Source: Short-Term Energy Outlook, January 2015

Quick hit v slow burn

Typical production curves of different kinds of oil well
Peak production=100%



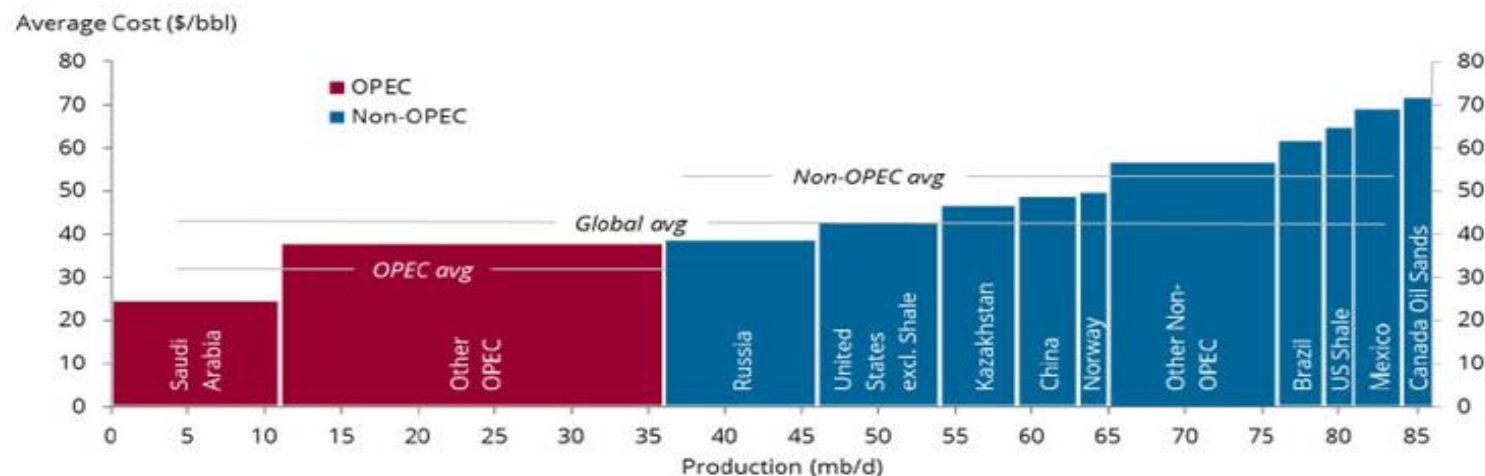
Source: International Energy Agency *Including shale

Source: The Economist

Global Costs of Production

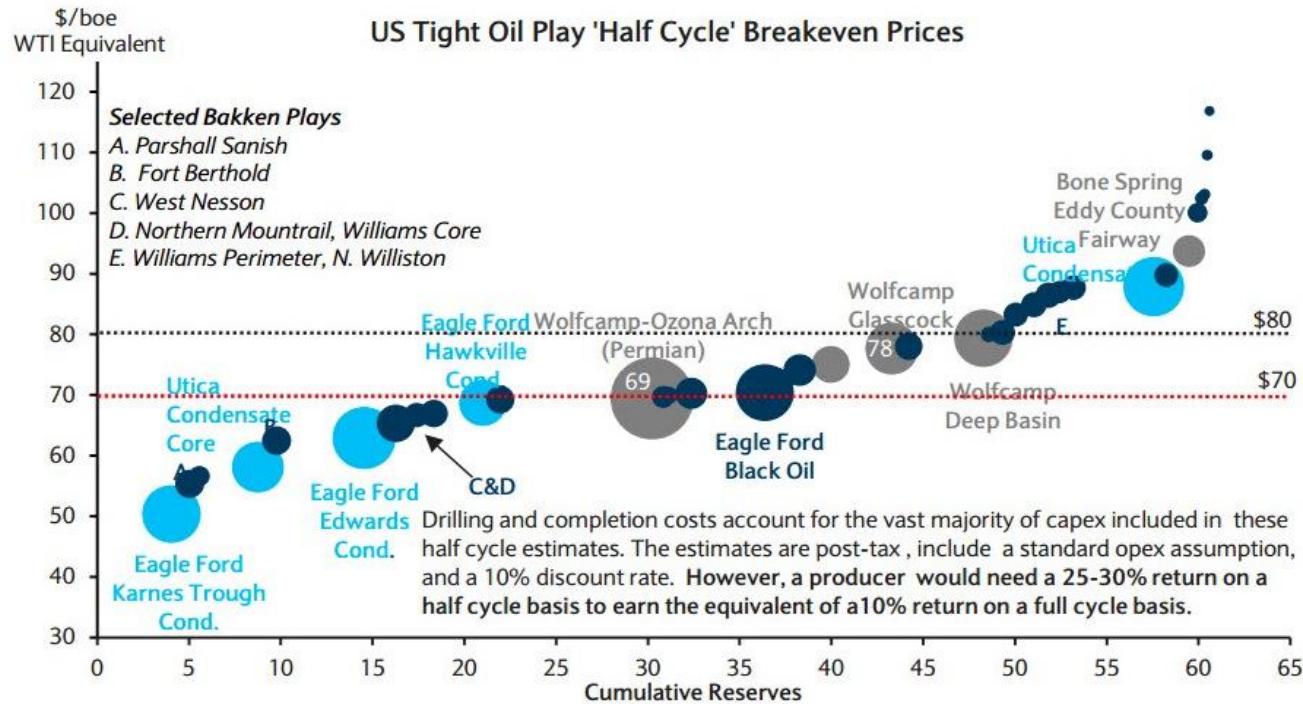
- Saudi Arabia is the lowest cost producer, globally
- U.S. Onshore marginal costs range from \$30 to \$100+/bbl
- Canadian Oil Sands are one the highest cost producers globally
- Deep-water Oil projects are very costly (\$1 billion+ Projects) and have long lead times
- Most experts see oil sands and costly deep-water drilling projects being delayed
- Capex cuts today will most likely cause supply shortfalls in the future, putting upward pressure on prices

Average cost curve for the oil market
\$/barrel



Shale plays lie at the higher end of the non-OPEC marginal cost curve, as infrastructure build-outs, decline rates, high levels of rig activity keep costs high

Impact on US Unconventional Producers



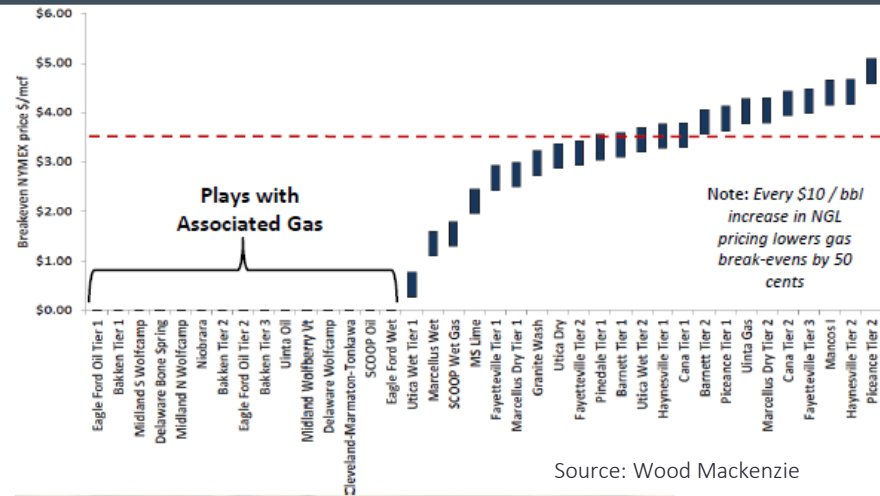
Source: WoodMackenzie, Barclays Research. Wood Mackenzie assumes a roughly 5.5% discount for WTI.

