



Stanislaus County Employees' Retirement Association

832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

AGENDA

BOARD OF RETIREMENT
832 12th Street, Ste 600
Modesto, CA 95354

January 20, 2016
1:00 p.m.

The Board of Retirement welcomes you to its meetings, which are regularly held on the third Wednesday of each month. Your interest is encouraged and appreciated.

CONSENT ITEMS: These matters include routine administrative actions and are identified under the Consent Items heading.

PUBLIC COMMENT: Matters under jurisdiction of the Board, may be addressed by the general public before or during the regular agenda. However, California law prohibits the Board from taking action on any matter which is not on the posted agenda unless it is determined an emergency by the Board of Retirement. Any member of the public wishing to address the Board during the "Public Comment," period shall be permitted to be heard once up to three minutes. Please complete a Public Comment Form and give it to the Chair of the Board. Any person wishing to make a presentation to the Board must submit the presentation in written form, with copies furnished to all Board members. Presentations are limited to three minutes.

BOARD AGENDAS & MINUTES: Board agendas, minutes and copies of items to be considered by the Board of Retirement are customarily posted on the Internet by Friday afternoon preceding a meeting at the following website: www.stancera.org.

Materials related to an item on this Agenda submitted to the Board after distribution of the agenda packet are available for public inspection at StanCERA, 832 12th Street, Suite 600, Modesto, CA 95354, during normal business hours.

AUDIO: All Board of Retirement regular meetings are audio recorded. Audio recordings of the meetings are available after the meetings at <http://www.stancera.org/agenda>.

NOTICE REGARDING NON-ENGLISH SPEAKERS: Board of Retirement meetings are conducted in English and translation to other languages is not provided. Please make arrangements for an interpreter if necessary.

REASONABLE ACCOMMODATIONS: In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary at (209) 525-6393. Notification 72 hours prior to the meeting will enable StanCERA to make reasonable arrangements to ensure accessibility to this meeting.

1. Meeting Called to Order
2. Roll Call
3. Announcements
4. Public Comment
5. Consent Items
 - a. Approval of the December 16, 2015 Meeting Minutes [View](#)
 - b. Approval of the 2016 StanCERA Master Calendar [View](#)
 - c. Receipt of the 2016 Board of Retirement Standing Committee Assignments [View](#)
 - d. Executive Director Goals Update Quarter 4 2015 [View](#)
 - e. Accept the 2015 Continuing Education Record and the 2016 Education Opportunities [View](#)
 - f. StanCERA Complaint Log of October 1 – December 1, 2015 [View](#)
 - g. Monthly Staff Report [View](#)
 - h. Approval of Service Retirement(s) – **Sections 31499.14, 31670, 31662.2 & 31810**
 1. Camelio, David – Probation – Effective 01-09-2016 *
 2. Huntley, Rosemarie – Auditor/Controller– Effective 01-05-2016
 3. Lamela, Debra – Sheriff – Effective 01-15-2016
 4. Lundeberg, Erik – Public Defender – Effective 01-21-2016
 5. O'Dell, Julie – Alliance Worknet – Effective 12-23-2015

6. Passanisi, Kathleen – HSA – Effective 11-14-2015
7. Rosales, Arturo – HSA – Effective 01-05-16
8. Thompson-Ryan, Pamela – CSA – Effective 01-06-2016
9. Wade, Pamela – Probation– Effective 01-09-2016
10. Weeks, Marlene – Probation – Effective 01-09-2016

** Indicates Safety Personnel*

i. Approval of Deferred Retirement(s) – **Section 31700**

1. Anderson, Vanessa – CSA – Effective 12-12-2015
2. Castro, Norbert – City of Ceres – Effective 05-21-2015 *
3. Chapman, Jason – City of Ceres – Effective 11-07-2015 *
4. Ellis, Linda – HSA – Effective 12-12-2015
5. Fredeking, Tobias – BHRS – Effective 10-15-2015
6. Graves, Stephanie – CSA – Effective 10-17-2015
7. Lee, Bee – CSA – Effective 01-05-2016
8. Lillie, Michael – City of Ceres – Effective 11-28-2015 *
9. Uemura, Scott – District Attorney – Effective 04-04-2015

j. Approval of Disability Retirement - **Section 31724**

1. Freeman Jr., Jimmy - Deputy Sheriff, Service-Connected, Effective 06-02-2015 *
- * Indicates Safety Personnel*

k. Approval of Death Benefit – **Sections 31781, 31781.1, and 31781.3**

1. Armstrong, Carla, Deceased, January 7,2016 Active Member

6. Executive Director - Administrative

- a. Information Technology Solutions (ITS) Project Update [View](#)
- b. Discussion and Action for Consideration of State Association of County Retirement Systems (SACRS) 2016 Legislative Proposals. [View](#)
- c. Discussion and Action Executive Director Goals for 2016 [View](#)
- d. Discussion and Action regarding the preliminary June 30, 2015 Actuarial Valuation - Cheiron Actuaries [View](#)

7. Executive Director - Investment

None

8. Verus – Investment Consultant

- a. November 30, 2015 Flash Report [View](#)
- b. December 31, 2015 Flash Report
- c. Risk Tolerance Allocation Study [View](#)
- d. Discussion and Action Regarding Asset Allocation Study [View](#)

9. Closed Session
 - a. Discussion and Action Regarding Investment in Raven Capital Management
Government Code Section 54956.81
 - b. Conference with Legal Counsel – Pending Litigation – One Case:
O'Neal et al v. Stanislaus County Employees' Retirement Association
Stanislaus County Superior Court Case No. 648469
Government Code Section 54956.9(d)(1)
 - c. Conference with Legal Counsel – Pending Litigation – One Case:
Nasrawi et al v. Buck Consultants, LLC, et.al, Santa Clara County
Superior Court Case No. 1-11-CV202224; Court of Appeal, Sixth Appellate
District, Case No. H038894 Government Code Section 54956.9(d)(1)
10. Members' Forum (Information and Future Agenda Requests Only)
11. Adjournment



**BOARD OF RETIREMENT MINUTES
December 16, 2015**

Trustees Present: Jim DeMartini, Michael O'Neal, Jeff Grover, Donna Riley
Sam Sharpe and Jegan Raja (for Gordon Ford)

Alternate Trustee Joan Clendenin, Alternate Retiree Representative

Trustees Absent: Jason Gordo, Mike Lynch and Gordon Ford

Staff Present: Rick Santos, Executive Director
Kathy Herman, Fiscal Services Manager
Dawn Lea, Member and Employer Services Manager
Kellie Gomes, Executive Board Assistant

Others Present: Fred Silva, General Legal Counsel
Ed Hoffman, Investment Consultant
Bryce Haws, Linea Consultant

1. Meeting Called to Order

Meeting called to order 2:04 p.m. by Trustee Riley, Chair

2. Roll Call

3. Announcements

Kellie Gomes announced that Trustee Riley would assume the role of Chair for the remainder of this calendar year and all of 2016.

Kellie Gomes announced that Trustee Gordo would assume the role of Vice-Chair for the remainder of this calendar year and all of 2016.

4. Public Comment

None

5. Consent Items

Trustee Sharpe asked to be recused from voting on Item 5.f and left the room.

- a. Approval of the November 24, 2015 Meeting Minutes
- b. Monthly Staff Report
- c. Report on Earnings Allocation for Fiscal Year 2015
- d. Approval of Service Retirement(s) – **Sections 31499.14, 31670, 31662.2 & 31810**
 1. Adkins, John – City of Ceres– Effective 12-06-2015
 2. Alvarez, Marta – BHRS – Effective 12-30-2015
 3. Benjamin, Ann– CSA – Effective 12-12-2015
 4. Camelio, David – Probation– Effective 12-29-2015 *
 5. Chmielski, Patsy – CEO – Effective 12-20-2015
 6. Edwards, Debbie– Superior Courts – Effective 11-04-2015
 7. McCandless, Martha– HSA– Effective 12-02-2015

8. Rickett, Marilyn – BHRS – Effective 12-25-2015
9. Sanson, David – Sheriff – Effective 03-21-2015 *
10. Tarancon, Trinidad – BHRS – Effective 11-26-2015
11. Wood, Ronald – Superior Courts – Effective 12-31-2015

** Indicates Safety Personnel*

e. Approval of Deferred Retirement(s) – **Section 31700**

1. Foster, Jeannine – CSA – Effective 11-14-2015
2. Lagorio, Kathleen – Superior Courts – Effective 12-01-2015
3. Pen Rocha, Phannary – CSA – Effective 11-11-2015

f. Approval of Disability Retirement - **Section 31724**

1. Smith, Tonya - Police Officer, Service-Connected, Effective 12-17-2015 *

** Indicates Safety Personnel*

g. Approval of Death Benefit – **Sections 31781, 31781.1, and 31781.3**

1. Fielder, Jeremy, Active Member

Motion was made by Trustee Grover and seconded by Trustee O'Neal to approve consent item 5.f as presented.

Motion carried unanimously

Trustee Sharpe returned to the room.

Motion was made by Trustee Grover and seconded by Trustee O'Neal to approve all other consent items as presented minus item 5.f.

Motion carried unanimously

6. Executive Director - Administrative

a. Discussion and Action Regarding Staffing Request

Motion was made by Trustee Grover and seconded by Trustee Sharpe to approve staffing request outlined in the staff recommendation as follows:

1. Approve the addition of two new positions, one Member and Employer Services Specialist and one Member and Employer Services Technician. (Attachment 1 & 2)
2. Approve an adjustment to the Fiscal Year 2015-2016 Administrative Budget to include \$64,938 for salary, benefits and equipment to set up and fund these positions for the five months remaining in the fiscal year.

Motion carried unanimously

b. Information Technology Solutions (ITS) Project Update

Kathy Herman and Bryce Haws from Linea gave the Board their regular monthly update on the progress of the ITS project

7. Committee Reports and Recommendations for Action

STANDING COMMITTEES

Internal Governance Committee

a. Discussion and Action regarding the following:

StanCERA Bylaws Revision
Excess Earnings and Interest Posting Policy Update
Wire Transfer Policy Update

Motion was made by Trustee Grover and seconded by Trustee O'Neal to approve all three items as presented.

Motion carried unanimously

8. Executive Director - Investment

a. Medley Capital Corporation – Educational Presentation

Chris Taube gave an update on the continued market dislocation in the Direct Lending market.

9. Closed Session

- a. Conference with Legal Counsel – Pending Litigation – One Case:
O'Neal et al v. Stanislaus County Employees' Retirement Association
Stanislaus County Superior Court Case No. 648469
Government Code Section 54956.9(d)(1)
- b. Conference with Legal Counsel – Pending Litigation – One Case:
Nasrawi et al v. Buck Consultants, LLC, et.al, Santa Clara County
Superior Court Case No. 1-11-CV202224; Court of Appeal, Sixth Appellate
District, Case No. H038894 Government Code Section 54956.9(d)(1)

Nothing to Report

10. Members' Forum (Information and Future Agenda Requests Only)

None

BREAK 11:42 a.m. - 12:45 p.m.

11. Asset Liability Study

- Workshop Agenda
- Workshop Introduction
- Role of Asset Classes
- Asset Liability Study
- Investment Strategy Evaluation

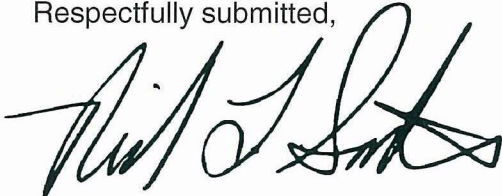
11. Asset Liability Study (Cont.)

Ed Hoffman of Verus presented the triennial asset liability study. In January, Ed will bring back the two candidate mixes for final refinement from the Board based off the discussion today.

12. Adjournment

Meeting adjourned at 3:45 p.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Rick Santos", with a stylized flourish at the end.

Rick Santos, Executive Director

APPROVED AS TO FORM:
Fred Silva, GENERAL LEGAL COUNSEL

By: 
Fred Silva, General Legal Counsel

StanCERA's Board Meeting Master Calendar **2016**

2016 Calendar

Board Meetings are held every 3rd Wednesday at 1:00p.m.

January, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	February, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	March, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	April, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
May, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	June, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	July, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	August, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
September, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	October, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	November, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	December, 2016 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Investment Manager Presentations

January	None
February	Legato
March	PIMCO / LSV Asset Management
April	Morgan Stanley
May	Capital Prospects/ Jackson Square Partners
June	Raven
July	Pyramis
August	Medley
September	Dodge & Cox
October	American Reality
November	White Oak Global Advisors, LLC / Greenfield
December	None

Standing Committees

Internal Governance Committee

Areas of Responsibility: *Audits, Bylaws Revisions, Policy Revisions, Board Member Education*

Joan Clendenin, Chair
Sam Sharpe
Donna Riley
Staff as needed

Due Diligence Committee

Jason Gordo, Chair
Jeff Grover
Michael O'Neal
Staff as needed

Ad-Hoc Committees

2015 Executive Director's Review Committee

Areas of Responsibility: *Assessment of the performance and compensation recommendation for the positions of Executive Director and Investment Officer*

Chair	Donna Riley
Vice Chair	Jason Gordo
Past Chair	Michael Lynch*
Staff as needed	

*Past Chair not possible next vice chair used in place of

2017-2019 Strategic Planning Committee

Jim DeMartini
Michael O'Neal
Sam Sharpe



**STANISLAUS COUNTY
EMPLOYEES' RETIREMENT ASSOCIATION**
832 12th Street, Suite 600
Modesto, CA 95354
P.O. Box 3150 Modesto, CA 95353-3150

Phone (209) 525-6393
Fax (209) 558-4976
www.stancera.org
e-mail: retirement@stancera.org

January 20, 2016, Retirement Board meeting

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: Executive Director Goals Update Quarter 4

II. ITEM NUMBER: 5.d

III. ITEM TYPE: Consent

IV. STAFF RECOMMENDATION: None

V. EXECUTIVE SUMMARY

Attachment 1 displays Quarter 4 progress on those items that are ongoing for 2015 and for items directly associated with the 2014-2016 Strategic Plan.

Ongoing Items

Items italicized in blue denote progress in Quarter 4. Outstanding disabilities remain below historical averages for Quarter 4 and are 2 less outstanding from Quarter 3.