- Breakeven prices in certain basins are profitable at today's oil price
- E&P companies in the Bakken and higher cost basins have already begun to cut spending
- Producers with conservative balance sheets appear capable of weathering an extended period of low commodity prices

A word on Natural Gas Producers

- Most of the U.S. unconventional hydrocarbon production is natural gas, not oil
- Marginal costs in the Marcellus and Utica range from \$1–\$5; NGLs help offset low gas prices
- Supply has grown 2.5 bcf/d per year versus demand of 1.9 bcf/d
- Marcellus alone has 40 years of supply capability with an average break-even in the \$3–\$5 range

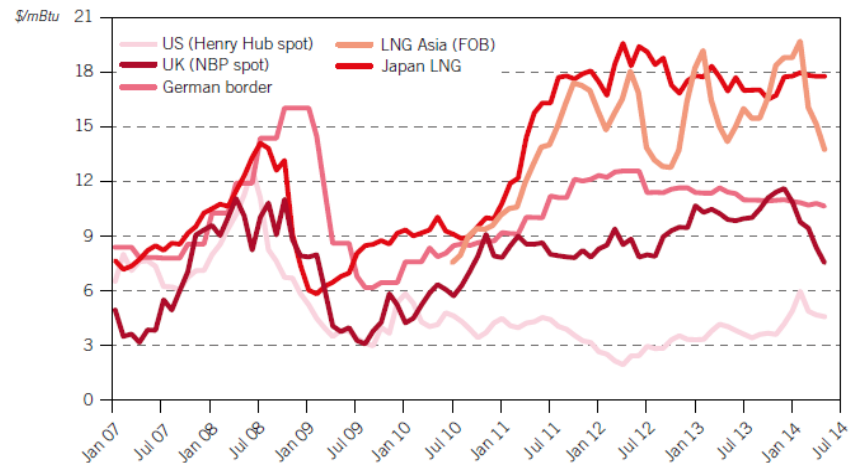
Breakeven Price for Major North American Gas Plays



Demand

- Natural gas demand expected to grow by double digits
- Replacement of coal-fired power with natural gas
- LNG exports expected to grow to 5.2 bcf/d
- Exports to Mexico

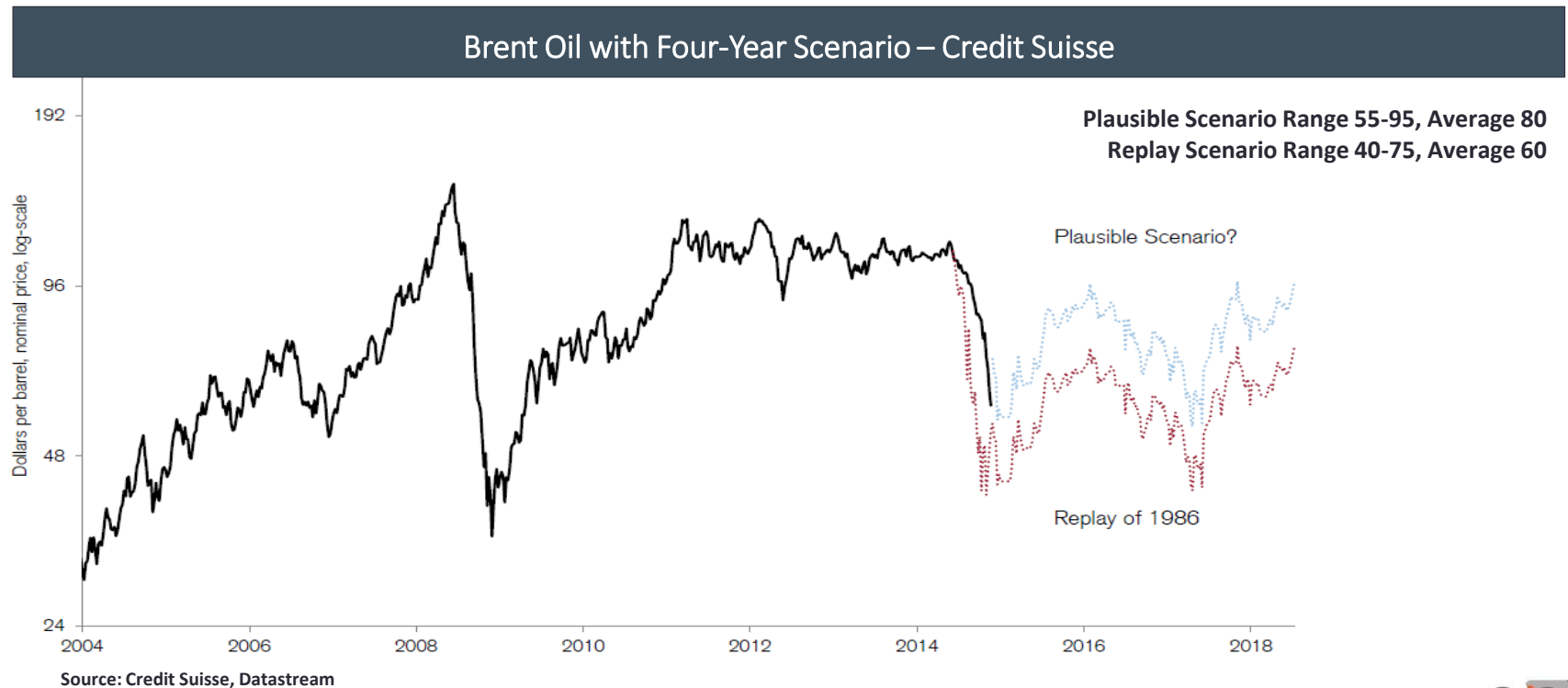
Global Natural Gas Prices



Sources: IMF Primary Commodity Prices, Monthly data, 2014; Platt's, Natural Gas Spot & Contract Prices, 2014.

Current Energy Market Expectations

- China and non-OECD countries drove 100% of the demand growth since 2009
- Lower demand from Europe was a large driver of the 2014 supply glut
- U.S. shale producers, Canadian heavy oil and deep-water offshore will see supply declines
- Lower oil prices are expected to increase demand globally
- Brent expected to recover to \$80/bbl longer term; some think as early as late 2015



Risks to Investing in Energy Today

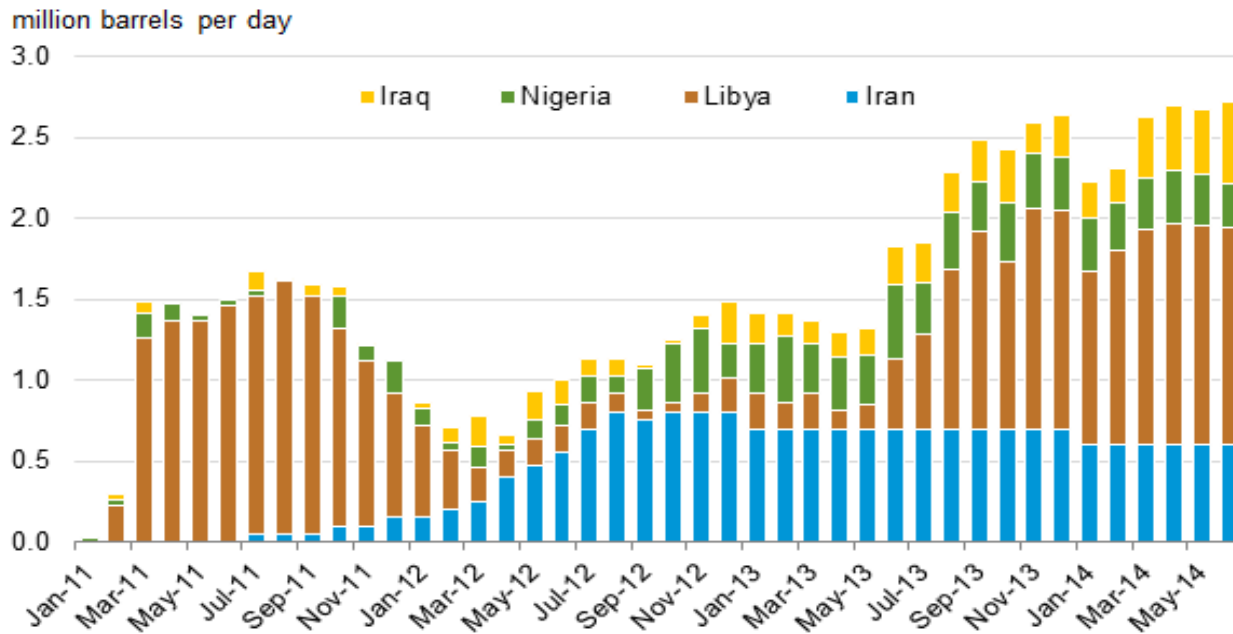
Oil is priced in U.S. dollars

- In previous oil sell-offs, a declining dollar helped increase global oil consumption
- The dollar has rallied against global currencies in recent months which offsets some of the price decline for non-U.S. consumers

New supply coming to market

- Large supply disruptions in Iraq, Iran and Libya have curtailed production in all three countries; stability in the region could bring increased supply to the market

Estimated
unplanned
OPEC crude
oil production
disruptions



Source: U.S. Energy Information Administration.

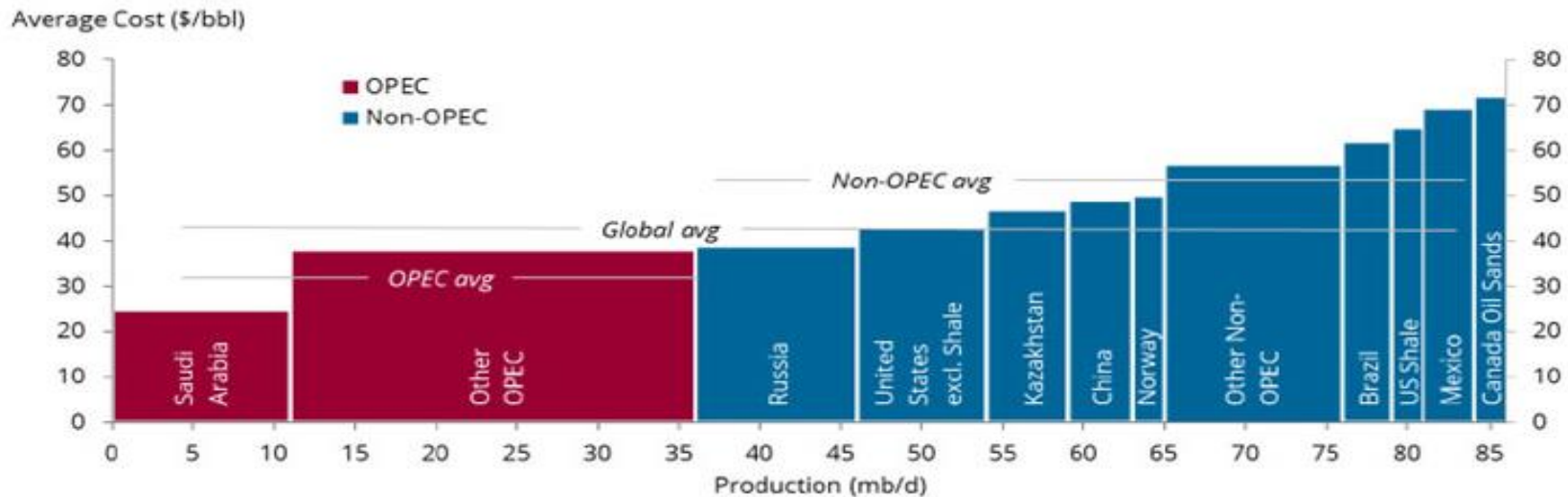


Risks to Investing in Energy Today

U.S. shale as the marginal cost producer

- Much of the new supply brought to market comes from U.S. shale
- In a competitive global oil market, prices are set around the break-even costs for marginal producers
- Oil prices increase and shale producers pump more oil; prices fall and output declines
- This is not an attractive environment for many shale plays that rely on stable oil prices >\$80/bbl

Average cost curve for the oil market
\$/barrel



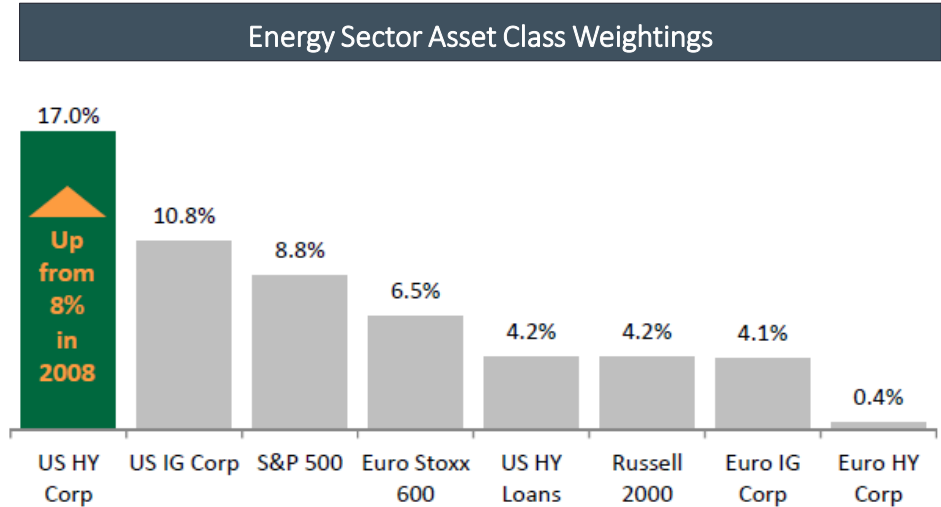
Shale plays lie at the higher end of the non-OPEC marginal cost curve, as infrastructure build-outs, decline rates, high levels of rig activity keep costs high

Energy Opportunities

	POTENTIAL STRATEGY	STRENGTHS	WEAKNESSES
Public Equities	<ol style="list-style-type: none"> Utilize overlay manager to rebalance energy exposure to market weight Hire energy specialist in public equity markets—fund investment from public equity 	<ul style="list-style-type: none"> Liquid market with greater flexibility in deploying capital and redeeming investment Generally, lower cost than private investment strategy 	<ul style="list-style-type: none"> Fewer energy specialists in the public markets Client will have greater impact over timing of capital deployment Lower in the cap structure; higher risk of capital loss
Public Debt	<ol style="list-style-type: none"> Utilize credit specialist to opportunistically invest in energy credit 	<ul style="list-style-type: none"> Liquid market with greater flexibility in deploying capital and redeeming investment Lower cost and potentially able to utilize existing Client manager Greater downside protection should energy prices remain depressed 	<ul style="list-style-type: none"> Small universe of available managers with an energy expertise Less upside if energy experiences a strong correction
Private Debt	<ol style="list-style-type: none"> Distressed energy strategy Primary loans or project finance in the energy sector Structured equity 	<ul style="list-style-type: none"> Larger universe of distressed managers, some energy specialists Managers exercise greater discretion in deploying capital and exiting investments Downside protection from being higher in the capital structure 	<ul style="list-style-type: none"> Less liquidity and higher cost structure Large number of funds coming to market to take advantage of the opportunity
Private Equity (Primary)	<ol style="list-style-type: none"> PE Energy Funds (upstream, midstream, diversified energy) 	<ul style="list-style-type: none"> Broad universe of energy funds Flexibility in choosing sub-industries within energy Allows energy experts to deploy capital as opportunities arise 	<ul style="list-style-type: none"> Low liquidity and higher cost structure Typically equity-oriented investment so less downside protection
Co-Invest and/or Special Situations	<ol style="list-style-type: none"> Selectively consider co-investment opportunities in energy private markets 	<ul style="list-style-type: none"> Opportunistic approach with Client selectively considering deals Typically, a lower fee structure relative to primary funds 	<ul style="list-style-type: none"> High risk of no deals coming to market Higher level of due diligence required Low liquidity and less diversified approach

Credit Markets are Foreshadowing Distress

- Energy companies have utilized the high yield markets to grow CAPEX spending
- Energy now represents 17% of the U.S. High Yield market, up from 8% in the 2008
- Highly levered energy companies are already trading at distressed prices



Source: Riverstone

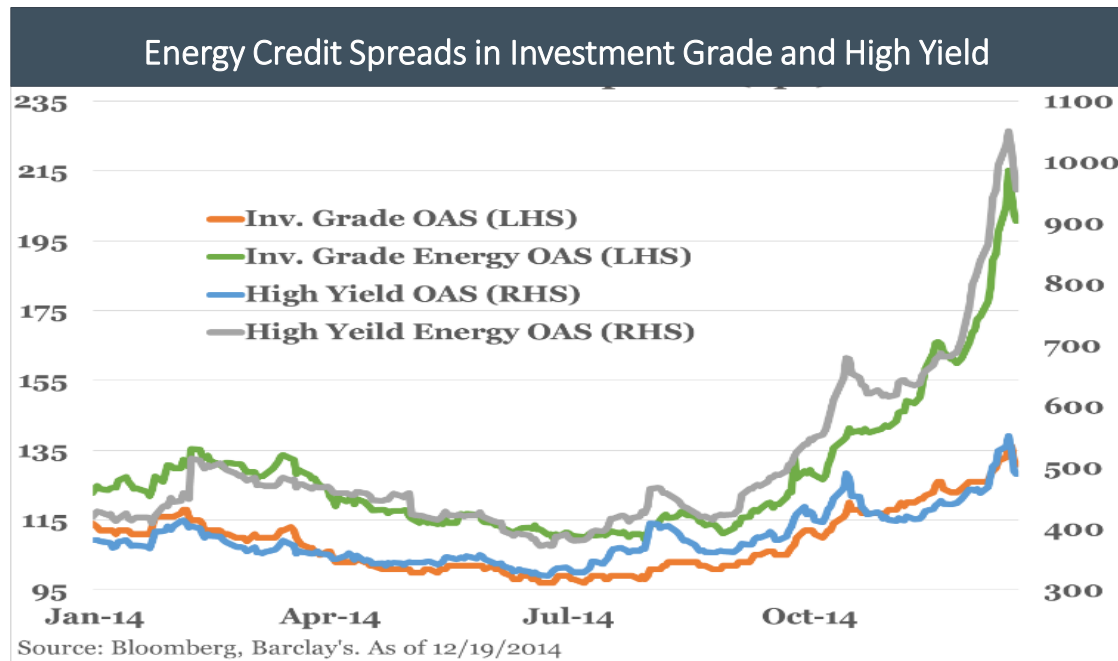
Bond Issuer	Coupon	As of 12/30/2014	
		Price	Yield
Linn Energy	6.50%	81.0	10.5%
RKI E&P	8.50%	80.8	12.9%
Penn Virginia	8.50%	80.0	13.9%
Halcon Resources	9.25%	73.8	15.5%
Magnum Hunter Resources	9.75%	79.0	15.7%
Sandridge Energy	7.50%	63.0	15.7%
Midstates Petroleum	9.25%	50.0	25.5%
Samson Resources	9.75%	41.4	35.2%