Strategic Plan

This agenda item signals the final report card for the 2015 goals. Those items in green represent those items/goals completed this year. Items in red signal items or goals that weren't met for various reasons. Those items not completed in 2016 include:

- *Completion of a glide path plan for derisking* – For various reasons, this item should be reexamined with the Board at its next Strategic Planning session (2016) before beginning this task
- *Meet with plan sponsors to discuss risk* – This item is on Verus' itinerary for 2016
- *Development of policies related to manager assessment and disposition* – This item is on Verus' itinerary for 2016
- *Review and amend media policy* – This item actually fell off staff's radar during the biennial bylaw review process. Staff has already secured suggested changes from legal counsel and will incorporate those into the policy this year

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently

VIII. BUDGET IMPACT: None



Rick Santos, Executive Director



Kathy Herman, Fiscal Services Manager



Dawn Lea, Member and Employer Services Manager



Ongoing/Required Items

1. Continued communication, outreach and transparency with major stakeholders such as County, County BOS, Local Governments, Special Districts and Employee Groups
 - *Nothing to report*
2. Facilitate completion of the transition to alternative investments
 - *Facilitate various calls, distributions and cash movement*
3. Complete Custodial Bank Transition
 - Custodial Bank transition complete – 2014
4. Complete Trustee Elections
 - Seat 3 complete – 2014
 - Seat 7 complete - 2015
5. Complete intermediate and long-term Organizational Structure Review
 - 10 Year Strategic Realignment analysis complete - 2014
6. Continued monitoring of StanCERA lawsuits
 - *Analyses and discussions regarding settlement issues in Buck case*
 - *Discussions regarding O'Neal appeal and extension*
7. Director Professional Development
 - *SOA Annual Conference*
 - *Heavy involvement as Chair of the Controller's Retirement Advisory Committee*
8. Facilitate RFP for an Investment Consultant
 - Investment Consultant acquisition completed
9. Oversee and complete day to day administrative functions
 - *Disabilities; Organizational goal of 18 or less outstanding disabilities at any one time. Outstanding disabilities are 11 as of December 29th (this compares to 13 outstanding at the end of Quarter 3, 2015)*
 - *Agenda and minute production for all Board and Committee Meetings*
 - *Facilitation of Board and Staff travel*
 - *All retiree payrolls completed on time*



- *Member contributions and refunds up to date*
- *Monitoring of Investment Policy and Bylaws*
- *Daily monitoring of pension issues in media*
- *Ongoing and regular meetings with Investment Managers*
- *Facilitate ITS*

Items Explicitly Tied to the 2014-2016 Strategic Plan

1. Strategic Plan Objective #1

a. Monitor current costs and risks

- *Create a program that allows StanCERA to determine the approximate cost to immunize any portion (percentage) of StanCERA's future benefit obligations using current yields available on various government treasuries and high grade corporate bonds – Complete*

b. Enhance the understanding of various financial hedging tools available

- *Contract with specialists in the area of asset-liability management – Nothing to report. Recommend task be revisited at the 2017-2019 Strategic Planning Session*

c. Communicate with plan sponsors

- *Meet with plan sponsors annually to discuss any issues that may affect StanCERA's future projected cash flows – Complete Q3*
- *Meet with plan sponsors annually to determine the sponsor's willingness and capacity to take pension risk – To be completed alongside Verus' plan sponsor analyses*

d. Develop policy triggers for potential mitigating opportunities

- *Develop a glide path approach to determine when and if efficiencies exist in the bond markets relative to StanCERA's liabilities – Nothing to report. Recommend task be revisited at the 2017-2019 Strategic Planning Session*

2. Strategic Plan Objective #2

a. Develop clear and concise processes and policies dedicated to the continual assessment, monitoring and disposition of StanCERA's active managers

1. *Develop various reports meant to assess active manager performance*

- *Creation of enhanced value added reports - Complete*



- Creation of risk allocation reports - Complete
 - Creation of benchmark adherence reports - Complete
2. Define satisfactory performance with an eye towards asset liability and risk management
 - *Nothing to report. Note: Task slated to be completed in 2016*
 3. Define processes and remedies for active managers when performance is deemed to be unsatisfactory (manager continuation policy)
 - *Nothing to report. Note: Task is slated to be complete 2016*
3. Strategic Plan Objective #3
- a. Optimize StanCERA's organizational resources
 1. Review current job duties as they relate to the position, classification and Organizational needs
 - Staff review and documentation of current position and task analysis
 - Current and unique job duty statements for each position completed in Quarter 1
 - Monitoring process completed end of Quarter 2 and job duty statements are now available to be used to evaluate the desk/employee
 - Staff positions have been evaluated and determinations made regarding duty assignments and employee capability
 2. Continue to cross train and/or train staff with a goal of establishing multiple levels of backup (ongoing)
 - Accounting specialist training in all aspects of member and fiscal services
 - Accounting specialist training in investment compliance processes
 - Retiree payroll cross training from member services to accounting
 - Back up training for executive secretary regarding Board meeting planning, facilitation and web posting complete
 - Cross train staff for web site maintenance and updating
 - Member and Employer Services Technician and Fiscal Services Technician positions cross trained
 - b. Identify potential programs that will enhance skills and advance development of staff



- Establish in-house training opportunities – Complete

4. Strategic Plan Objective #4

a. Formalize a process to educate StanCERA stakeholders

- Develop an education/advocacy Committee – Task complete
- Identify StanCERA stakeholders – Task complete
- Outline job duties/responsibilities for a Communications Specialist – Complete
- Determine areas of stakeholder educational needs – Task complete
- Review and amend the media policy – *To be completed in 2016*

b. Enhance StanCERA technology in order to optimize human resources and productivity

- Create a focus group to identify possible technology enhancements – Ongoing sessions with IT Consultant

c. Expand technology and training to ensure continuity of operations during a natural disaster or a period of major outage

- Develop testing and training for COOP – Quarter 2: Creation of a formal disaster recovery plan was put into place this quarter. The goal of this plan is to identify and address any additional resources necessary in order to assure continuance of operations in the event of an emergency. Staff has also begun the process of researching the cost/benefit of Cyber Insurance designed to provide coverage in the event of a data breach. Quarter 3: COOP information status has been made up to date and remote DR environment successfully tested.
- Develop a formal schedule and process for disaster drills of Technology systems – Complete

2015 STANCERA CONTINUING EDUCATION RECORD

Board Member	Ethics Training Completed	3-Year Rolling Total Education Credits	2013 Total Education Credits	2014 Total Education Credits	2015 Total Education Credits	CALAPRS General Assembly (March) 8.	Ethics AB1234 Training 2	NCPRS (May) 26.50	SACRS Spring Conference (May) 16	OPAL Investment Trends Summit (July) 17.00	CALAPRS Public Pension Investment Mngt Prgm (July) 26.50	SACRS Fall Conference (November) 16
Gordon B. Ford	03/05/14	46.00	18.00	4.00	24.00	8.00			16.00			
Maria De Anda	01/12/15	72.50	18.00	18.00	36.50	8.00	2.00	26.50				
Donna Riley	03/26/15	88.00	55.00	31.00	2.00		2.00					
* Jason Gordo	08/26/15	59.50		31.00	28.50		2.00				26.50	
Mike Lynch	05/14/13	60.00	46.00	14.00	0.00							
Jim DeMartini	03/16/14	48.00	15.00	33.00	0.00							
* Sam Sharpe		16.00	0.00	0.00	16.00							16.00
Michael O'Neal	05/12/15	169.00	56.00	64.00	49.00				16.00	17.00		16.00
Joan Clendenin	05/05/14	89.00	34.00	28.50	26.50						26.50	
Jeff Grover	01/08/15	79.00	31.00	30.00	18.00		2.00		16.00			

* New Trustee 24 Hours required by completion of 2 years of service

StanCERA Bylaws:

Article 14.3 Educational Requirement

Note:

- 1.) SACRS Maximum Credit - 16 (Per February 11, 1998 Board of Retirement Minutes).
- 2.) Ethics - AB 1234 requires that all members of a legislative body who receive compensation, salary, or stipend to, or reimburse the expenses of, must attend AB 1234 training every two years.
The term "legislative body includes commissions, committee, board, or other body of a local agency, whether permanent or temporary, decision making or advisory.
- 3.) Board of Retirement Continuing Education Record will be posted on StanCERA's Web site due to AB1519, Government Code Section 31522.8.
- 4.) Board terms listed on StanCERA's Web site.
- 5.) StanCERA's Web site: www.stancera.org



Approved Trustee Education Opportunities for 2016

January

Opal Public Funds Summit	12-14	Scottsdale, AZ
CALAPRS Adv. Princ. of Pension Mgmt	27-29	Los Angeles, CA
NCPERS Legislative Conference	24-26	Washington, DC

February

CALAPRS Trustees Roundtable	5	Burbank, CA
-----------------------------	---	-------------

March

CALAPRS General Assembly	5-8	Indian Well , CA
--------------------------	-----	------------------

April

CRCEA Spring Conference	TBD	TBD
-------------------------	-----	-----

May

SACRS Spring Conference	10-13	Costa Mesa, CA
NCPERS Trustee Education Seminar	14-15	San Diego, CA
NCPERS Annual Conference	15-19	San Diego, CA

June

CALAPRS Trustees Round Table	10	San Jose, CA
------------------------------	----	--------------

July

SACRS Public Pension Investment Mgmt		Berkeley, CA
--------------------------------------	--	--------------

August

NCPERS Public Pension Funding Forum	21-23	Berkeley, CA
CALAPRS Adv. Princ. of Pension Mgmt	9-12	Pepperdine University

September

CALAPRS Trustees Round Table	30	Burbank, CA
OPAL Investment Trends Summit	28 – 30	Santa Barbara, CA

October

CRCEA Fall Conference	TBD	TBD
-----------------------	-----	-----

November

SACRS – Fall Conference	8-11	Indian Wells, CA
-------------------------	------	------------------



Stanislaus County Employees' Retirement Association

832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

January 20, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Alaine Taa, Administrative Assistant

I. SUBJECT: StanCERA Complaint Log

II. ITEM NUMBER: 5.f

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

There were twelve (12) retiree complaints logged between October 1 and December 30, 2015. A summary of these complaints follows:

Number of Complaints	Caller Status	Nature of Complaints
11	Retiree	Retired members called to inquire about why they had not received their health benefit enrollment paperwork and inquired about their health benefit changes.
1	Retiree	Retired member upset that the United Way forms were sent to retirees late, and it was too late to have deductions made for the month of January.

The number of complaints this quarter increased by 9 (nine) complaints compared to the previous report period July 1, 2015 through September 30, 2015.

VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.

VIII. ADMINISTRATIVE BUDGET IMPACT: None

Alaine Taa, Administrative Assistant

Kathy Herman, Fiscal Services Manager



Stanislaus County Employees' Retirement Association

832 12th Street, Ste. 600, Modesto, CA 95354 • PO Box 3150, Modesto, CA 95353 • www.stancera.org • 209-525-6393 • 209-558-4976 Fax

January 20, 2016
Retirement Board Agenda Item


TO: Retirement Board

FROM: Rick Santos, Executive Director

- I. SUBJECT: Monthly Staff Report
- II. ITEM NUMBER: 5g
- III. ITEM TYPE: Information
- IV. STAFF RECOMMENDATION: None
- V. SUMMARY:
 - a) *Fiscal Services* – In December staff processed 18 active payrolls, totaling \$6,423,502 in member and employer contributions. 15 members terminated, 16 members withdrew funds, and 6 death benefits were also processed. The January retiree payroll was completed as scheduled, totaling \$8,771,772. The State Controllers report and required safety inspections were completed on schedule. In cooperation with the District Attorney and Stanislaus County, staff has started to research and address the security equipment and protocols in this building. The Board approved United Way campaign for retirees' was completed.
 - b) *Member & Employer Services* – During the month of December 2015, Member and Employer Services Staff processed 42 new hires (5 Safety and 37 General), 41 buy backs and 37 estimates. There were 27 individual counseling sessions and one group presentation at the New Employee Orientation.
 - c) *Investment Governance and Compliance* – In anticipation of additional capital being deployed to the private credit space; staff has been exploring other alternatives within the space that will allow the Organization to fully meet an enhanced capacity commitment.
 - d) RISK: None
- VI. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently*
- VII. BUDGET IMPACT: None



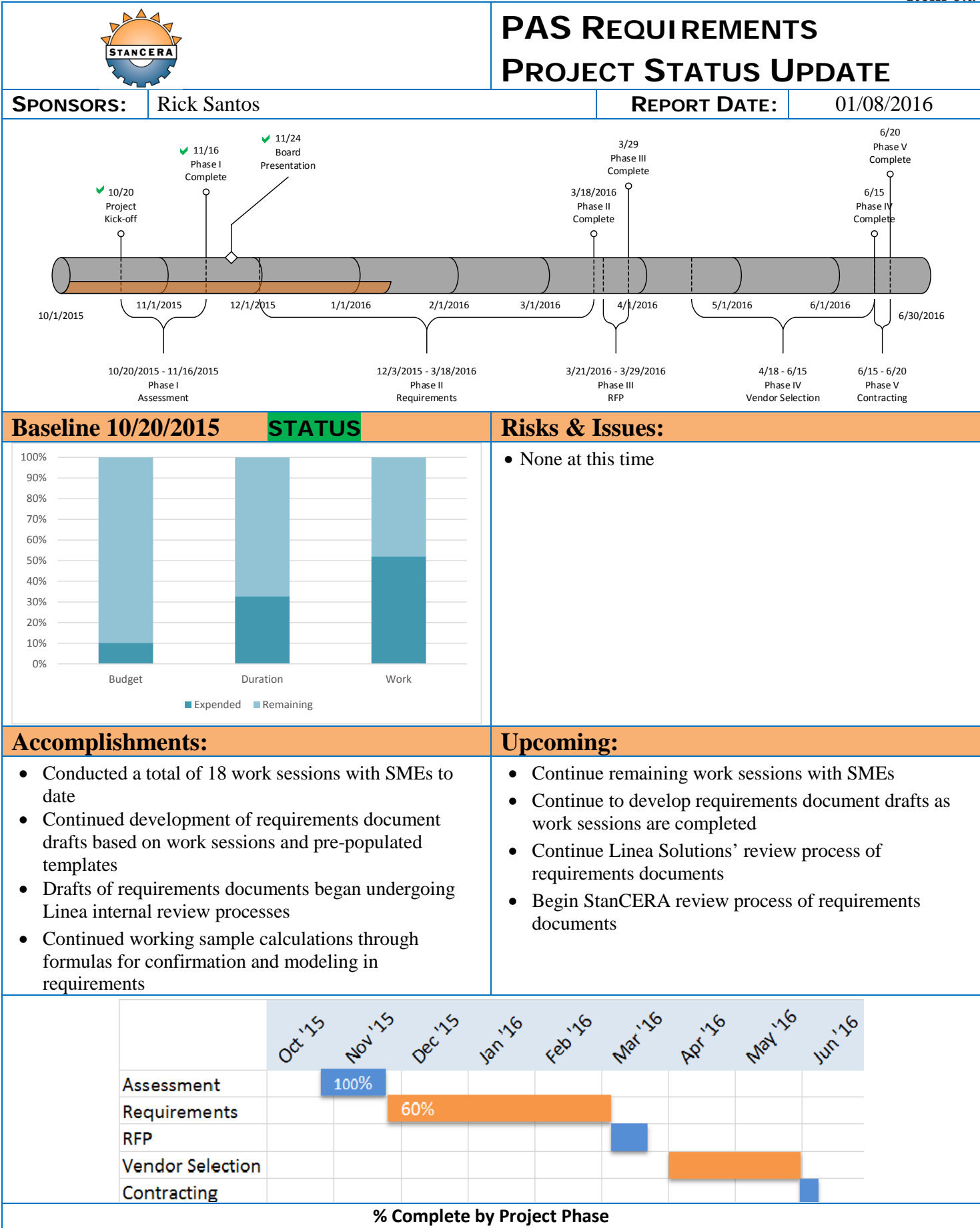
Rick Santos, Executive Director



Kathy Herman, Fiscal Services Manager



Dawn Lea, Member and Employer Services Manager





January 20, 2016

Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

- I. SUBJECT: SACRS (State Association of County Retirement Systems) Member Systems Operating Authority Proposal
- II. ITEM NUMBER: 6.b.
- III. ITEM TYPE: Discussion and Action
- IV. STAFF RECOMMENDATION: Support or oppose, in concept, SACRS Legislative Proposal regarding System operating authority
- V. EXECUTIVE SUMMARY

In October, staff asked the Board whether they would support a SACRS legislative proposal concerning District Status for 1937 Act County Employee Retirement Systems. At that time, very little was known about the concept and the StanCERA Board directed the voting delegate to abstain from the vote at the November SACRS business meeting. At that meeting, there were several Systems that felt the same way and as a result, the vote was postponed until more information on the proposal could be funneled to System Trustees.

In December, the Chair of the SACRS Legislative Committee sent out a memo explaining the concept in more detail (Attachment 1). The Committee is now looking to see which Systems may support this idea in concept. Today's vote from the Board of Retirement is simply a vote of support or opposition for the concept itself. Formal approval of the proposed legislation will take place at the SACRS business meeting in May. Even though the Board may support the concept today, *this in no way binds the Board in its final support or opposition of the proposal at the May business meeting*. Staff will be asking the Board in April how to direct the spring delegate to vote on this issue.