Source: Kayne Anderson

Interesting Opportunity in Credit

Key Factors we are looking for in GPs

- GPs with a strong background in credit underwriting
- GPs that think like a credit investor (i.e., defensive with a focus on downside protection)
- Flexibility to originate loans, buy secondary distressed debt or originate structured credit and equity solutions
- Target mid-size companies with balance sheet and scale to withstand longer periods of low oil prices
- Terms that align LPs with the expected returns available in credit-oriented strategies



SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 7.1

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer 

SUBJECT: Report on the Status of the Update to the Board's Policy and Procedures for the Correction of Errors

Staff Recommendation

Accept staff's report on the status of revisions to the Board's "Policy and Procedure for Correction of Errors Relating to Member Contributions, Withdrawals and the Payment of Benefits."

Background

As part of staff's on-going project to identify key Board policies and bring such policies to the Board for reaffirmation or amendment, staff reviewed the Board's current policy and procedures to correct errors in the collection of member contributions or payment of benefits.

Staff is of the opinion that a revised policy is in order and, for informational purposes only, would like to discuss key elements of the revision, particularly the collecting and awarding of interest on amounts owed, and receive Board direction in order to finalize the policy for future Board approval.

Discussion

Several retirement systems have been updating their error correction policies to reflect the need to collect interest on under-payments of contributions or over-payments of benefits in order to make the fund "whole." While there appears to be uniformity on the need to collect interest, systems differ on the rate of interest to be charged.

Staff has determined that the collection of interest is necessary regardless of the reason for the error (i.e. mistake by members, employers or SamCERA). In turn, interest would be paid to the member for over-payment of contributions or under-payment of benefits. The rate of interest will differ depending upon the scenario.

In regards to money owed by a member:

- **For under-payments of contributions**, interest should be assessed at the rate(s) of interest credited to the member's account for the period in which the under-payments

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

were made, and be applied to the outstanding amount due until such amount is fully repaid.

- **For over-payment of withdrawn/rolled over contributions and interest**, interest would be at the rate of the applicable assumed actuarial rate of return from the date of withdrawal/rollover to the completion of the repayment.
- **For the over-payment of a monthly benefit**, interest shall accrue from the dates of the over-payments until the completion of the repayment at the applicable actuarial assumed rate of return.

In regards to money owed to a member:

- **For over-payment of contributions**, members would receive interest at the rate of interest credited to the member's account on the amount of over-payment.
- **For under-payment of withdrawn/rolled over funds**, the member shall receive interest at the rate(s) of interest credited to the member's account for the period in which the under-payments were made.
- **For the under-payment of a monthly benefit**, the member shall receive interest that accrued since the under-payment commenced at the applicable actuarial assumed rate of return.

Attachment:

Draft "Policy and Procedure for Correction of Errors Relating to Member Contributions, Withdrawals and the Payment of Benefits. "

**POLICY AND PROCEDURE FOR THE CORRECTION OF ERRORS
RELATING TO MEMBER CONTRIBUTIONS, WITHDRAWALS
AND THE PAYMENT OF BENEFITS**

I. POLICY OF THE BOARD OF RETIREMENT

Pursuant to the Board of Retirement's ("Board") fiduciary duty to conserve retirement fund assets and protect the integrity of the fund for the benefit of the members and beneficiaries ("Members"), it is the policy of the Board:

- To collect member contributions and issue all disbursements in accordance with the law;
- To correct errors as soon as administratively feasible once identified and verified; and
- To recover under-payments of member contributions and over-payments of SamCERA funds in accordance with the law and whenever it is reasonable to do so in the opinion of the Board.

For purposes of this policy, the term Chief Executive Officer (CEO) means the Chief Executive Officer and his or her designee. The term "member" means member, beneficiary or survivor.

This Policy is designed for use when calculation and other errors affect an individual or small number of members. In the event of a system-wide error that affects multiple members, the Board may direct staff to implement a system-wide correction process that it determines is appropriate under all the circumstances.

In the event of any inconsistency between applicable law and this Policy, the law shall take precedence.

II. PROCEDURE FOR RESOLVING CONTRIBUTION ERRORS

A. Under-Payment of Member Contributions Discovered While A Member is Still Active.

1. The CEO shall confirm the amount of contributions that the member should have paid, the period of time that the under-payment occurred, and the total amount of contributions owed.

2. Staff shall promptly notify the employer to correct the error on a going forward basis in order that the correct amount of contributions is deducted from the member's bi-weekly pay.

3. In regards to collection of arrears under-payments, the amount of the under-payment and the applicable interest on that amount shall be collected. The interest shall be assessed at the rate(s) of interest credited to the members' accounts for the period in which the under-payments were made, and shall be applied to the outstanding amount due until such amount is fully repaid. The rate of interest during the repayment period shall be the assumed actuarial rate of return applicable at the commencement of the repayment. If the under-payment was due to an incorrect pick-up or cost share, or COLA cost share in which the employer paid rather than the member, no interest shall be assessed.

4. If the full amount of the past due contributions and interest equals \$50 or less, staff shall send a notice setting forth:

- (a) The total amount of contributions and interest owed; and
- (b) The amount of the additional contributions to be deducted from the member's next payroll.

5. If collecting the full amount of the past due contributions and interest will exceed \$50, staff shall commence a collection effort that shall commence after sending a notice to the member setting forth:

- (a) The total amount of contributions and interest owed and the rate that interest will continue to accrue;
- (b) The bi-weekly amount of the additional contributions to be deducted from the member payroll;
- (c) The commencement date of the collection and the number of affected pay periods;
- (d) The member's right to object the collection of the additional contributions and/or collection method and the deadline for such action; and
- (e) The fact that repayment will commence if a written appeal is not received within 15 days.

All methods of repayments should be completed no later than three years from the date of the notice to member of the amount owed unless otherwise extended by the CEO.

6. Notwithstanding paragraphs 4 and 5 above, the full amount of the required contributions and interest must be paid to prior to the commencement of any benefit payments to the member.

7. In the event that the member intends on terminating active membership and withdrawing/rolling over funds, the amount of any member contributions and interest owed shall be deducted from the lump sum payment. In the event that the member has already received the payment, or the amount owed is greater than the lump sum due, staff shall note the amount owing in the member's account and that it is to be repaid upon the member's return to active service.

B. Under-Payment of Member Contributions Discovered After Member Left Active Status.

1. The CEO shall confirm the amount of contributions that the member should have paid, the period of time that the under-payment occurred, and the total amount of the under-payment of contributions by the member.

2. In regards to collection of arrears under-payments, the amount of the under-payment and the applicable interest on that amount shall be collected. The interest shall be assessed at the rate of interest credited to the members' accounts for the period in which the under-payments were made, and shall be applied to the outstanding amount due until such amount is fully repaid. If the under-payment was due to an incorrect pick-up or cost share, or COLA cost share in which the employer paid rather than the member, no interest shall be assessed.

3. Staff shall endeavor to recover under-payments and interest by: (a) a lump sum payment from the member, (b) installment payments from the member, (c) offsets to future benefit payments to the member or (d) a combination of the foregoing, unless the Board, in its discretion and because of legal or practical considerations, determines that other action is warranted.

4. If the member has left active membership and if the CEO believes that considerations of cost effectiveness make it prudent and reasonable to not pursue recovery of under-payments where the cumulative total amount of member contributions underpaid, not including interest, is \$50 or less, then no further action is required.

5. The CEO may, on the advice of legal counsel, compromise the recovery of under-payments when the total amount of under-payment, not including interest, is less than \$5,000. Only the Board may compromise claims in which the total amount of under-payment, not including interest, is \$5,000 or more. Among other things, the likelihood of collection, the cost of collection, the amount of possible recovery and extreme hardship to the member will be considered by the CEO and/or the Board when determining whether to compromise a claim. Compromising claims may

include a different method of repayment than is otherwise provided by this Policy and/or a partial reduction of the amounts underpaid or interest due.

5. The CEO's collection process shall include a notice to the member setting forth:
 - (a) The total amount of contributions and interest owed and the rate at which interest will continue to accrue until the repayment is made;
 - (b) An agreement to pay the amounts owed with the payment options;
 - (c) A statement that, if the member is receiving a monthly payment, a repayment by equal installments for the amount of the contributions and interest will be deducted from benefit payments over the same length of time that the under-payments occurred and will go into effect by default if a written response from the member is not received within 30 days following the date the letter was delivered; and
 - (d) The member's right to appeal the collection of the additional contributions and/or collection method and the deadline for such action.
6. If the amount of the under-payment, not including interest, is \$5,000 or more, staff will attempt to contact the member by phone to discuss the contents of the letter before the letter is sent out for delivery.
7. The CEO may pursue all legal remedies to collect under-payments, including making a claim on an estate or trust, if appropriate.

C. Over-Payment of Member Contributions Discovered While Member Is Still Active.

1. The CEO shall confirm the amount of contribution that the member should have paid, the period of time that the over-payment occurred, and the total amount of the over-payment of contributions.
2. Staff shall promptly notify the employer to correct the error on a going forward basis in order that the correct amount of contributions is deducted from the member's bi-weekly pay.
3. Staff shall promptly notify the employer that the member is entitled to a lump sum credit equal to the amount of the over-payment plus the interest credited to the member's account on the over-payment. The adjustment reflecting the credit applicable to future deductions shall be made in the member's pay from their SamCERA participating employer as soon as is reasonably practicable following the confirmation of the over-payment.

D. Over-payment of Member Contributions Discovered After Member Has Left Active Status.

1. The CEO shall confirm the amount of contribution that the member should have paid, the period of time that the over-payment occurred, and the total amount of the over-payment of contributions.
2. Staff shall ensure that the member receives a lump sum payment in the amount of the over-payment plus interest at a rate of the rate of interest credited to the member's account on the over-payment, and the interest accruing from the date of the last over payment until the date that the lump sum is paid accruing at the applicable assumed actuarial rate of return. The payment shall be made as soon as is reasonably practicable following the confirmation of the over-payment and shall be made in a manner that is in compliance with requirements contained in the Internal Revenue Code and applicable Internal Revenue Service regulations.
3. If the member has died prior to payment of the lump sum amount due, the following procedures will be followed:
 - (a) If the member has named a designated beneficiary, the payment will be made directly to the designated beneficiary.
 - (b) If there is no beneficiary but there is an open estate (i.e., no order for final distribution yet), payment will be made to the estate (through the personal representative). If an estate was not established, distribution will be made in accordance with any applicable and valid Affidavit for Payment of Personal Property on file with SamCERA pursuant to Probate Code Section 13101. In cases where there is no designated beneficiary and the total amount of over-payment is less than \$50, staff need not take proactive measures to locate the person(s) entitled to such funds. All claims presented to SamCERA, however, will be considered regardless of size.

II. PROCEDURE FOR RESOLVING BENEFIT PAYMENT ERRORS

A. Under-payments to members Who Withdrew/Rolled Over Funds Or Retired.

1. The CEO shall confirm the amount of the under-payment contained in the withdrawal/rollover) or monthly benefit.
2. If the member has withdrawn/rolled over an incorrect amount of contributions and interest, staff shall promptly contact the member and remit to the member the amount owed and interest accrued. Interest should be paid at the rate(s) of interest credited to the member's account for the period in which the under-payments were made. The correction shall be on the next Consent Agenda for ratification by the Board.

3. For the under payment of a monthly benefit, staff promptly shall correct the monthly benefit amount on a going forward basis and make a lump sum payment of the arrears owed, for up to three years from the date of the discovery of the under-payment, plus interest that accrued at the applicable assumed actuarial rate of return and report the correction in the next Consent Agenda for ratification by the Board.
4. If a monthly benefit is no longer being paid, the staff shall make a reasonable attempt to pay the amount of the under-payment for up to three years from the date of the discovery of the under-payment, plus interest at the assumed rate of return to the beneficiary, survivor, or estate of the deceased recipient and shall report such action in the next Consent Agenda for ratification by the Board.

C. Over-payments to Members Who Withdrew/Rolled Over Funds or Retired.

1. The CEO shall confirm the amount of the over-payment contained in the withdrawal/rollover or monthly benefit.
2. For withdrawn/rolled over contributions and interest, staff shall contact the member and request payment of the amount of the over-payment plus interest at the rate of the applicable assumed actuarial rate of return from date of withdrawal/rollover to the completion of the repayment. If payment is not made, the collection procedure is set forth in paragraph (5) below.
3. For the over payment of a monthly benefit, staff shall correct the monthly benefit on a going forward basis at the earliest practical time after confirming the error.
4. For the over payment of a monthly benefit, Staff shall take all reasonable steps to recover the full amount of all past over-payments made within three years from the date of the discovery of the over-payment, interest shall accrue from the dates of the over-payment until the completion of the repayment at the applicable assumed rate of return. Collection of over-payments that are subject to the provisions of paragraph 12, shall not be limited to three years.
5. Staff shall endeavor to recover over-payments by: (a) a lump sum payment from the member, (b) periodic installment payments from the member or (c) offsetting the amount to be recovered against future benefits, or a combination of these methods; unless the Board, in its discretion and because of legal or practical considerations, determines that another action is warranted. The member shall have a right to appeal the collection of the additional contributions and/or collection method and the deadline for such action.
6. If the CEO believes that considerations of cost effectiveness make it prudent and reasonable to not pursue recovery of over-payments where the cumulative total amount of the over-payment, not including interest, is \$50 or less, then no further steps shall be taken.

7. The CEO shall have authority, on the advice of legal counsel, to compromise recovery of over-payments when the total amount of over-payment, not including interest, is less than \$5,000. Only the Board may compromise claims in which the total amount of over-payment, not including interest, is \$5,000 or more. Among other things, the likelihood of collection, the cost of collection, the amount of possible recovery and the extreme hardship to the member will be considered by the CEO and/or the Board when determining whether to compromise a claim. Compromising claims may include a different method of repayment than is otherwise provided by this Policy and/or a partial forgiveness of the amounts overpaid.
8. Upon confirmation of an over-payment, staff shall send a letter by certified mail, return receipt requested, or by express delivery service, to the member advising the member of the over-payment and proposing a repayment schedule, as follows:
 - a. The letter will identify the circumstances of the over-payment and the fact that adjustments will be made to all future benefit payments.
 - b. The letter will request payment of the amount overpaid and interest, subject to the provisions of this Policy.
 - c. The letter will include an agreement to repay excess benefits and interest and a consent form for the spouse or beneficiaries, if applicable.
 - d. The agreement to repay excess benefits and interest will provide options including, but not limited to:

Option 1 — equal installments over the same length of time that the over-payments occurred, with interest that accrued during the over-payment period and during the repayment period.

Option 2 — lump sum payment for the full amount overpaid, with accrued interest that accrued during the over-payment period and during the repayment period.

Option 3 — reduction of monthly benefit until the over-payment is paid in full, with interest applied during the over-payment period and during the repayment period.
 - e. The letter and agreement to repay excess benefits may provide that Option 3 will go into effect by default if a written response from the member is not received within 30 days following the date the letter was delivered.
 - f. The letter shall inform the member of the right to appeal the collection effort and/or collection method and the deadline for such action.

9. If the amount of the over-payment, not including interest, is \$5,000 or more, staff will attempt to contact the member by phone to schedule a meeting to discuss the contents of the letter before the letter is sent out for delivery.

10. Staff may pursue all legal remedies to collect over-payments, including making a claim on an estate or trust, if appropriate.

11. Upon the death of the member before full repayment has been made, staff shall endeavor to pursue a claim or claims against the member's estate, survivors, heirs and/or beneficiaries to recover the unpaid amounts.

12. In cases where the error in the calculation of the member's monthly allowance or other benefits was made as a result of either (1) fraudulent reports for compensation made, or caused to be made, by the member for his or her own benefit or (2) the member caused his or her final compensation to be improperly increased or otherwise overstated at the time of retirement and the system applied that overstated amount as the basis for calculating the member's monthly retirement allowance or other benefits, the correction of this error shall be subject to the procedures sets forth in Government Code section 31529.