- VI. RISK: None
- VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently
- VIII. ADMINISTRATIVE BUDGET IMPACT: None

Rick Santos, Executive Director

Kathy Herman, Fiscal Services Manager



Executive Staff
Richard Stensrud
Chief Executive Officer
Vacant
Chief Investment Officer
Robert L. Gaumer
General Counsel
Kathryn T. Regalia
Chief Operations Officer
John W. Gobel, Sr.
Chief Benefits Officer

TO: SACRS Member Systems

FROM: Richard Stensrud
Chair
SACRS Legislative Committee

DATE: December 4, 2015

SUBJECT: Information Regarding Operating Authority Legislative Proposal

As you know, one of the proposals being presented for consideration as SACRS-sponsored legislation would amend the 1937 Act to allow the Board of Retirement of a SACRS system to change from the legacy operating authority model in the 1937 Act to one of the alternative operating authority models set forth in the 1937 Act. The discussion that follows is intended to provide SACRS members with information to assist you in determining whether your system wishes to support the proposal as SACRS-sponsored legislation.

In this regard, it is not only important that SACRS member systems understand what the proposed legislation will and will not do, but that member systems understand what they are being asked to do and what they are not being asked to do with respect to the legislative proposal.

Specifically, the individual SACRS member systems are not being asked if they want to change their current operating authority structure. Nor are the individual member systems being asked if changing their operating authority structure would be a good thing for them. Rather, the member systems are only being asked if they would support legislation that would allow a change in operating authority to be available to those systems that would like to consider it.

Such a choice would turn on whether a system determined that a change in their operating authority structure was imperative for them to properly execute their fiduciary responsibilities. It has been the long-standing tradition and practice within the SACRS community that systems not seek to substitute or impose their judgment in administrative or fiduciary matters on other systems. This can be seen in the common feature of allowing SACRS systems to 'opt-in' to legislative changes rather than to mandate such changes. As discussed more fully below, the legislative proposal regarding operating authority will

be structured in this way. Accordingly, the SACRS Legislative Committee respectfully requests that member systems honor this practice by supporting the proposal in that it will provide individual systems with the ability to make operating authority changes if the system determines such changes are reasonable and necessary to carrying out the system's fiduciary duties.

What Does Operating Authority Mean?

The term 'operating authority' encompasses the wide array of decisions that must be made in administering 1937 Act retirement systems. For current purposes, the key decisions include: (1) The appropriate staffing levels and staffing structure for the retirement system; (2) The appropriate job descriptions and duties for the necessary staff; and (3) The terms and conditions of employment of necessary staff, including appropriate levels and forms of compensation.

The 'default' operating authority structure for 1937 Act systems is established via various provisions in the 1937 Act, many of which literally date from 1937. At that time, and for a number of years after, the retirement systems were smaller (both with respect to the number of members and the assets under management); the benefit plans and operating rules were simpler; and the financial markets were not as complex, sophisticated and global in nature. When our systems were smaller, simpler operations within the County Treasurer and Tax Collector's office, it made sense to have decisions such as those noted above rest, in the end, with the Board of Supervisors, often implemented through salary resolutions and/or job classifications established under the County Civil Service structure.

Today, a 1937 Act retirement system is a very different entity. We have evolved and grown into autonomous organizations, serving thousands of members, managing billions of dollars in assets, and operating a highly specialized business that is unique relative to the rest of county government. In recognition of this, and the importance of the mission served by public retirement systems, in 1992 the voters approved an amendment to the California Constitution (Article XVI, Section 17), which placed both the fiduciary responsibility and the plenary authority for the administration of the retirement system on the governing Retirement Board.

Unfortunately, however, the legacy operating authority structure under the 1937 Act has largely failed to keep up with these developments, and as a result, beginning in 2003, 1937 Act systems began efforts to gain a more modernized operating authority structure.

How Has Operating Authority Evolved Under the 1937 Act?

The first system to establish a different operating authority structure within the 1937 Act was the Orange County Employees' Retirement System (OCERS).^{*} Under the OCERS operating authority model, the management personnel of OCERS are deemed to be employees of OCERS, and the OCERS Board establishes the positions and terms of employment for those positions.

In 2004, the San Bernardino County Employees' Retirement Association (SBCERA) obtained legislative approval to operate under the same operating authority model. Then, in 2006, SBCERA gained legislative approval of a new operating authority model, which expanded the category of SBCERA employees to those positions deemed to require specialized retirement system knowledge or expertise, the practical effect of which was to allow virtually all SBCERA personnel to be SBCERA employees.

Between 2006 and 2012 efforts were initiated by other 1937 Act systems to follow a similar track as OCERS and SBCERA, but for various political reasons, those efforts were not successful.

Then, in 2012, the Contra Costa County Employees' Retirement Association (CCCERA) entered into litigation with Contra Costa County regarding the scope of CCCERA's operating authority. As part of the settlement of that litigation, legislation was approved that designated CCCERA as the employer of all personnel at CCCERA.

This was followed in 2015 by legislation giving the Ventura County Employees' Retirement Association (VCERA) operating authority over a set of identified executive management positions.

In sum, under the 1937 Act, there are four models that re-allocate operating authority relative to the legacy 1937 Act structure, with the scope of that re-allocation increasing as follows: (1) The VCERA model; (2) The OCERS model; (3) The SBCERA model; and (4) The CCCERA model.

*The Los Angeles County Employees' Retirement Association (LACERA) has had an operating authority agreement with Los Angeles County for many years, under which the county recognizes the authority of the LACERA Board over the administration of the retirement system and further agrees to take any ministerial action necessary to implement the decisions made by the LACERA Board. As a result of this agreement, LACERA has not needed to pursue a change in operating authority under the 1937 Act.

What Would the Proposed Legislation Do?

As reflected by the discussion above, the efforts to-date to obtain modernized operating authority have been made on a system-by-system basis. Those efforts were largely driven by the recognition by those systems that they had reached a 'tipping point,' where their size and the scope of their responsibilities required that operational decisions needed to be addressed in a different manner.

This perspective gained more wide spread acceptance with the passage of PEPRA. The drafters of PEPRA recognized that the new duties imposed on 1937 Act systems by PEPRA increased the potential conflicts of interest between the systems and the dominant participating employer, the county. The drafters further recognized that the legacy operating authority model could be used to compromise the ability of a 1937 Act system to carry out its responsibilities. For that reason, earlier drafts of PEPRA

authorized 1937 Act system Retirement Boards to shift to a different operating authority model. This change did not ultimately make it into the final version of PEPPRA, but it continues to be viewed as a sensible change.

The proposal being considered as SACRS-sponsored legislation seeks to capitalize on the growing realization that change in operating authority is necessary, widely desired across the 1937 Act systems, and will produce beneficial results for all the stakeholders of these systems.

Specifically, the proposal under consideration would take the existing menu of operating authority options in the 1937 Act and allow the individual system Retirement Boards to decide if they want to shift from their current operating authority model to one of those other operating authority models. This decision would be at the discretion of each Retirement Board, with no approval or concurrence by the county required. At the same time, the Retirement Board is not required to change its operating authority model, and the Retirement Board is also free to coordinate/collaborate with the county in any such decision as it sees fit.

Central to the concept is flexibility rather than imposing a 'one size fits all' solution, and having the right fit determined by each system. If systems are happy where they are, they can stay there. If systems want to change, there are options for how far they go, again contingent on what works best for their circumstances.

Another element of the concept is that it is not a 'one and done' decision. A system can choose to start at the smaller end of the operating authority spectrum and then expand that authority if and when they believe it makes sense. This approach essentially allows a system to 'test and verify' that a change in operating authority works, and to be able to illustrate that as support for any subsequent increase in operating authority.

What the Proposed Legislation Will Not Do:

When our systems began to move out of the Treasurer/Tax Collectors' office and become more autonomous, many people predicted that it would be disastrous. That did not happen then and, as evidenced by the experience in those systems that have already changed their operating authority model, will not happen now.

- The governance of the systems will remain the same, with all the stakeholders having the same degree of representation and oversight as they have now. If a Retirement Board acts irresponsibly, the stakeholders can change its members.
- Transparency and accountability will not change. The 1937 Act cap on administrative expenses will still operate. Meetings and records will still be public. Budgets will be public. Salaries will be public.
- Retirement Board members will continue to be liable as fiduciaries.

- The legislation will be drafted to ensure that employees of the system will continue to be able to participate in the benefit plans (including the retirement system) offered by the county to county employees.
- The legislation will clearly note that nothing changes for those systems that have already obtained alternative operating authority. Those systems will not be required to take any new or additional action unless they wish to move to a different operating authority model.

Can Systems Review the Proposed Language?

Specific language has not yet been crafted for the proposal. Before anything is put in writing the Legislative Committee wants to consult with the key players in the Capitol and gauge where they stand with respect to the overall concept and then adapt/adjust the proposal as necessary. The Legislative Committee prefers to do this via discussion of basic concepts rather than specific language, because, once specific language is presented, people tend to get locked in on the minutia. In addition, before turning to discussion of specifics, the Legislative Committee wants to frame the issues properly and have a strategy established for winning support and rebutting opposition.

The Legislative Committee understands that many people like to see specific legislative language before they vote to support something. That is nice when it is feasible, but the reality is that once a legislative proposal is launched, there is no assurance that it will remain unchanged. Sometimes it needs to be modified to accommodate concerns or gain support, sometimes it is modified over your opposition. Accordingly, at this juncture the Legislative Committee is requesting that member systems consider this legislative proposal as a 'concept' and determine whether they will support it 'in concept.' If and when the proposal moves forward, and it is put into print, member systems will promptly be provided with a copy of the legislation.

As discussed at the SACRS Conference, the Legislative Committee is only requesting a preliminary position from the systems at this time. Formal approval of the proposal as SACRS-sponsored legislation will take place at the May Conference Business Meeting. If, at that point, the member systems do not believe that the legislation is reasonably consistent with the way it has been previously described, the systems can choose to withdraw SACRS sponsorship. If, at any point, the legislation is amended to negatively impact SACRS members, the legislation will be withdrawn.

The Legislative Committee hopes this information is helpful and thanks the member systems for your consideration.

Respectfully,

Richard Stensrud
Chair
SACRS Legislative Committee

From: Sulema Peterson < >
To:
Date: 12/9/2015 1:26 PM
Subject: SACRS Legislative video and information regarding the operating authority proposal
Attachments: Memorandum SACRS Member SystemsOperating Authority Proposal 12-4-2015 (00000003).pdf; Modified copy of Memorandum SACRS Member SystemsOperating Authority Proposal 12-4-2015 (00000003).pdf

Good afternoon SACRS Administrators, Trustees and Staff, (this message is being sent on behalf of Jim Lites, SACRS Strategic Facilitator and Consultant)

As you will recall, at the November SACRS Business Meeting, the member systems voted to defer taking formal action on potential SACRS-sponsored legislation until the May SACRS Business Meeting. As explained by SACRS Legislative Committee Chair Richard Stensrud, this action was requested because it appeared that several systems had not had an opportunity to consider the legislative proposals and/or had not taken a position on the legislative proposals. Richard noted that one proposal in particular - involving system operating authority - had important ramifications and that member systems could benefit from having more information regarding the proposal.

To that end, attached is information for your consideration regarding the operating authority proposal. Specifically, you will find a memorandum from Richard and the SACRS Legislative Committee, as well as the 'talking points' piece that was originally included in the Business Meeting packet. In addition, via the following link, you can view the extended discussion about this proposal that took place at the Legislative Session on Thursday afternoon of the conference. Hopefully, through the combination of these materials, you will be able to determine your position on whether this proposal should move forward as SACRS sponsored legislation.

To download the video file:

- * Click on link below
- * When prompted, select to sign in or continue without signing in.
- * Due to the size of the file, Dropbox allows you to preview of 15 minutes of the video. Please download the full 1 hour and 20 min video file. It takes approx. 4 mins to download.
- * The video does not give a prompt to download, its simply begins playing.
- * Dropbox has a very discreet message at the top of the video "download to watch the entire video". Viewers are required to click on the download button.

SACRS Legislative Video Fall Conference 2016 Operating Authority
Proposal<<https://www.dropbox.com/s/uawlthq4ifmidr5/SACRS%20Legislative%20Meeting.wmv?dl=0>>

A few important things to keep in mind in this regard:

- * First, at this point, the Legislative Committee is only asking for a preliminary indication of your position on the proposal. This is required so that the Committee knows whether it should be moving forward on the proposal when the legislative session begins in January. As noted above, a formal vote on whether it retains SACRS sponsorship will take place in May.
- * Second, under Roberts Rules, abstaining on the proposal would essentially be the same as a 'no' vote. This is because in order for the proposal to gain approval it must obtain a majority of the voters present and an abstaining voter is considered to be 'present.' So, for example, if there were 10 support votes, 2 not support votes and 8 abstentions, the measure would fail because it had not obtained a majority of the votes present. Accordingly, I would encourage you to review the discussion in Richard's memo regarding what systems are being asked to decide, and what systems are not being asked to decide.
- * Finally, I would respectfully request that systems exercise discretion regarding how broadly the information regarding this proposal is shared. In making this request, I understand that discussion of the proposal is necessary and important. At the same time, please keep in mind that the successful exercise of legislative strategy often requires being able to develop messages and build discussions, which can be complicated if one has to go on the 'defense' before getting a chance to play 'offense.'

If you experience difficulty downloading the video file, please contact Sulema at sulema@sacrs.org or 916-441-1850 for assistance.

Thank you,
Jim Lites

Sulema H. Peterson
SACRS Administrator
1415 L Street, Suite 1000



**STANISLAUS COUNTY
EMPLOYEES' RETIREMENT ASSOCIATION**
832 12th Street, Suite 600
Modesto, CA 95354
P.O. Box 3150 Modesto, CA 95353-3150

Phone (209) 525-6393
Fax (209) 558-4976
www.stancera.org
e-mail: retirement@stancera.org

January 20, 2016, Retirement Board meeting

TO: Retirement Board

FROM: Rick Santos, Executive Director

- I. SUBJECT: Executive Director Goals for 2016
- II. ITEM NUMBER: 6.c.
- III. ITEM TYPE: Discussion and Action
- IV. STAFF RECOMMENDATION: Accept the 2016 Executive Director Goals as presented
- V. ANALYSIS: Attachment 1 contains the Executive Director Goals for 2016. The goals are broken down into 2 categories:
 - a. General items that are either recurring in nature or tasks that are unique to 2016 but are not linked to the Strategic Plan
 - b. Tasks that are explicitly linked to the Strategic Plan

Strategic Plan

Completion of the goals for 2016 will signal an end to the 2014-2016 Strategic Plan. There are 3 items from the 2014-2016 Strategic Plan not yet completed that staff is recommending either completing at a later date or exploring in more depth at the next Strategic Planning session:

1. *Contracting with specialists in the area of asset liability management in regard to the development of a glide path plan that would suggest triggers for removing equity risk from the plan*

This item should be revisited during the next Strategic Planning session (2017- 2019) with the Board and explored more fully. Additionally, this is not a task that staff recommends handing off in its entirety to the investment consultant. The ability for StanCERA to be a major player in this concept and its administration is an opportunity that should not be undervalued.

2. *Establishing policy and standards for the creation and maintenance of educational material and the development of efficient means to push this material out to members*

Recommend delaying this item until new technological capabilities are fully understood

3. *Development of various technology enhancements related to administration and member services*

Task is best associated with the ITS project and is naturally a part of its scope

Those tasks slated to be completed this year are tied to those strategic goals pertaining to the evaluation and disposition of StanCERA's active managers, organizational culture and the efficient delivery of administrative and member services.

General Items

Some of the tasks on this list are new and unique for 2016. Those items include:

- Development of the 2017-2019 Strategic Plan
- Exploring the idea of a hybrid defined benefit/defined contribution plan
- Facilitation of the ITS project
- Facilitation of the data clean up project
- RFP for actuarial services

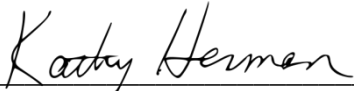
VI. RISK: None

VII. STRATEGIC PLAN: Strategic Objective IV: Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently

VIII. BUDGET IMPACT: To be determined in the 2016-2017 Administrative Budget



Rick Santos, Executive Director



Kathy Herman, Fiscal Services Manager



Dawn Lea, Member and Employer Services Manager



General Items

1. Continued communication, outreach and transparency with major stakeholders such as County, County BOS, Local Governments, Special Districts and Employee Groups
2. Facilitate completion of the transition to alternative investments
3. 95% completion of clean-up of member data
4. Complete Trustee Election
5. Continued monitoring of StanCERA lawsuits
6. Director Professional Development
7. Facilitate RFP for actuarial consultant
8. Oversee Information Technology Solutions Project
9. Gauge plan sponsor interest in hybrid defined benefit/contribution plan
10. Oversee and complete day to day administrative functions
11. Complete cost benefit analysis of Investment Officer position
12. Facilitate StanCERA 2017-2019 Strategic Plan
13. Finalize Record Retention Policy
14. Development of policy related to the use and legal implications of electronic signatures

Items Explicitly Tied to the 2014-2016 Strategic Plan

Strategic Objective #1

Invest StanCERA assets in such a way that efficiently maximizes the ability to meet current and future benefit obligations while balancing the need for contribution stability and sustainability

2016 Action Plan with Deliverables

- I. *Communicate with plan sponsors*
 - a. Meet with plan sponsors annually to discuss any issues that may affect StanCERA's future projected cash flows – ongoing
 - b. Meet with plan sponsors at least annually to determine the sponsor's willingness and capacity to take pension risk – *ongoing*

Strategic Objective # 2

Develop efficient and effective processes for the evaluation, monitoring and disposition of StanCERA's active managers

2016 Action Plan with Deliverables

- I. *Develop clear and concise processes and policies dedicated to the continual assessment, monitoring and disposition of StanCERA's active managers*
 - a. Develop:



- i. reasonable criteria that defines satisfactory performance with an eye towards asset liability and total risk management
- ii. processes and remedies for active managers when performance is deemed to be unsatisfactory

Strategic Objective # 3

Continue to foster an organizational culture that values and promotes team work, education, awareness, accountability and achievement.

2016 Action Plan with Deliverables

- I. Optimize StanCERA's organizational resources*
 - a. Complete review and amendment of process manuals
- II. Ensure organizational quality and performance through continuous improvement*
 - a. Establish a formal peer-review process for internal and external documents and external communications

Strategic Objective # 4

Refine StanCERA's business and policy practices in ways that enhance stakeholder awareness, the delivery of member services and the ability of the Organization to administer the System effectively and efficiently.

2016 Action Plan with Deliverables

- I. Formalize a process to educate stakeholders*
 - a. Determine areas of educational need
 - 1. Members
 - 2. Plan Sponsors/Employers
 - 3. Tax Payers/Members of the public
 - b. Review and amend the media policy
- II. Expand technology and training to ensure continuity of operations during a natural disaster or a period of major outage*
 - a. Develop a formal schedule and process for disaster drills of Technology systems
 - b. Determine optimal level of redundancy for continuity of operations

Stanislaus County Employees' Retirement System



Classic Values, Innovative Advice

01/20/16
Item 6.d

2015 Preliminary Valuation Results

January 14, 2016

Graham A. Schmidt, ASA, EA, FCA

Topics for Discussion



- Preliminary 2015 Valuation Results Prior to Assumption Changes
 - Executive Summary and Highlights
 - Changes Since Last Valuation
- Historical Review
- Potential Impact of Assumption Changes
- Next Steps
- Appendix

Executive Summary Prior to Assumption Changes



Stanislaus County Employees' Retirement Association Summary of Key Valuation Results Prior to Any Assumption Changes (in millions)

Valuation Date Fiscal Year End	June 30, 2014 2016	June 30, 2015 2017
Actuarial Liability	\$ 2,026.4	\$ 2,121.8
Actuarial Value of Assets*	<u>1,644.1</u>	<u>1,763.6</u>
Unfunded Actuarial Liability (Actuarial Value)	\$ 382.3	\$ 358.2
Funding Ratio (Actuarial Value)	81.1%	83.1%
Market Value of Assets	<u>1,773.6</u>	<u>1,812.6</u>
Unfunded Liability (Market Value)	\$ 252.8	\$ 309.2
Funding Ratio (Market Value)*	87.5%	85.4%
Net Employer Contribution Rate	23.35%	22.02%

* Net of non-valuation reserves

Highlights Prior to Assumption Changes



- Investment return on the market value of assets was 3.9%, net of investment expenses, compared to the 7.75% assumed rate of return.
- The actuarial return on assets was 9.1%, which resulted in a \$21 million gain and decreased the contribution rate by 0.61% of pay. There are approximately \$49 million in deferred asset gains not yet recognized in the smoothed asset value.
- The net impact of all changes decreased the contribution rate by about 1.3% of pay, including salary changes, demographic changes, and asset gains.
- The amortization period for the UAL has dropped to 21 years. The Plan will continue to experience “negative amortization” (i.e. the payment on the unfunded is less than the interest on the UAL) until the amortization period drops below 18 years.
 - Negative amortization threshold will depend on economic assumptions

Changes Since Last Valuation Prior to Assumption Changes



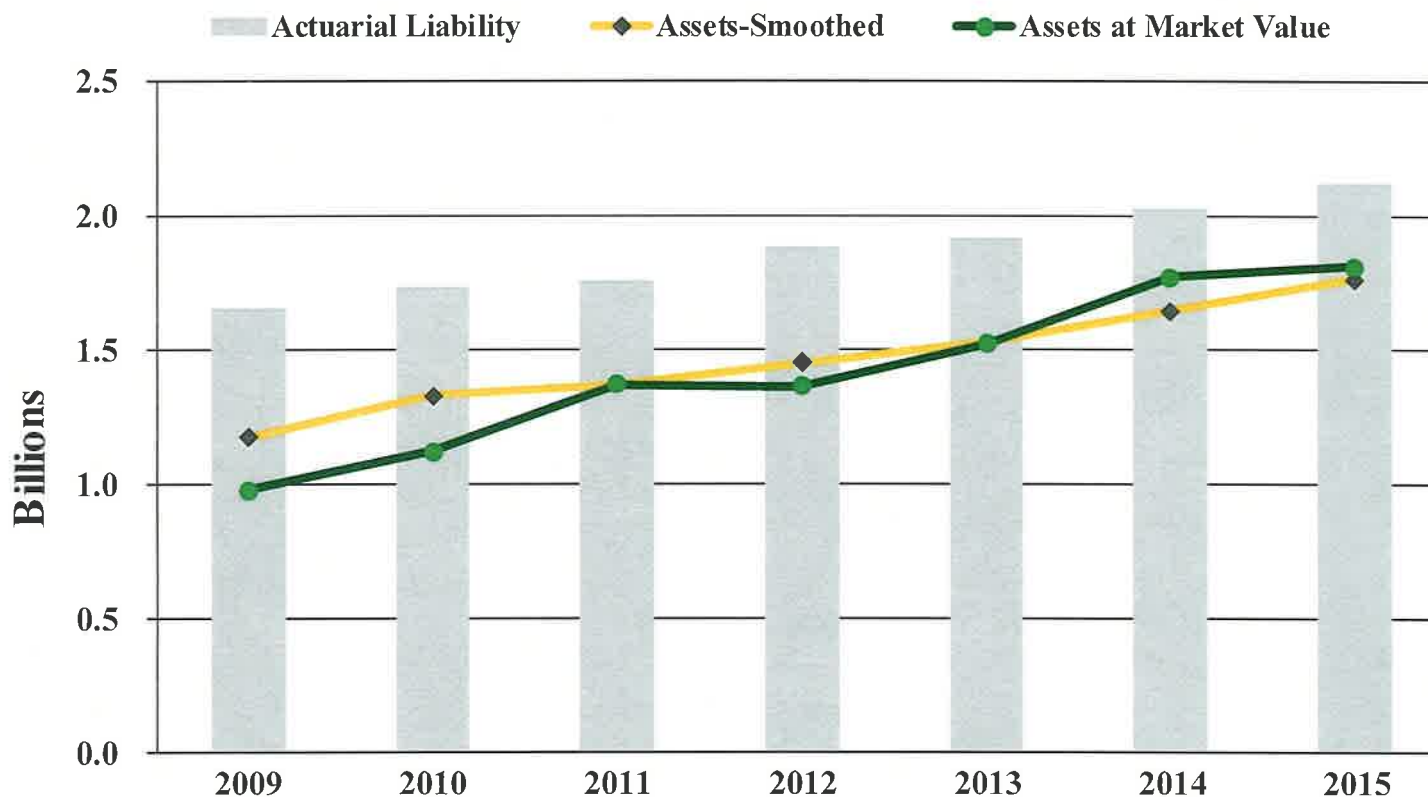
Stanislaus County Employees' Retirement Association Employer Contribution Reconciliation Prior to Any Assumption Changes (in millions)

	Total	Normal Cost	Amortization	Admin Exp
FYE 2016 Net Employer Contribution Rate	23.35%	11.13%	11.33%	0.89%
Change Due to Asset Gain	-0.61%	0.00%	-0.61%	0.00%
Change Due to Contribution Shortfall / Phase-In	-0.05%	0.00%	-0.05%	0.00%
Change Due to Demographic Changes	-0.30%	-0.19%	-0.11%	0.00%
Change Due to Effect of Payroll on Amortization	-0.37%	0.00%	-0.32%	-0.05%
Change Due to Methods / Assumptions				
FYE 2017 Net Employer Contribution Rate	22.02%	10.94%	10.24%	0.84%

Historical Review Prior to Assumption Changes



Assets and Liabilities

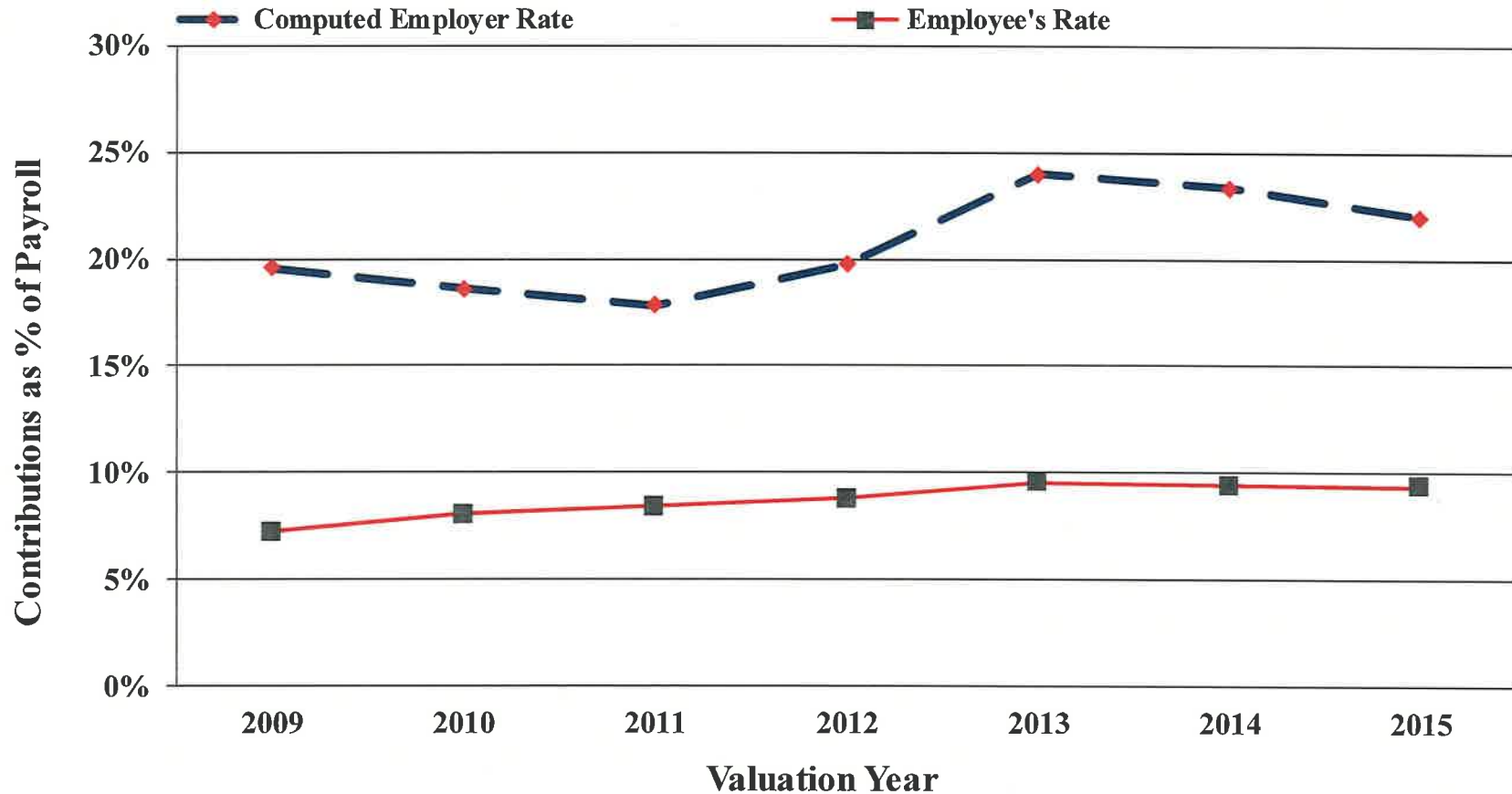


Valuation Year	2009	2010	2011	2012	2013	2014	2015
Funded Ratio	70.9%	76.3%	78.1%	76.9%	79.4%	81.1%	83.1%
UAL (Billions)	\$ 0.48	\$ 0.41	\$ 0.39	\$ 0.44	\$ 0.40	\$ 0.38	\$ 0.36