III. Chief Executive Officer Implementation Authority

In the implementation of this policy and procedure, the Chief Executive Officer has the authority to make minor adjustments in order that such implementation is accomplished in a fair and reasonable manner consistent with the objective sets forth in Section I.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 7.2

TO: Board of Retirement 
FROM: Scott Hood, Chief Executive Officer
SUBJECT: Amendment of the Board's Policy for Reimbursement of Travel and Other Official Expenses for Trustees and Staff

Staff Recommendation

Approve a resolution amending the Board's Policy for Reimbursement of Travel and Other Official Expenses for Trustees (Travel Policy) to reflect that SamCERA supports the involvement of Trustees who choose to take leadership roles with the State Association of County Retirement Systems (SACRS), and that expenses for such leadership roles shall not be subject to the overnight stay limitations set forth in the Board's Education Policy.

Background

Section 1 of the current Travel Policy provides for reimbursement of expenses whenever any Trustee is required to travel and states, "Occurrences that would require a Trustee or a SamCERA employee to travel include, but are not limited to, official business of the retirement association at conferences, education, due diligence,... or when otherwise serving in their official capacity or representing SamCERA." The Board's Education Policy further expands on the limitations relating to the reimbursement for travel for educational proposes.

Discussion

The Travel Policy should be amended if the Board wants to clarify that SamCERA supports the work of Trustees who take leadership roles in SACRS. Staff recommends that the Travel Policy be amended to reflect this and to clarify that expenses related to such travel shall not be subject to the overnight stay limitations set forth in the Board's Education Policy.

Attachment:

Resolution Amending the Policy and the Proposed Policy for Reimbursement of Travel and Other Official Expenses for Trustees and Staff

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

Board of Retirement

RESOLUTION 15-16-___

***RESOLUTION AMENDING THE BOARD OF RETIREMENT'S
"POLICY FOR REIMBURSEMENT OF TRAVEL AND OTHER OFFICIAL EXPENSES FOR TRUSTEES
AND STAFF"***

WHEREAS, Government Code §31520 vests the management of SamCERA in the Board; and

WHEREAS, the Board acknowledges the vital importance of making informed judgments on all matters which come before it and has adopted a Code of Fiduciary Conduct and an Educational Policy to guide its actions; and

WHEREAS, pursuant to Government Code §31521 the Board of Supervisors has authorized the appointed Trustees and the retiree Trustees to receive a stipend for attending meetings of the Board and for meetings of a committee authorized by the Board and, further, that all Trustees may be reimbursed for actual and necessary expenses; and

WHEREAS, the Board recognizes that reimbursements should be only for those necessary, reasonable and actual expenses that have been incurred; and

WHEREAS, the Board desires to amend its "Policy For Reimbursement of Travel and Other Official Expenses For Trustees and Staff" to clarify and expressly state that SamCERA supports the involvement of Trustees in leadership roles with the State Association of County Retirement Systems (SACRS) and expenses for such leadership roles shall not be subject to the overnight stay limitations set forth in the Board's Education Policy. All claims for reimbursement are subject to the limitations set forth below and shall be made in accordance with Section 3 "Claims for Expenses";

Therefore, be it

RESOLVED, that the Board hereby amends its Policy For Reimbursement of Travel and Other Official Expenses For Trustees and Staff as set forth in the attachment.

PASSED AND ADOPTED by the Board of Retirement on March 24, 2015.

Lauryn Agnew, Chair, Board of Retirement

I, Michal Settles, Secretary of the Board of Retirement, of the San Mateo County Employees' Retirement Association, DO HEREBY CERTIFY that the foregoing resolution was duly introduced, approved and adopted by the Board of Retirement at a regular meeting of the Board of Retirement held on the March 24, 2015, by the following vote:

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

AYES:

NOES:

ABSENT:

ATTEST: _____

Michal Settles
Secretary, Board of Retirement

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

**POLICY FOR REIMBURSEMENT OF TRAVEL AND OTHER
OFFICIAL EXPENSES FOR TRUSTEES AND STAFF**

SECTION 1. TRAVEL RELATED EXPENSES.

Whenever any Trustee of the Board of Retirement (“Trustee”) or any SamCERA employee in the service of SamCERA is required to travel, such person shall be allowed, in addition to any salary or compensation, certain actual and necessary travel expenses, as set forth below. Occurrences that would require a Trustee or a SamCERA employee to travel include, but are not limited to, official business of the retirement association at conferences, education, due diligence, appearances before local, state, and federal administrative agencies, legislative bodies, and judicial proceedings or when otherwise serving in their official capacity or representing SamCERA. SamCERA supports the involvement of Trustees in leadership roles with the State Association of County Retirement Systems (SACRS) and expenses for such leadership roles shall not be subject to the overnight stay limitations set forth in the Board’s Education Policy. All claims for reimbursement are subject to the limitations set forth below and shall be made in accordance with Section 3 “Claims for Expenses.”

(a) Transportation. Actual cost incurred for transportation by any carrier services shall be reimbursed. Reimbursement for travel by any privately owned automobile shall be in accordance with the provisions of paragraph (c), below, except that it shall not be more than the cost of common carrier services where the one-way distance required to be traveled is 200 miles or more, and in such event the reimbursement for such travel shall not exceed the cost of air travel regardless of the mode of transportation used. The cost of air travel shall be based on coach fares, unless air coach service is not available, or unless otherwise authorized by the Chief Executive Officer. Government and group rates offered by a provider of transportation services shall be used when available.

(b) Meals, Lodging, and Incidentals. For official business travel with an overnight stay, there shall be direct payment by SamCERA or reimbursement for the actual costs that are incurred only outside the local commuting area for meals, lodging, and incidentals, including baggage transfer, tips, and other actual and necessary incidental expenses. Direct payment for meals, either without an overnight stay and/or within the local commuting area, and lodging within the local commuting area shall be made if such costs are included in the set conference or tuition fee. Exceptions based upon unique circumstances can be made for reimbursement for meals, either without an overnight stay and/or within the local commuting area, lodging and incidentals incurred within the local commuting area, if authorized by the Board Chair for Trustees and for the Chief Executive Officer, the Board Vice Chair for the Board Chair, and the Chief Executive Officer for employees. The local commuting area is defined as within the five counties of Alameda, Contra Costa, San Francisco, San Mateo, and Santa Clara. The maximum reimbursement for the actual cost of meals will be limited to the Continental United States (CONUS) current rate except that for those areas that do not have a standard rate and have a separate CONUS rate, the maximum reimbursement rate shall be limited to

double the amount of the CONUS current rate for those areas. Government and group rates offered by a provider of lodging services shall be used when available. If such rate is not available, the maximum reimbursement rate shall be limited to double the amount of the CONUS current rate for that location. If the lodging is in connection with a conference or organized educational activity, lodging reimbursement for lodging costs shall not exceed the maximum group rate published by the conference or activity sponsor, provided that lodging at the group rate is available at the time of booking. If such rate is not available, the maximum reimbursement rate shall be limited to double the amount of the applicable CONUS rate or the group rate, whichever is higher. A complete listing of CONUS rates can be found at www.gsa.gov. If it is necessary to secure lodging in excess of double the CONUS rates, that expenditure must be approved in advance by the Board Chair for Trustees and for the Chief Executive Officer, the Board Vice Chair for the Board Chair, and the Chief Executive Officer for employees.

(c) Privately Owned Automobile. Actual costs of parking and mileage actually traveled shall be reimbursed. Mileage shall be reimbursed at a rate determined by the County Manager for San Mateo County, provided that such amount is at least that amount established by the Internal Revenue Service as the allowable business deduction rate for such travel. Any Trustee or alternate who is using a vehicle belonging to his or her SamCERA employer shall not receive mileage reimbursement under this section. Any Trustee or alternate who is receiving a travel allowance from his or her SamCERA employer shall not receive mileage reimbursement under this section for travel that is within the geographic area covered by the travel allowance.

(d) Other Transportation. Travel expenses may be paid directly by SamCERA to the supplier of the transportation where the mode of transportation is other than by a privately owned motor vehicle. In other instances travel shall be claimed by the individual employee.

(e) Automobile Insurance. No Trustee or employee shall engage in any travel in connection with the performance of official business of SamCERA in a privately owned conveyance, either their own, or that belonging to another, unless the same is insured in such manner as to comply with County of San Mateo Administrative Memorandum.

(f) Course or Meeting Registration Fees. Required registration fees for educational courses, conferences, or other meetings may be paid directly to the organization or association conducting such course, conference, or other meeting and the officer or employee shall not be required to advance the funds therefore.