Historical Review Prior to Assumption Changes



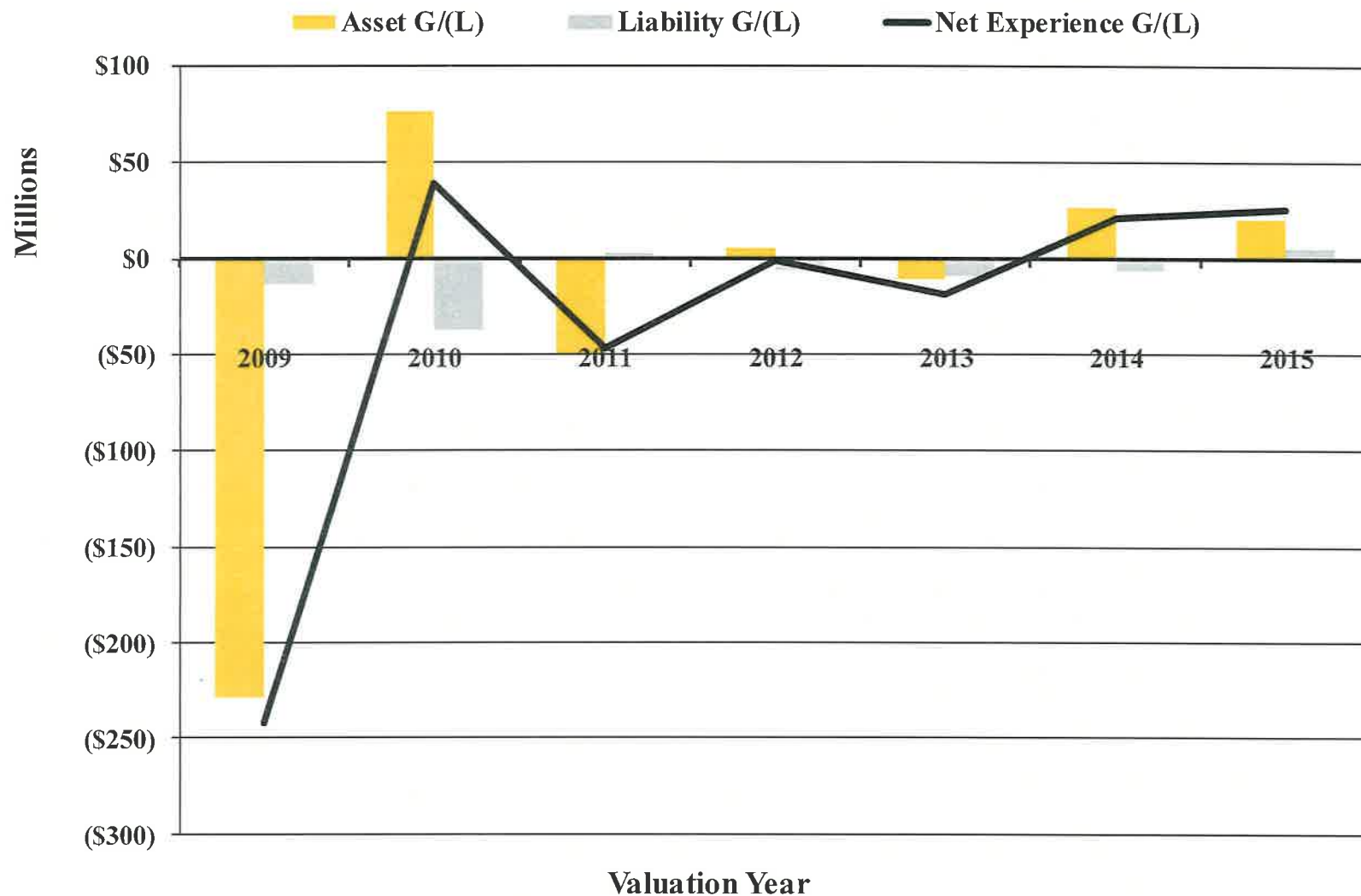
Stanislaus County Employees' Retirement Association



Historical Review



Experience Gains and Losses



Impact of Assumption Changes



Stanislaus County Employees' Retirement Association FYE 2017 Contributions

	Gross Normal Cost %	Administrative Expense %	Amortization of UAL %	Gross Contribution
Baseline Prior to Any Assumption Changes	20.29%	0.84%	10.24%	31.37%
Demographic Assumption Changes Only	20.08%	0.84%	13.66%	34.58%
<i>Difference from FYE 2017 Baseline</i>	<i>-0.21%</i>	<i>0.00%</i>	<i>3.42%</i>	<i>3.21%</i>
Demographic and Economic Assumption Changes Option 1	20.74%	0.84%	15.37%	36.95%
Investment Return: 7.50%, Wage Inflation: 3.25%				
CPI: 3.00%, COLA: 2.70%				
<i>Difference from FYE 2017 Baseline</i>	<i>0.45%</i>	<i>0.00%</i>	<i>5.13%</i>	<i>5.58%</i>
<i>Difference from FYE 2017 Demo Assumption Changes Only</i>	<i>0.66%</i>	<i>0.00%</i>	<i>1.71%</i>	<i>2.37%</i>
Demographic and Economic Assumption Changes Option 2	19.96%	0.84%	14.42%	35.22%
Investment Return: 7.50%, Wage Inflation: 3.00%				
CPI: 2.75%, COLA: 2.60%				
<i>Difference from FYE 2017 Baseline</i>	<i>-0.33%</i>	<i>0.00%</i>	<i>4.18%</i>	<i>3.85%</i>
<i>Difference from FYE 2017 Demo Assumption Changes Only</i>	<i>-0.12%</i>	<i>0.00%</i>	<i>0.76%</i>	<i>0.64%</i>

The impact of any assumption changes on employee contributions will be determined when the final assumptions are adopted. The increase in the contribution rate will not fall solely on the employers or the employees but will be split between them.

Next Steps



- Finalize Experience Study and Adopt Assumptions
 - New demographic assumptions have been adopted.
 - Economic assumption scenarios shown appear reasonable based on new asset allocations under consideration. Finalize once new asset allocation adopted.
 - Review administrative expense assumption with Staff.
- Finalize Actuarial Valuation results
 - Results shown are preliminary. Still proceeding with peer review.
- Adopt June 30, 2015 Actuarial Valuation and FY16-17 Contribution Rates

Appendix: Prior to Any Assumption Changes



Stanislaus County Employees' Retirement Association Membership Total Prior to Any Assumption Changes

	June 30, 2014	June 30, 2015	% Change
Actives	3,992	4,144	3.81%
Current Inactives	962	979	1.77%
In-Pay Members	3,385	3,539	4.55%
Total Members	8,339	8,662	3.87%
Active Member Payroll (FYE 2015/2016)	\$ 235,092,377	\$ 251,046,685	6.79%
Average Pay per Active	\$ 58,891	\$ 60,581	2.87%

Appendix: Prior to Any Assumption Changes



Stanislaus County Employees' Retirement Association Contributions Prior to Any Assumption Changes

Item	FYE 2016	FYE 2017	Change
Gross Normal Cost %	20.52%	20.29%	-0.23%
Employee Contributions	9.39%	9.35%	-0.04%
Employer Normal Cost %	11.13%	10.94%	-0.19%
Administrative Expense %	0.89%	0.84%	-0.05%
Amortization of UAL %	11.33%	10.24%	-1.09%
Net Employer Contribution Rate:	23.35%	22.02%	-1.33%

Required Disclosures



The purpose of this presentation is to present the annual actuarial valuation of the Stanislaus County Employees' Retirement Association. This presentation is for the use of the Stanislaus County Employees' Retirement Board in accordance with applicable law.

In preparing our presentation, we relied on information (some oral and some written) supplied by the Stanislaus County Employees' Association. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

We hereby certify that, to the best of our knowledge, this presentation and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices that are consistent with the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board. Furthermore, as a credentialed actuary, I meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this presentation. This presentation does not address any contractual or legal issues. I am not an attorney, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the Stanislaus County Employees' Retirement Board for the purpose described herein. This presentation is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

The actuarial assumptions, data and methods are those that will be used in the preparation of the actuarial valuation report as of June 30, 2015.

The assumptions reflect our understanding of the likely future experience of the Plans, and the assumptions as a whole represent our best estimate for the future experience of the Plans. The results of this presentation are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the plan could vary from our results.

Graham A. Schmidt ASA, FCA
Consulting Actuary

January 14, 2016



Classic Values, Innovative Advice



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



JANUARY 20, 2016
Meeting Materials for

Item 8.

Stanislaus County Employees' Retirement Association

Table of contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

November Executive Summary	TAB I
----------------------------	-------

Enterprise Risk Tolerance Assessment	TAB II
---	--------

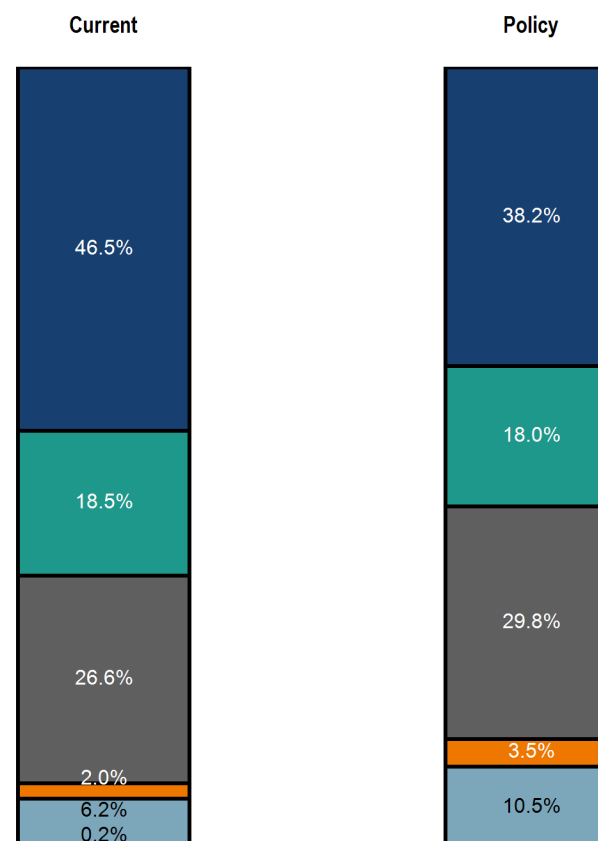
Asset Allocation Study	TAB III
------------------------	---------

Total Fund Executive Summary (Net of Fees) - Preliminary

Period Ending: November 30, 2015

	Market Value	% of Portfolio	1 Mo	YTD
Total Fund	1,785,786,133	100.0	-0.1	0.8
<i>Policy Index</i>			-0.1	1.5
US Equity	830,817,121	46.5	0.7	1.7
<i>US Equity Blended</i>			0.9	2.4
<i>Russell 3000</i>			0.6	2.6
Mellon S&P 500	74,719,105	4.2	0.3	3.0
<i>S&P 500</i>			0.3	3.0
BlackRock Russell 1000 Growth	114,988,712	6.4	0.3	7.2
<i>Russell 1000 Growth</i>			0.3	7.2
Jackson Square	166,932,363	9.3	-0.4	4.7
<i>Russell 1000 Growth</i>			0.3	7.2
BlackRock Russell 1000 Value	122,360,588	6.9	0.4	-1.5
<i>Russell 1000 Value</i>			0.4	-1.7
Dodge & Cox-Equity	181,048,987	10.1	-0.4	-1.4
<i>Russell 1000 Value</i>			0.4	-1.7
Legato Capital	86,580,864	4.8	5.1	3.2
<i>Russell 2000 Growth</i>			3.7	3.6
Capital Prospects	84,186,502	4.7	2.0	-2.3
<i>Russell 2000 Value</i>			2.8	-2.3
International Equity	330,807,624	18.5	-2.0	-2.4
<i>MSCI ACWI ex USA Gross</i>			-2.1	-3.5
LSV Asset Mgt	162,824,907	9.1	-2.6	-3.4
<i>MSCI ACWI ex USA Gross</i>			-2.1	-3.5
Pyramis	167,982,717	9.4	-1.4	-1.1
<i>MSCI ACWI ex USA Gross</i>			-2.1	-3.5
US Fixed Income	474,687,323	26.6	-0.1	0.9
<i>Barclays Aggregate</i>			-0.3	0.9
Dodge & Cox-Fixed	363,559,101	20.4	-0.1	0.8
<i>Barclays Aggregate</i>			-0.3	0.9
PIMCO	111,128,223	6.2	-0.2	1.1
<i>Barclays Aggregate</i>			-0.3	0.9

	Current	%	Policy	%
Domestic Equity	\$830,817,121	46.5%	\$682,170,303	38.2%
International Equity	\$330,807,624	18.5%	\$321,441,504	18.0%
Domestic Fixed Income	\$474,687,323	26.6%	\$532,164,268	29.8%
Real Estate	\$36,128,224	2.0%	\$62,502,515	3.5%
Alternatives	\$110,549,198	6.2%	\$187,507,544	10.5%
Cash and Equivalents	\$2,796,642	0.2%	--	--
Total	\$1,785,786,133	100.0%	\$1,785,786,133	100.0%



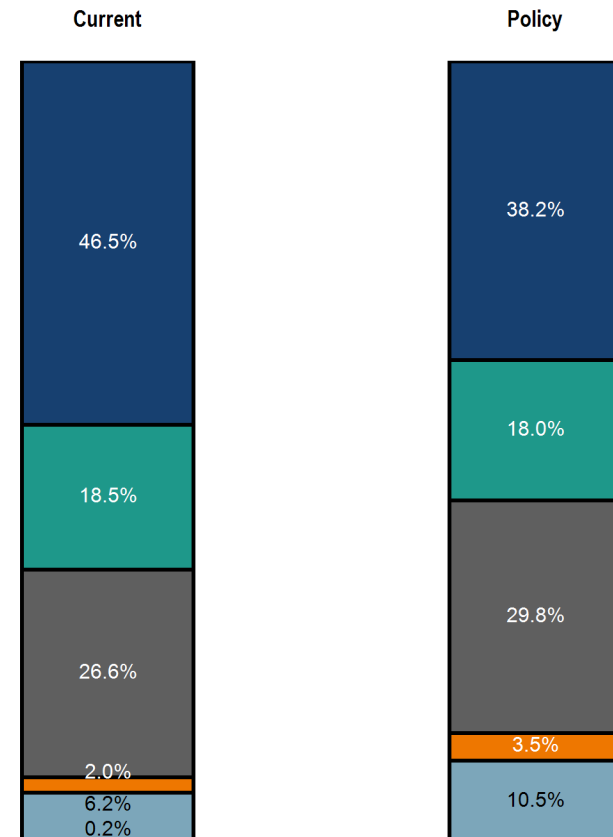
Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data prior to 6/30/2015 provided by the previous consultant. 12th Street Building removed from investable assets 3Q 2015. Invesco residual balance of \$133.03 included in Total Fund market value. Raven Opportunity III initial capital called 7/6/2015. Prime Property Fund capital called 9/30/2015. All data is preliminary.

Total Fund Executive Summary (Net of Fees) - Preliminary

Period Ending: November 30, 2015

	Market Value	% of Portfolio	1 Mo	YTD
Real Estate	36,128,224	2.0	0.0	5.9
DJ US Select RESI			-0.5	2.3
Prime Property Fund	15,000,002	0.8	0.0	--
NCREIF-ODCE			0.0	--
American Strategic Value Realty	8,607,734	0.5	0.0	13.4
NCREIF Property Index			0.0	10.1
BlackRock US Real Estate	3,254,378	0.2	-0.5	2.2
DJ US Select RESI TR USD			-0.5	2.3
Greenfield Gap	9,265,978	0.5		
Direct Lending	101,725,927	5.7		
Medley Capital	31,808,156	1.8		
Raven Capital	26,960,872	1.5		
Raven Opportunity III	2,229,239	0.1		
White Oak Pinnacle	40,727,660	2.3		
Infrastructure	8,823,271	0.5		
MS Infrastructure Partners II	8,823,271	0.5		
Cash Account	2,796,642	0.2	0.0	--

	Current	%	Policy	%
Domestic Equity	\$830,817,121	46.5%	\$682,170,303	38.2%
International Equity	\$330,807,624	18.5%	\$321,441,504	18.0%
Domestic Fixed Income	\$474,687,323	26.6%	\$532,164,268	29.8%
Real Estate	\$36,128,224	2.0%	\$62,502,515	3.5%
Alternatives	\$110,549,198	6.2%	\$187,507,544	10.5%
Cash and Equivalents	\$2,796,642	0.2%	--	--
Total	\$1,785,786,133	100.0%	\$1,785,786,133	100.0%



Policy Index: 14.4% Russell 1000 Value, 11.3% Russell 1000 Growth, 4.8% S&P 500, 4.0% Russell 2000 Value, 3.7% Russell 2000 Growth, 18.0% MSCI ACWI ex USA, 29.8% Barclays Aggregate, 3.5% DJ US Select RESI, 7.5% 9% Annual, 3% CPI + 4%. US Equity Blended: 80% Russell 1000, 20% Russell 2000. All data prior to 6/30/2015 provided by the previous consultant. 12th Street Building removed from investable assets 3Q 2015. Invesco residual balance of \$133.03 included in Total Fund market value. Raven Opportunity III initial capital called 7/6/2015. Prime Property Fund capital called 9/30/2015. All data is preliminary.