(g) Non-Reimbursable Travel Expenses. Not all travel expenses incurred are reimbursable. Examples of such non-reimbursable expenses include, but are not limited to: Trustee educational or conference expenses which were not approved by the Board in accordance with the Education Policy, non SamCERA related expenses, transportation, lodging, and meal expenses which exceed or are outside of the limits set forth in this policy, alcoholic beverages, personal entertainment, additional costs for additional person(s) who are not either SamCERA Trustees or employees, extra baggage charges for personal items, traffic citations and parking tickets.

SECTION 2. MEETINGS OF THE BOARD AND BOARD COMMITTEES.

(a) **Stipend For Meetings.** Pursuant to the resolution adopted by the Board of Supervisors and in accordance with Government Code section 31521, Trustees in the fourth, fifth, sixth, eighth (and alternate) and ninth seats shall receive compensation for attendance at a rate of \$100 a meeting of the Board or for a meeting of a committee authorized by the Board, up to 3 meetings a month.

(b) **Mileage Reimbursement.** All members of the Board shall receive mileage reimbursement for personal attendance at any meeting of the Board or for a meeting of a committee authorized by the Board for up to three meetings a month. Mileage for Trustees in the fourth, fifth sixth, eighth (and eighth alternate) and ninth seats shall be calculated to and from the Trustee's place of residence. For the Trustees in the first, second, third, and seventh (and seventh alternate) seats, the mileage shall be calculated to and from the Trustee's SamCERA employer worksite. Any Trustee or alternate who is using a vehicle belonging to or is receiving a travel allowance from his or her SamCERA employer shall not receive mileage reimbursement under this section.

SECTION 3. OTHER OFFICIAL DUTY RELATED EXPENSES.

(a) **Expenses Incurred by Trustees:** Trustees are entitled to reimbursement of the actual cost of expenses, including meals, that are necessary, appropriate, and reasonably incurred in the performance of official duties within or outside of the local commuting area, unless otherwise specified by this policy.

(b) **Expenses Incurred by Staff:** All staff expenditures must be pre-approved by the supervising manager or the Chief Executive Officer. The supervising manager will ensure that the proper procedures are being followed, funds are available, expenses are reasonable and appropriate, and the cost is not excessive. Employees are encouraged to use the corporate credit card for necessary online purchases. Employees must submit original detailed receipts and should note the purpose or recipient of the expense items on the Claim Form as applicable.

(c) **Staff Expenses under \$50.** Employees may request immediate reimbursement of approved expenditures under \$50 from the Petty Cash Fund upon submission of a completed and approved Petty Cash Voucher accompanied by the original itemized invoice. Reimbursement of petty cash expenditures would include, but is not limited to: refreshments for meetings, kitchen supplies, postage stamps, and certified mailings. The Petty Cash Custodian will obtain approval from the Chief Executive Officer prior to reimbursing the employee.

(d) **Tuition Reimbursement for Continuing Education:** Permanent SamCERA employees are eligible to participate in the County's Tuition Reimbursement Program to enhance work performance and career mobility. College level courses may be taken at accredited educational institutions. Requests must be submitted and approved by the supervising manager at least two weeks before the beginning date of the course. The County Human Resources Department will have the final approval for this program.

SECTION 4. CLAIMS FOR EXPENSES.

(a) Claim Form. A claim for expenses shall be submitted within sixty (60) days after incurring the expense. Before any expenses are allowed or paid, the claimant shall file a claim in the manner provided by law for claims to be filed against SamCERA, duly certified as correct by the claimant and approved by SamCERA's Chief Executive Officer. The Board Chair will approve the Chief Executive Officer's claims. When submitting a joint receipt for multiple trustees and employees, the names of the other participants must be listed on the claim and receipt.

(b) Itemized receipts: The claimant shall attach to the claim all itemized receipts showing the moneys expended by the claimant. If a receipt includes non-SamCERA expenses, e.g. personal expenses, the claim shall reflect only the portion of the expense that pertains to SamCERA. Receipts are required for all expenditures \$25 and over. If a receipt is lost, the claimant must detail the expenditure to the best of their ability and attest to its accuracy by affixing their signature to the reimbursement expense.

(b) Expenses Must Be Actually Incurred. SamCERA Trustees or employees shall not submit a claim to SamCERA except for those expenses actually incurred in connection with the performance of official business of the retirement association.

(c) Approval By the Board. All reimbursable expenses for Trustees that do not fall within the above provisions may be approved by the Board of Retirement at a public meeting before the expense is incurred.

SECTION 6. ADVANCE PAYMENTS FOR EXPENSES.

Whenever it appears to be for the best interests of SamCERA that any Trustee, or employee of SamCERA travel outside of the County of San Mateo on official business and where prior authorization for such travel has been given by the Board of Retirement, and it appears that it is necessary that such trustee or employee be allowed a sum of money not in excess of two thousand five hundred dollars (\$2,500) for such travel expenses in advance, a claim for such advance showing the emergency requiring such advance shall be made out in the regular form and approved by the Chief Executive Officer and thereafter SamCERA shall draw their warrant in favor of such Trustee or employee. The trustee or employee receiving such advance shall file with SamCERA after their return from such trip an itemized account, together with proper vouchers of their expenses and shall pay to SamCERA any balance remaining unexpended for SamCERA business purposes. SamCERA shall attach such statement to the original claim for such advance and shall immediately make the proper adjustment of the account from which the advance was drawn.

SECTION 7. REPORTING BY TRUSTEES OF THE BOARD OF RETIREMENT

Trustees shall provide a brief report, either orally or in writing, on meetings attended at the expense of SamCERA at the next attended regular meeting of the Board.

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 7.3

TO: Board of Retirement

FROM: Scott Hood, Chief Executive Officer



SUBJECT: Update and Discussion of April 28 and 29, 2015 Board-Staff Retreat

Staff Recommendation

Provide input regarding 2015 Board-Staff Retreat Agenda topics.

Background

This item is to give trustees another opportunity to review and discuss retreat topics. The items on the agenda are the result of discussions with the Board over the last few meetings.

The Draft agenda is attached. Staff believes this is a well-balanced list of topics that should fit well with the amount of time planned for the retreat.

Discussion

The April 28 and 29, 2015, SamCERA Board-Staff Retreat is scheduled along the same lines as the 2014 retreat:

Days:	Two consecutive days
Timing:	Leaves time in between speakers for discussion
Location:	In the SamCERA boardroom
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 28, and Wednesday, April 29

Attachment

Draft 2015 Board-Staff Retreat Agenda

Agenda & Presenters

Board / Staff Retreat

April 28 & 29, 2015



San Mateo County Employees'
Retirement Association

BOARD / STAFF RETREAT AGENDA
Day One—Tuesday, April 28, 2015

<u>TIME</u>	<u>TOPIC AND PRESENTER</u>
8:30 a.m.	Coffee and Refreshments
9:00 a.m.	Welcome Presenter: Scott Hood, SamCERA Chief Executive Officer
9:15 a.m.	Macro Overview Presenter: David Kupersmith, AQR
10:15 a.m.	Break
10:30 a.m.	Potential Impact of Plan Maturation How will this impact Investment Strategies and Liquidity? Presenters: Patrick Thomas, SIS Vice President, Michael Coultrip, SamCERA Chief Investment Officer
11:30 a.m.	Open Discussion
12 Noon	Lunch
1:15 p.m.	Ethics Training Presenter: Brenda Carlson, SamCERA Chief Legal Counsel
2:15 p.m.	Break
2:30 p.m.	Beginning of Regular Board Meeting Agenda

BOARD / STAFF RETREAT AGENDA
Day Two—Wednesday, April 29, 2015

<u>TIME</u>	<u>TOPIC AND PRESENTER</u>
8:30 a.m.	Coffee and Refreshments
9:00 a.m.	<p>Deep Dive Led by Mike Coultrip. Assess longer-term manager performance and other characteristics vs indexes and peer groups. Review Risk Dashboard. Presenters: Patrick Thomas, SIS Vice President, Michael Coultrip, SamCERA Chief Investment Officer</p>
10:15 a.m.	Break
10:30 a.m.	Dive Deep - Continued
11:00 a.m.	Open Discussion
11:30 a.m.	Lunch
12:45 p.m.	<p>Approach to Difficult Cases, such as Stress-related Conditions. Presenter: Dr. Henry Brodtkin, SamCERA Medical Advisor</p>
1:30 p.m.	<p>Risk Management’s Role In Regards to Disabled Employees Presenter: Scott Johnson, San Mateo County Risk Manager</p>
2:15 p.m.	Break
2:30 p.m.	<p>Actuarial Presentation Explicit vs Implicit Assumption Rate Treating SamCERA’s separate employers separately. Presenter: Nick Collier, Milliman, Inc.</p>
3:30 p.m.	<p>Analyzing Currency Risk A summary of the issues surrounding this topic. Presenters: Patrick Thomas, SIS Vice President, Michael Coultrip, SamCERA Chief Investment Officer</p>
4:15 p.m.	<p>Pros and Cons of Implementing a Global Equity Structure. Presenters: Patrick Thomas, SIS Vice President, Michael Coultrip, SamCERA Chief Investment Officer</p>
5:00 p.m.	End of Retreat – Adjournment in the Memory of Our Deceased Members

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

March 24, 2015

Agenda Item 7.4

TO: Board of Retirement

FROM: Tariq Ali, Chief Technology Officer



SUBJECT: Update on Progress of SamCERA's Information Technology Projects

Discussion

Staff will provide an update of SamCERA's technology projects, and SamCERA's Project Manager, Will Morrow from LRWL, Inc. will provide an update on the Pension Administration Software System implementation project, per the attached presentation.