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



JANUARY 2016

Item 8.c

Enterprise Risk Tolerance Assessment for

Stanislaus County Employees' Retirement Association

Table of contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

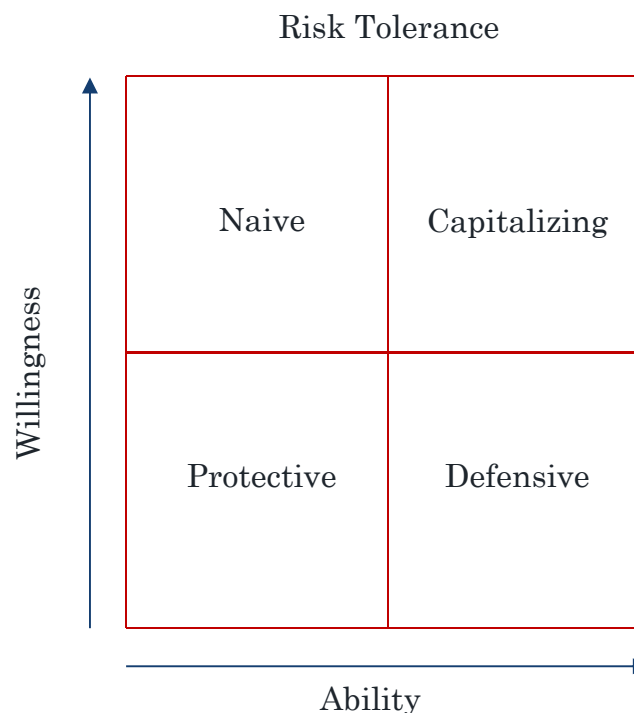
LOS ANGELES 310-297-1777

Introduction	3
Interview findings	5
Plan sponsor review	16
Appendix	25

Introduction

Enterprise risk tolerance in context

- Properly assessing Enterprise Risk Tolerance has important and practical implications for investment strategy development.
- Identifying the appropriate risk tolerance for a plan involves viewing risk in terms of the Plan's willingness and ability to bear risk.
- The ability to bear risk depends on financial circumstances, while the willingness to bear risk is generally based on investor's attitudes and beliefs about investments.
- Although the StanCERA Board's duty is clearly to the beneficiaries of the Association, assessing the County's financial situation and ability to make contributions to the Pension is one component in evaluating the Plan's ability to take on risk.
- In today's session, we review StanCERA's willingness and ability to incur investment risk, based on our findings from recent Trustee and Staff interviews, as well as an assessment of the financial health of the Plan sponsor.



Interview findings

Mission and objectives

Mission

- Complete consistency
 - Ensuring payment of promised benefits

Objectives

- High consistency
 - Maximize return given acceptable risk threshold
- Other considerations
 - Meet assumed rate or return
 - Balance risk and diversify portfolio
 - Reduce chance of large losses
 - Establish sound rationale when adding new strategies
 - Invest responsibly (SRI)

Time horizon

Overall Plan

— Low consistency

- 3-5 years
- 10 years
- > 20 years
- 50 years

Strategy evaluation

— Low consistency

- 3-5 years
- 5 years
- > 5 years

Longer-term
time horizon
implies an
increased
risk
tolerance

Investment philosophy

Simple vs. complex

— Low consistency

- Investment philosophies are complex and a \$1.8 billion portfolio warrants more complexity
- Preference for simplicity with acceptance of complexity if warranted
- Simple and direct

Investment philosophy (cont'd)

Active vs. passive

— High consistency

- There are roles that both active and passive management play within a portfolio

— Sample responses

- Passive for fixed income and large cap domestic equity, active for others.
- Core/satellite strategy is better suited.
- Passive for large cap domestic equity, active for “speed boat” type investments.
- Active management can do positive things but must be aware of the fees being paid.

Investment philosophy (cont'd)

Public vs. private

— High consistency

- General consensus that there is a role for both

— Sample responses

- Private equity has a niche right now. Returns are good, risk is reasonable.
- Need both. Find ways to replace equities if we expect to meet the return target.
- Given the time horizon, amount of money, and return target, we have to have some private money.
- Public more transparent, private less so but higher potential for returns.

Investment philosophy (cont'd)

Liquid vs. illiquid

— High consistency

- Illiquidity is fine, as long as operational needs of the Plan are met.

— Sample responses

- No problem with longer duration as long as there is enough current income to provide for benefit payments.
- Probably 25% could be illiquid with a variety of strategies.
- Illiquid acceptable for long-term investments.

Investment philosophy (cont'd)

Thought leader vs. safety in numbers

— High consistency

- In favor of thought leader

— Sample responses

- Start watching everyone else and pretty soon you don't have your own plan.
- Peer risk is not a concern.
- The Plan needs to look different.

Investment risk

Definition

- No broad definitional themes identified

Volatility

- Not generally considered in investment decision-making

Drawdown

- Occasionally mentioned in investment decision-making

Tracking Error

- Not generally considered in investment decision-making

Recommendation

- Education session on risk management

Organizational risk

“Key person”

- Some response dispersion
- Generally two schools of thought
 - Staff is light and personnel is important; could be issue if any were to leave.
 - No real key man risk because the organization consists of board members, staff, consultant, counsel, actuaries, etc.

Board turnover

- General consistency
 - Most see this as a low risk to the Plan

Environmental risk

Peer risk

- High consistency
 - Not a concern

Headline risk

- General consistency
 - Headline risk can be a bit of a concern if there is a miscommunication
- Sample responses
 - Concerned if information is inaccurate.
 - Have to be proactive in communicating what we do, why we do it, and who we do it for.
 - Having a press is a good thing if truly objective.

Plan sponsor review

Credit ratings

- Moody's assigned the County an issuer rating in the upper-medium grade category with a stable outlook since Aug 2012.
- S&P's assigned the County an issuer rating in the high quality category with a stable outlook since July 2012.

Commentary from Moody's:

Strengths

- Strong General Fund financial position.
- Manageable lease burden.
- Relatively stable operations despite local and regional economic pressures.

Challenges

- Near-term budgets are balanced with use of reserves.
- Tax base decline has been substantial and near-term recovery is likely to be limited
- County continues to manage dynamic of increased demands for services and decreased/limited resources with which to fund services.

	Moody's	Standard & Poor's
Issuer Credit Rating	A1	AA-

Issuer Ratings Relative to Other Counties

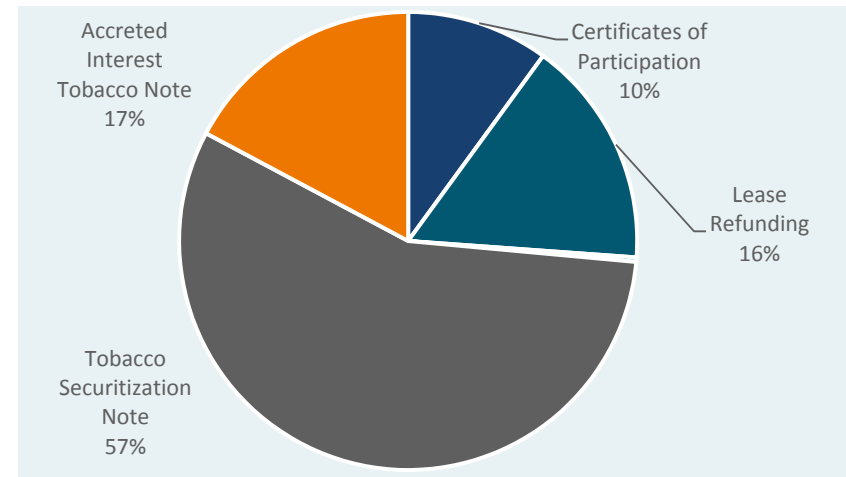
	Moody's	S&P	Pension Fund Ratio	Outstanding POBs (000s)	County Revenue (000s)	POB to Revenue	Revenue as of FY
Alameda	Aa1	AA+	75.9%	\$318,892	\$2,579,836	12.36%	6/30/2014
Contra Costa	Aa2	AAA	76.4%	\$258,500	\$2,548,523	10.14%	6/30/2014
Fresno	-	A+	80.7%	\$527,056	\$1,341,194	39.3%	6/30/2014
Imperial	A1	AA-	88.9%	\$51,160	\$358,774	14.3%	6/30/2013
Merced	Aa3	-	55.6%	\$23,935	417,863	5.7%	6/30/2014
Sacramento	A2	A	86.8%	\$990,308	\$2,735,069	36.21%	6/30/2014
San Joaquin	Aa2	-	64.2%	-	\$1,213,919	-	6/30/2014
Santa Barbara	A1	AA+	80.5%	-	\$844,991	-	6/30/2015
Sonoma	Aa1	AA+	86.3%	\$459,165	\$929,176	49.4%	6/30/2014
Stanislaus	A1	AA-	81.1%	-	\$812,652	-	6/30/2014

Sources: Stanislaus County Comprehensive Annual Financial Report FY 2014, Moody's, Standard & Poor's
 Note: Stanislaus County's Pension Obligation Bond was paid off between June 30, 2013 and June 30, 2014

Long-term obligations

- The county's legal General Obligation bonded debt limit is 1.25% of the value of taxable property (taxable property is also commonly referred to as assessed value).
- The county's assessed value is \$35.6 billion and the legal debt limit about \$445 million.
- Total long-term debt obligations for the county is valued at \$158.9 million, well under the legal limit.
- Pension Obligation Bonds were paid off in full during the 2014 fiscal year.

Long-term debt components



	Value (\$)	Allocation %
Certificates of Participation	\$15,930,000	10.0%
Lease Refunding	\$25,605,970	16.1%
Plan Issuance Premium	\$502,193	0.3%
Tobacco Securitization Note	\$89,503,611	56.3%
Accreted Interest Tobacco Note	\$27,339,863	17.2%
Total	\$158,881,637	100%

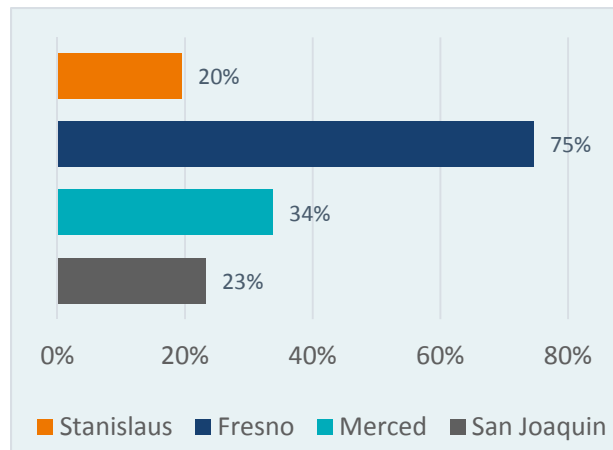
Source: Stanislaus County Comprehensive Annual Financial Report FY 2014

Debt ratios

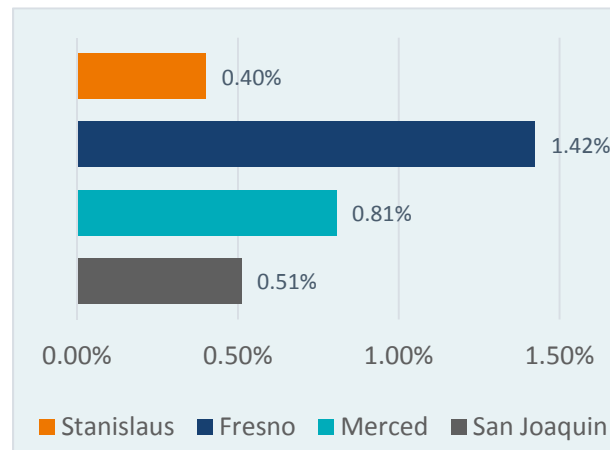
When comparing Stanislaus County's debt ratios against 3 counties in the same region of comparable size (Fresno, Merced, and San Joaquin):

- Total County debt is 20% of total revenues, which is lowest amongst the group.
- Total debt is 0.40% of the County's assessed value (taxable property), well below the legal limit of 1.25% and the lowest amongst the group.
- Debt payments to the General Fund reserves is 9.0%, which is a higher ratio relative to Merced and San Joaquin, but lower than Fresno.

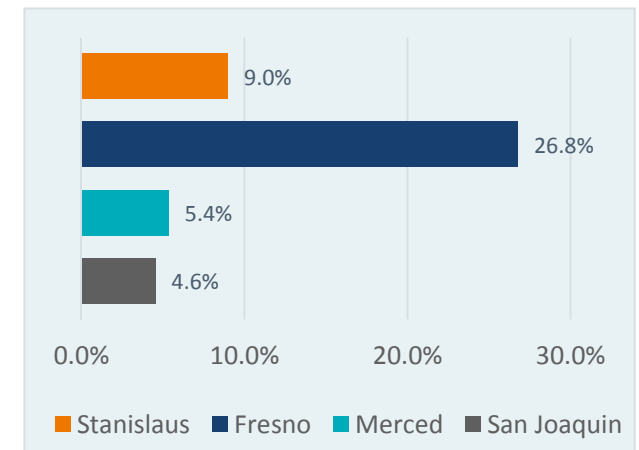
DEBT AS % OF REVENUE



DEBT TO ASSESSED VALUE



DEBT PAYMENTS TO GENERAL FUND

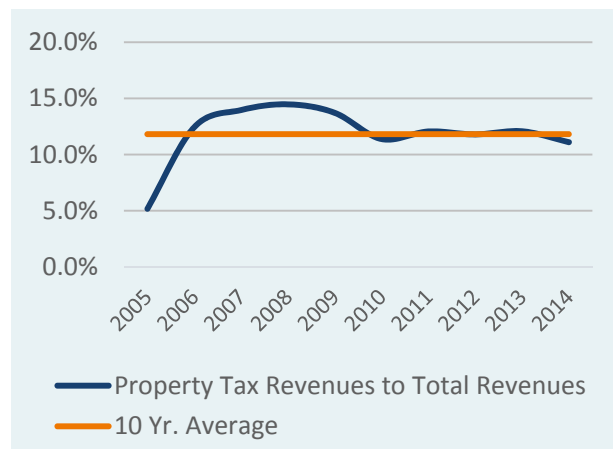


1. Source: Stanislaus County Comprehensive Annual Financial Report FY 2014

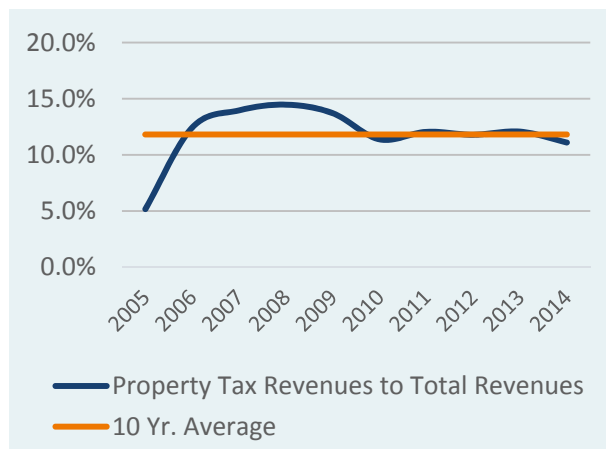
County revenues

- County revenues have been flat since 2010 and are around their 10 year average.
- Property Tax Revenue is a stable source of income and has averaged about 12% of the County's revenues over the last 10 years.
- Non-Tax revenue is a less stable income source that includes grants, intra-governmental contributions, and investment earnings.
- Non-Tax revenues have averaged 59% of all revenues over the last 10 years and has been increasing since 2004.

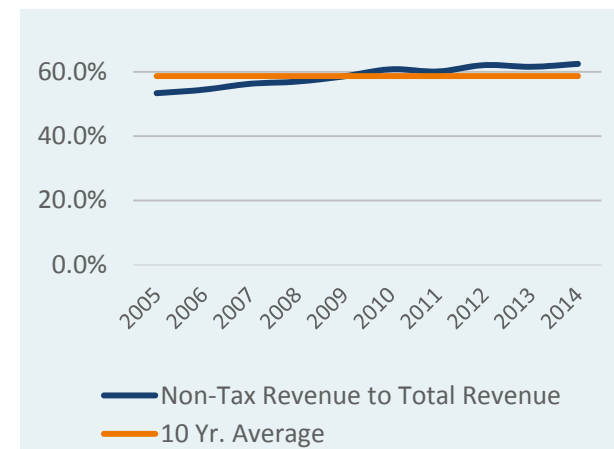
TOTAL COUNTY REVENUES



PROPERTY TAX REVENUE TO TOTAL REVENUE



NON-TAX REVENUE TO TOTAL REVENUE

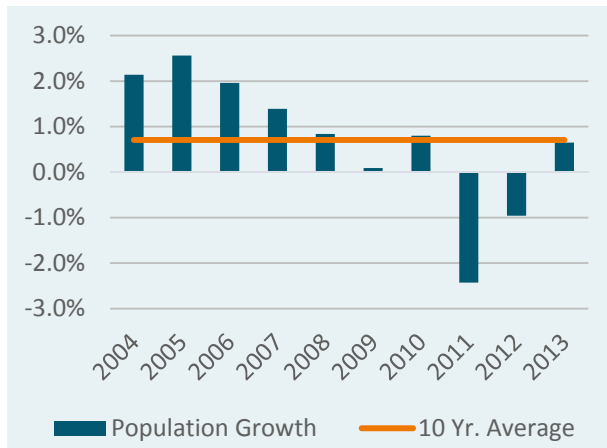


1. Source: Stanislaus County Comprehensive Annual Financial Reports FY 2005 through FY 2014

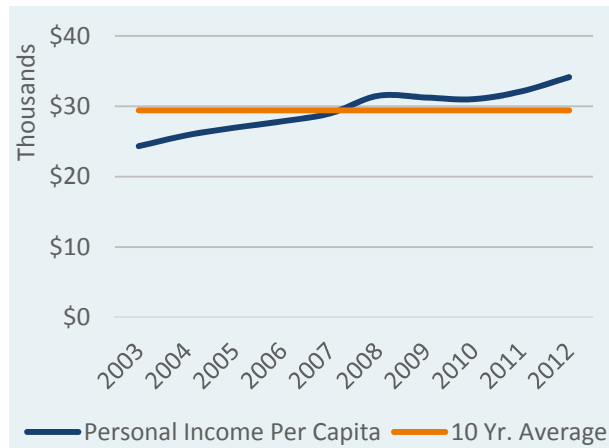
Economic & demographic statistics

- Population growth has fluctuated over the last 10 years, averaging about 0.7%. The county experienced negative population growth in 2011 and 2012.
- Personal income per capita has been trending upwards and is currently noticeably above the County's 10 year average.
- The unemployment rate has improved from the high of 2010 and is currently near the County's 10 year average.

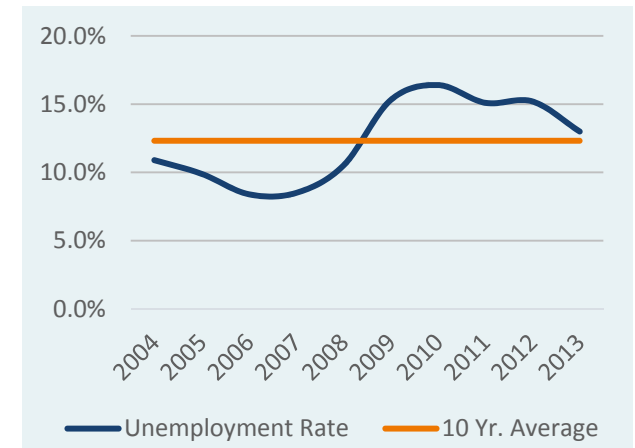
POPULATION GROWTH



PERSONAL INCOME PER CAPITA



UNEMPLOYMENT RATE

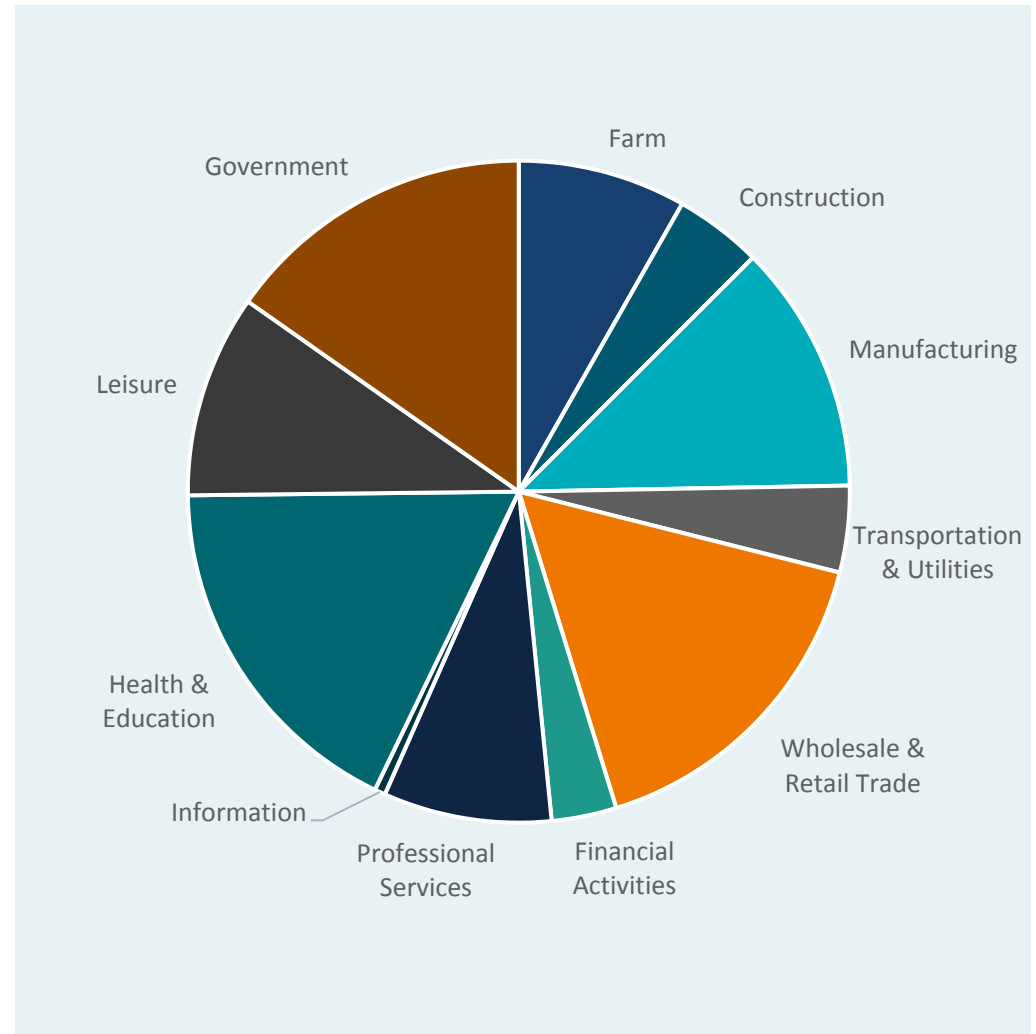


1. Source: Stanislaus County Comprehensive Annual Financial Reports FY 2013 and FY 2014

2. Personal income per capita not reported for FY 2013

Employment by industry

- Stanislaus County has a diverse employment base
- The largest industry, Health and Education, accounts for 17.1% of county-wide employment



Source: Stanislaus County Economic Forecast, http://www.dot.ca.gov/hq/tpp/offices/eab/socio_economic_files/2015/Final%20Forecasts/Stanislaus.pdf

Employment by employer

Among the top 10 employers, Stanislaus is most reliant on Food & Beverage (4.7%), Education (2.6%), Healthcare (2.3%) and Gov't (1.9%) industries. With the top 10 employers representing just 12.2% of total employment, the county is less susceptible to company and industry specific risk.

Diversified employer base across industries helps preserve tax base and during economic slowdown.

Employer	Industry	2014			2005		
		Employees	Rank	% of Total Employment	Employees	Rank	% of Total Employment
County of Stanislaus	Government	3,747	1	1.81%	4,747	1	2.28%
E & J Gallo Winery	Food & Beverage	3,300	2	1.59%	3,425	4	1.65%
Modesto City Schools	Education	3,189	3	1.54%	4,000	3	1.92%
Memorial Medical Center	Healthcare	2,600	4	1.25%	2,600	6	1.25%
Del Monte Foods	Food & Beverage	2,300	5	1.11%	2,600	5	1.25%
Seneca (Signature) Foods	Food & Beverage	2,275	6	1.10%	4,100	2	1.97%
Turlock Unified School District	Education	2,192	7	1.06%	1,851	10	0.89%
Doctors Medical Center	Healthcare	2,100	8	1.01%	2,300	7	1.11%
Stanislaus Food Products	Food & Beverage	1,850	9	0.89%	2,000	8	0.96%
Save Mart Supermarkets	Grocery	1,661	10	0.80%	-	-	-
Modesto Junior College	Education	-	-	-	1,866	9	0.90%
Total		25,214		12.16%	29,489		14.18%

Source: Stanislaus County Comprehensive Annual Financial Report FY 2014

Summary

Overall, Stanislaus County enjoys favorable financial and economic conditions.

- The County's credit ratings from Moody's and S&P are high and stable.
- Long-Term debt obligations are well under the legal limit.
- Total Debt is about 1/5 of revenue, which indicates good coverage.
- County revenues have remained steady through the last few years.
- Improving unemployment rates, stable population growth, and a diverse employment base imply a stable tax base.

Appendix

Moody's credit rating definitions

Category	Definition
Aaa	Obligations rated Aaa are judged to be of the highest quality, with minimal credit risk.
Aa	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.
A	Obligations rated A are considered upper-medium grade and are subject to low credit risk.
Baa	Obligations rated Baa are subject to moderate credit risk. They are considered medium-grade and as such may possess certain speculative characteristics.
<i>Investment Grade</i>	
Ba	Obligations rated Ba are judged to have speculative elements and are subject to substantial credit risk.
B	Obligations rated B are considered speculative and are subject to high credit risk.
Caa	Obligations rated Caa are judged to be of poor standing and are subject to very high credit risk.
Ca	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.
C	Obligations rated C are the lowest rated class of bonds and are typically in default, with little prospect for recovery of principal or interest.
<p>Note: Moody's appends numerical modifiers, 1, 2, and 3 to each generic rating classification from Aa through Caa. The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.</p>	

Source: Moody's rating Symbols & Definitions

S&P credit rating definitions

Long-Term Issuer Credit Ratings*

Category	Definition
AAA	An obligor rated 'AAA' has extremely strong capacity to meet its financial commitments. 'AAA' is the highest issuer credit rating assigned by Standard & Poor's.
AA	An obligor rated 'AA' has very strong capacity to meet its financial commitments. It differs from the highest-rated obligors only to a small degree.
A	An obligor rated 'A' has strong capacity to meet its financial commitments but is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligors in higher-rated categories.
BBB	An obligor rated 'BBB' has adequate capacity to meet its financial commitments. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitments.

Investment Grade

BB; B; CCC; and CC	Obligor rated 'BB', 'B', 'CCC', and 'CC' are regarded as having significant speculative characteristics. 'BB' indicates the least degree of speculation and 'CC' the highest. While such obligors will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.
BB	An obligor rated 'BB' is less vulnerable in the near term than other lower-rated obligors. However, it faces major ongoing uncertainties and exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitments.
B	An obligor rated 'B' is more vulnerable than the obligors rated 'BB', but the obligor currently has the capacity to meet its financial commitments. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitments.
CCC	An obligor rated 'CCC' is currently vulnerable, and is dependent upon favorable business, financial, and economic conditions to meet its financial commitments.
CC	An obligor rated 'CC' is currently highly vulnerable. The 'CC' rating is used when a default has not yet occurred, but Standard & Poor's expects default to be a virtual certainty, regardless of the anticipated time to default.
R	An obligor rated 'R' is under regulatory supervision owing to its financial condition. During the pendency of the regulatory supervision the regulators may have the power to favor one class of obligations over others or pay some obligations and not others.
SD and D	An obligor rated 'SD' (selective default) or 'D' is in default on one or more of its financial obligations including rated and unrated financial obligations but excluding hybrid instruments classified as regulatory capital or in non-payment according to terms. An obligor is considered in default unless Standard & Poor's believes that such payments will be made within five business days of the due date in the absence of a stated grace period, or within the earlier of the stated grace period or 30 calendar days. A 'D' rating is assigned when Standard & Poor's believes that the default will be a general default and that the obligor will fail to pay all or substantially all of its obligations as they come due. An 'SD' rating is assigned when Standard & Poor's believes that the obligor has selectively defaulted on a specific issue or class of obligations but it will continue to meet its payment obligations on other issues or classes of obligations in a timely manner. An obligor's rating is lowered to 'D' or 'SD' if it is conducting a distressed exchange offer.
NR	An issuer designated 'NR' is not rated.

*The ratings from 'AA' to 'CCC' may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.

Source: Standard and Poor's Ratings Definitions. http://www.standardandpoors.com/en_US/web/guest/article/-/view/sourcelid/504352

Disclaimers / Disclosures

Past performance is no guarantee of future results. The information presented in this report is provided pursuant to the contractual agreement (the “Contract”) by and between Stanislaus County Employees’ Retirement Association (“Client”) and Verus Advisory, Inc. (“Company”). In the event of conflict between the terms of this disclosure and the Contract, the Contract shall take precedence. Client is an institutional counter-party and in no event should the information presented be relied upon by a retail investor.

The information contained in this report may not be copied, reproduced or distributed, in whole or in part, nor may its contents or facts or terms of any securities (if any) contained therein be disclosed to any other person except in accordance with the terms of the Contract.

The information presented has been prepared by the Company from sources that it believes to be reliable and the Company has exercised all reasonable professional care in preparing the information presented. However, the Company cannot guarantee the accuracy of the information contained therein. The Company shall not be liable to Client or any third party for inaccuracy or in-authenticity of information obtained or received from third parties in the analysis or for any errors or omissions in content.

The information presented does not purport to be all-inclusive nor does it contain all information that the Client may desire for its purposes. The information presented should be read in conjunction with any other material furnished by the Company. The Company will be available, upon request, to discuss the information presented in the report that Client may consider necessary, as well as any information needed to verify the accuracy of the information set forth therein, to the extent Company possesses the same or can acquire it without unreasonable effort or expense. Nothing contained therein is, or should be relied on as, a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the client should be prepared to bear.