IT Projects

- **New Website**
Staff is working with Digital Deployment.
- **PensionGold integration with Workday**
SamCERA is ready to accept the new Workday files into PensionGold.
- **PensionGold Web Member Services Portal (WMS)**
Staff is working with ISD to begin penetration testing.
- **Board Packet Software**
Staff has reviewed the proposals and have invited the top proposers to present a demo of their product
- **SharePoint Migration**
Staff is working with ISD to migrate documents from the Autonomy system to the new Office 365 SharePoint system.

PASS Implementation

- Status
 - Phase 1 (Project Initiation) is 100% complete
 - Phase 2 (PASS Development) is 10% complete
 - Phase 3 (PASS Implementation) will start December 2015
- Data Conversion
 - 92% of the data for Validation 1 (of 4) has been successfully converted

SAN MATEO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
Board of Retirement

- Data conversion for Validation 2 has begun
- Schedule
 - Validation 1 completed December 19, 2014
 - Validation 2 testing is scheduled to be completed by June 19, 2015
 - PASS is scheduled to go-live January 2, 2016
- Issues
 - Validation 1 testing resulted in 14 reported issues (all low or medium priority)
- Budget
 - No budget variance. Vitech has invoiced \$704,191 (9.3%) of the \$7,566,182 project budget.
- Risks
 - We have identified and planned mitigation for several project risks including:
 - Workday integration files not aligning with PASS requirements
 - Unique design solutions for a number of requirements
 - SamCERA staff resource availability
 - Processing time for Workday daily change file.
- Other
 - Change management meetings are being conducted bi-monthly
 - Change order in process to use Vitech V3 Imaging instead of San Mateo County's HP Autonomy software

Attachment

PASS Project Update Presentation



SamCERA PASS Project Update

March 24, 2015

PASS Status Overview

Status as of March 3, 2015

ID	Task Name	Start	Finish	Duration	% Complete	2014				2015				2016			
						Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	PASS Project	4/14/2014	1/2/2017	142.2w	28.93%												
2	Phase 1: Initiate Project	4/14/2014	8/15/2014	18w	100%												
3	Phase 2: Develop PASS	7/7/2014	4/15/2016	93w	28.62%												
4	Validation 1: Demographics	7/7/2014	12/19/2014	24w	100%												
5	Validation 2: CRM, Employer, Pension	9/29/2014	6/19/2015	38w	37%												
6	Validation 3: Service Purchase, Calcs, Self-Service	3/2/2015	11/13/2015	37w	0%												
7	Validation 4: Payments, Finance, Options	8/24/2015	4/15/2016	34w	0%												
8	Phase 3: Implement PASS	3/7/2016	1/2/2017	43.2w	0%												

Data Conversion Status

- Validation 1 conversion complete
- Validation 2 conversion on schedule
 - Cycle 1: Employment History
 - Cycle 2: Participant Account
 - Cycle 3: Participant Account Detail
 - Cycle 4: Pension Application
 - Cycle 5: Pension History

PASS Sprint Plan

- Preparation
- Execution
- Verification
- Validation

		2015															
		3/2	3/9	3/16	3/23	3/30	4/6	4/13	4/20	4/27	5/4	5/11	5/18	5/25	6/1	6/8	6/15
		3/5	3/13	3/20	3/27	4/3	4/10	4/17	4/24	5/1	5/8	5/15	5/22	5/29	6/5	6/12	6/19
Phase 1 - Project Initiation																	
Phase 2: PASS Solution Development																	
Segment: Enrollment, Employer Reporting and Employer Self Service																	
D. Demographics																	
E. Call Center/CRM and Member/Employer Education																	
F. Employer Reporting & Contributions Processing																	
Sprint 1	Agreements & Rates																
Sprint 2	Employer Account Setup																
Sprint 3	Wage Report Processing																
Sprint 4	Reconciliation & Billing																
Sprint 5	Payment Processing																
Sprint 6	Work Report Release	1															
Sprint 7	Member Accounts Update						1										
G. Employer Self-Service																	
Sprint 1	Login, Security, Accounts, News, Alerts and Home Page	1															
Sprint 2	Employer Demographic Updates						1										
Sprint 3	Member Demographics and Roster Updates									1							
Sprint 4	Work Report Processing															1	
Sprint 5	Employer Web Forms																
Segment: Pension, Benefits and Member Self Service																	
H. Purchase of Service, Multiple Service																	
Sprint 1	Core SCP Setup						1										
Sprint 2	SCP Initiation, Quote									1							
Sprint 3	SCP Payment Plan, Payments														1		
Sprint 4	Multiple Service																
I. Service Retirement, Benefit Estimates and Calculations																	
Sprint 1	Core Participant Account Design	1															
Sprint 2	Core Pension Design						1										
Sprint 3	Eligibility & Service Credit Calculation									1							
Sprint 4	Final Average Salary & Base Benefit															1	
Sprint 5	Optional Payment Forms, COLA																
Sprint 6	Death of Primary Annuitant and Contingent Annuitant																
Sprint 7	Functional Matrix & Processing																
Sprint 8	Participant Account Functions																
J. Disability, Pre-Retirement Death, Termination, Refunds, Return to Work																	
K. Legal Documents & Alt Payee Calculations																	
L. Payroll and other Payments																	
M. Funds Management & Query																	
N. Member Statement and Tax Reporting																	
O. Member Self-Service																	
P. ECM/Imaging																	
Sprint 1	Demographics and Entity Set up - Imaging Specific																
Sprint 2	Imaging for Val Cycle 3																
Q. Knowledge Management																	
Segment: Workflows, Docs, Reports, Interfaces & Data Conversion, Audit & Security																	
Phase 3: PASS Solution Implementation																	

Budget Summary

Items	Contract	Invoiced	Remaining
Phase 1	\$590,372	\$590,372	\$0
Phase 2	\$4,464,878	\$1,610,372	\$1,771,116
Phase 3	\$421,695		\$1,505,085
Holdback	\$468,555		\$468,555
Options	\$640,500		\$640,500
Hardware	\$178,483	\$35,172	\$143,311
Software	\$642,011	\$454,651	\$187,360
Amendments	\$159,688		\$159,688
TOTAL	\$7,566,182	\$2,690,567	\$4,875,615

36% of contract value has been invoiced

Risks

Risk (Value)	Actions
Workday integration files may not align with PASS requirements and schedule (63)	SamCERA will monitor status of requested changes after Workday go-live (March 16).
Workday cannot provide timely (5 business days) and correct changes after Workday go-live, which causes overall schedule delays (56)	ISD has indicated 10 day service level. Negotiate a Workday service level effective after Workday go-live
Number of SamCERA requirements requiring unique design solutions results in schedule delays (49)	Assuming we use the mobile Web approach, this risk is acceptable and no action required for Mobile. Social media risk will be mitigated by agreeing to time box the design and development and permitting some functions to be available after go-live. Knowledge Management will be mitigated by discussing and developing the approach early.
Errors in assumptions in Workday daily file result in rework that jeopardize readiness for Validation 2 testing (48)	Continue to confirm assumptions in a timely manner. Plan for special INT045 validation as a contingency .
SamCERA staff resources are not available to meet the project demands resulting in schedule delays and/or quality issues (48)	Sprint planning will permit SamCERA to balance staff workloads. SamCERA has committed Cele and Liz as project leads. Project team will monitor and respond to workload issues.

Other Status and Information

- Revised imaging change order in progress
- Change management activities continue
- Workday integration with PensionGold implemented