The material may include estimates, outlooks, projections and other “forward-looking statements.” Such statements can be identified by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “anticipates,” or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward-looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS



JANUARY 2016

item 8.d

Asset Allocation Study for

Stanislaus County Employees' Retirement Association

Table of contents



[VERUSINVESTMENTS.COM](https://verusinvestments.com)

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

Plan profile	3
--------------	---

Asset allocation analysis	5
---------------------------	---

Appendix	17
----------	----

Plan profile

Plan profile

As of November 30, 2015:

- Total market value of assets = \$1,785,786,133

As of June 30, 2015:

- Average monthly Plan cash flows based on the previous 24 months:
 - Total Contributions = \$6.06 mil
 - Total Benefit Payments & Expenses = \$8.39 mil
 - Benefit Payments = \$8.19 mil
 - Operating Expenses = \$0.19 mil
 - Net Operating Cash Outflow = \$2.33 mil
 - Total Interest & Dividends = \$3.67 mil
 - Net Cash Inflow = \$1.34 mil
- Total participants = 8,808 (4,145 or 47.1% active, 1,198 or 13.6% inactive, 3,456 or 39.3% retired)
- Open to new participants

As of June 30, 2014:

- Accrued liability = \$2,026.4 mil (based on interest rate of 7.75%)
- Actuarial assumed rate of return = 7.75%
- Funded ratio = 81.1% (actuarial value of assets) and 88.1% (November 30, 2015 market value of assets)

Asset allocation analysis

Descriptions of asset allocation approaches

Policy and Current portfolios

- Investment portfolio defined in the investment policy statement

Mix 1 and Mix 2

- Designed to increase risk diversification relative to policy

Mix 3

- Designed to increase risk diversification relative to policy without an increase in allocation to illiquid assets

Functionally focused portfolio

- Design based on functional elements, rather than categorizing assets by asset class or risk factors (e.g., liquidity and short term needs, long term growth assets, diversifying strategies)
- By explicitly funding near term benefit payments, additional risk can be assumed throughout the remainder of the portfolio

Asset allocation analysis

	Policy	Current	Mix 1	Mix 2	Mix 3	FFP 2 Yr	FFP 3 Yr	FFP 4 Yr	10-yr Capital Market Assumptions		
									Return	Vol	Sharpe
Total Equity	56.2	65.0	40.0	40.0	50.0	25.0	27.0	29.0			
Domestic Equity	38.2	46.5	20.0	20.0	25.0	10.0	9.0	8.0			
Large Cap US Equity	30.5	37.0	15.0	15.0	20.0	10.0	9.0	8.0	5.7	14.7	0.25
Small/Mid Cap US Equity	7.7	9.5	5.0	5.0	5.0	-	-	-	4.7	19.8	0.13
International Equity	18.0	18.5	20.0	20.0	25.0	15.0	18.0	21.0			
International Large	14.4	14.8	15.0	15.0	20.0	10.0	9.0	8.0	9.5	18.2	0.41
Emerging Markets	3.6	3.7	5.0	5.0	5.0	5.0	9.0	13.0	11.5	23.7	0.40
Total Fixed Income	29.8	26.6	24.0	24.0	25.0	21.0	24.0	27.0			
Domestic Fixed Income	29.8	26.6	19.0	19.0	20.0	21.0	24.0	27.0			
US Core Fixed Income	29.8	26.6	15.0	15.0	15.0	-	-	-	3.1	3.2	0.31
US Treasury	-	-	-	-	-	10.0	7.0	4.0	2.2	6.4	0.01
Short-Term Govt/Credit	-	-	-	-	-	11.0	17.0	23.0	2.3	1.3	0.17
High Yield Fixed Income	-	-	4.0	4.0	5.0	-	-	-	3.7	10.5	0.30
International Fixed Income	-	-	5.0	5.0	5.0	-	-	-			
Emerging Market Debt (Hard)	-	-	2.5	2.5	2.5	-	-	-	5.7	8.9	0.41
Emerging Market Debt (Local)	-	-	2.5	2.5	2.5	-	-	-	6.2	12.9	0.32
Total Real Assets	6.5	2.5	10.0	10.0	6.5	15.0	10.0	5.0			
Real Estate	6.5	2.5	10.0	10.0	6.5	15.0	10.0	5.0	5.1	13.2	0.23
Total Alternatives	7.5	5.7	25.0	25.0	17.5	38.0	38.0	38.0			
Risk Parity	-	-	5.0	-	10.0	10.0	9.0	8.0	7.1	10.3	
Private Equity	-	-	10.0	10.0	-	15.0	15.0	15.0	7.7	23.7	0.24
Private Credit	7.5	5.7	10.0	15.0	7.5	13.0	14.0	15.0	7.8	10.5	0.55
Cash	-	0.2	1.0	1.0	1.0	1.0	1.0	1.0	2.1	0.6	-
Total Allocation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
<i>Allocation to Illiquid Strategies</i>	<i>14.0</i>	<i>8.2</i>	<i>30.0</i>	<i>35.0</i>	<i>14.0</i>	<i>43.0</i>	<i>39.0</i>	<i>35.0</i>			

Asset allocation by functional role

	Policy	Current	Mix 1	Mix 2	Mix 3	FFP 2 Yr	FFP 3 Yr	FFP 4 Yr	10-yr Capital Market Assumptions		
									Return	Vol	Sharpe
Liquidity	-	0.2	1.0	1.0	1.0	12.0	18.0	24.0			
Cash	-	0.2	1.0	1.0	1.0	1.0	1.0	1.0	2.1	0.6	-
Short-Term Govt/Credit	-	-	-	-	-	11.0	17.0	23.0	2.3	1.3	0.17
Diversifying	-	-	5.0	-	10.0	20.0	16.0	12.0			
US Treasury	-	-	-	-	-	10.0	7.0	4.0	2.2	6.4	0.01
Risk Parity	-	-	5.0	-	10.0	10.0	9.0	8.0	7.1	10.3	
Growth	100.0	99.8	94.0	99.0	89.0	68.0	66.0	64.0			
Domestic Equity	38.2	46.5	20.0	20.0	25.0	10.0	9.0	8.0			
Large Cap US Equity	30.5	37.0	15.0	15.0	20.0	10.0	9.0	8.0	5.7	14.7	0.25
Small/Mid Cap US Equity	7.7	9.5	5.0	5.0	5.0	-	-	-	4.7	19.8	0.13
International Equity	18.0	18.5	20.0	20.0	25.0	15.0	18.0	21.0			
International Large	14.4	14.8	15.0	15.0	20.0	10.0	9.0	8.0	9.5	18.2	0.41
Emerging Markets	3.6	3.7	5.0	5.0	5.0	5.0	9.0	13.0	11.5	23.7	0.40
Domestic Fixed Income	29.8	26.6	19.0	19.0	20.0	-	-	-			
US Core Fixed Income	29.8	26.6	15.0	15.0	15.0	-	-	-	3.1	3.2	0.3
High Yield Fixed Income	-	-	4.0	4.0	5.0	-	-	-	3.7	10.5	0.3
International Fixed Income	-	-	5.0	5.0	5.0	-	-	-			
Emerging Markets Debt (Hard)	-	-	2.5	2.5	2.5	-	-	-	5.7	8.9	0.4
Emerging Markets Debt (Local)	-	-	2.5	2.5	2.5	-	-	-	6.2	12.9	0.3
Real Estate	6.5	2.5	10.0	10.0	6.5	15.0	10.0	5.0	5.1	13.2	0.23
Private Equity	-	-	10.0	10.0	-	15.0	15.0	15.0	7.7	23.7	0.24
Private Credit	7.5	5.7	10.0	15.0	7.5	13.0	14.0	15.0	7.8	10.5	0.55
Total Allocation	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0			
<i>Allocation to Illiquid Strategies</i>	<i>14.0</i>	<i>8.2</i>	<i>30.0</i>	<i>35.0</i>	<i>14.0</i>	<i>43.0</i>	<i>39.0</i>	<i>35.0</i>			

Asset allocation analysis

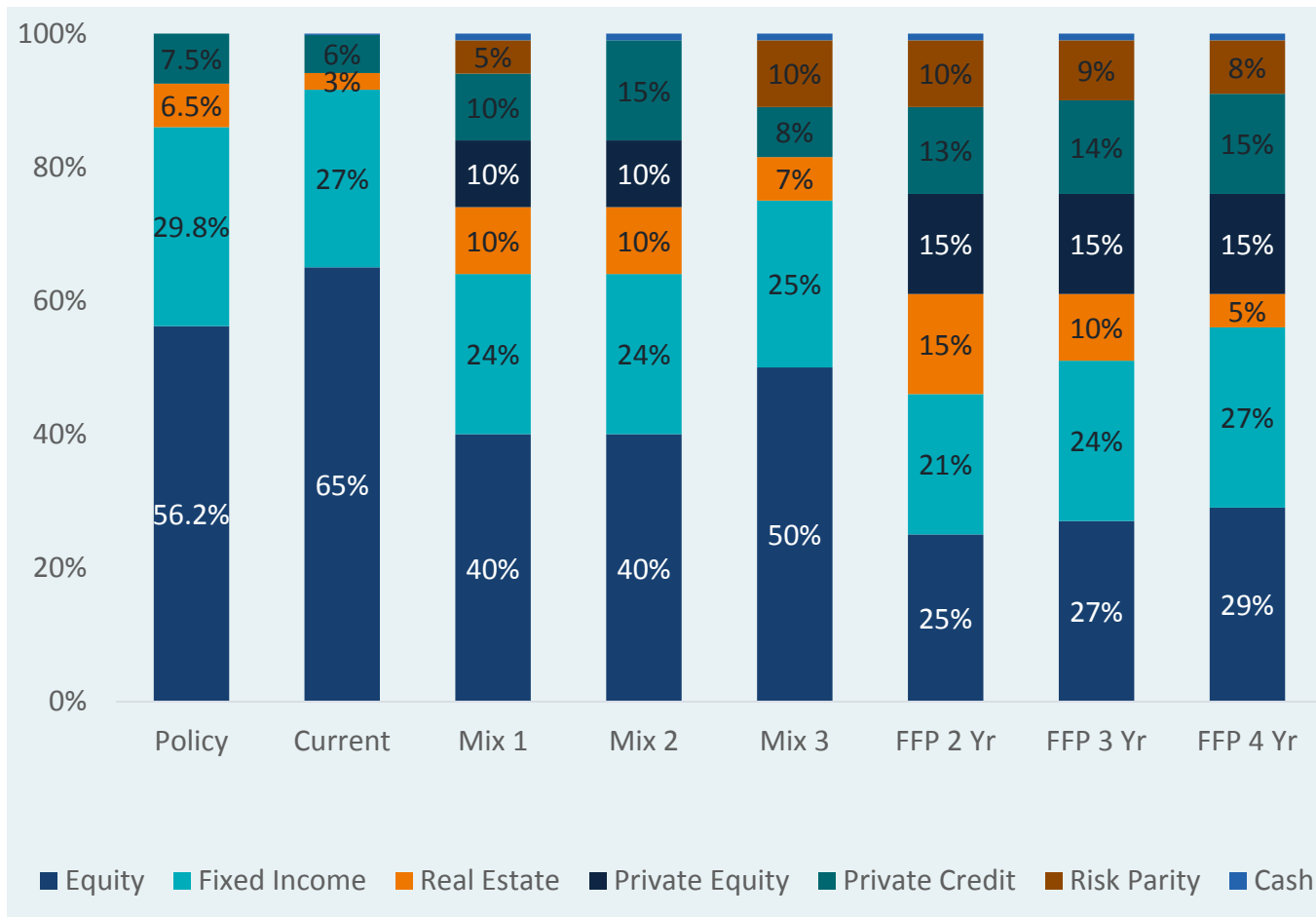
	Policy	Current	Mix 1	Mix 2	Mix 3	FFP 2 Yr	FFP 3 Yr	FFP 4 Yr
Mean Variance Analysis								
Forecast 10 Year Return	6.1	6.1	7.1	7.0	7.1	7.0	7.1	7.2
Standard Deviation	10.1	11.1	10.9	11.0	10.7	9.2	9.5	10.0
Return/Std. Deviation	0.6	0.6	0.7	0.6	0.7	0.8	0.7	0.7
1st percentile ret. 1 year	-21.7	-23.4	-24.4	-25.0	-24.2	-21.0	-21.7	-22.4
Sharpe Ratio	0.44	0.41	0.51	0.49	0.51	0.57	0.57	0.55
Verus Economic Scenario Analysis								
10 Year Return Forecast								
Stagflation	4.9	4.8	6.0	5.8	5.4	6.4	6.3	6.1
Weak Economy	1.9	1.6	3.1	2.9	2.8	3.7	3.7	3.7
Base CMA	5.6	5.7	6.6	6.5	6.7	6.5	6.7	6.9
Strong	9.4	9.9	10.0	10.0	10.1	9.4	9.5	9.6
Range of Scenario Forecast	7.5	8.3	6.9	7.0	7.3	5.7	5.8	5.9
Economic Shock (1 year)	-23.9	-26.9	-22.7	-23.7	-22.5	-17.9	-19.2	-20.5

Notes:

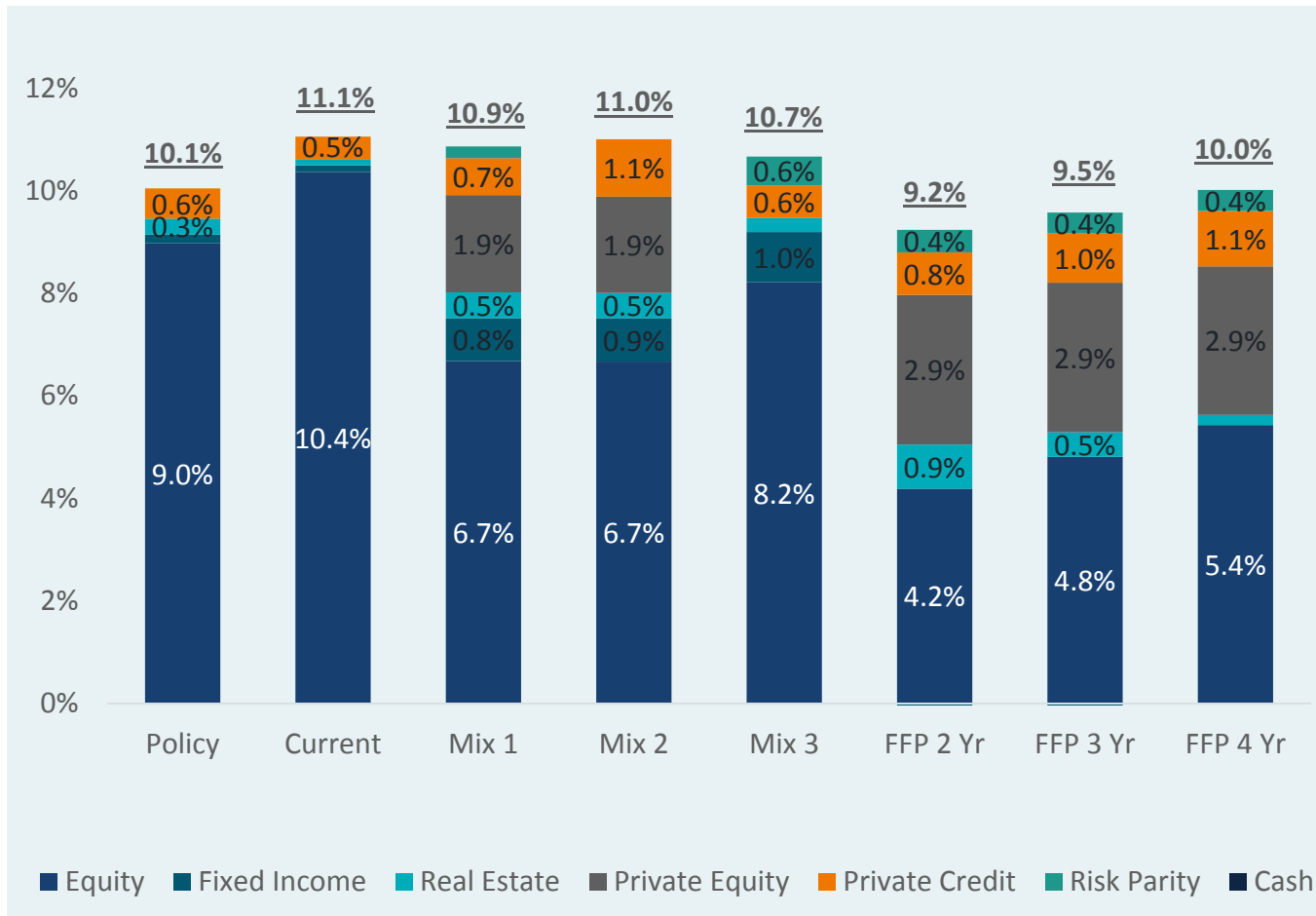
- Real Estate capital market assumptions are for core real estate
- Verus' assumed inflation rate is 2.1% over the next 10 years (actuarial assumption is 3.50% over 30 years)

Scenario Analysis utilizes October 2015 Verus Capital Market Assumptions

Allocation by asset class

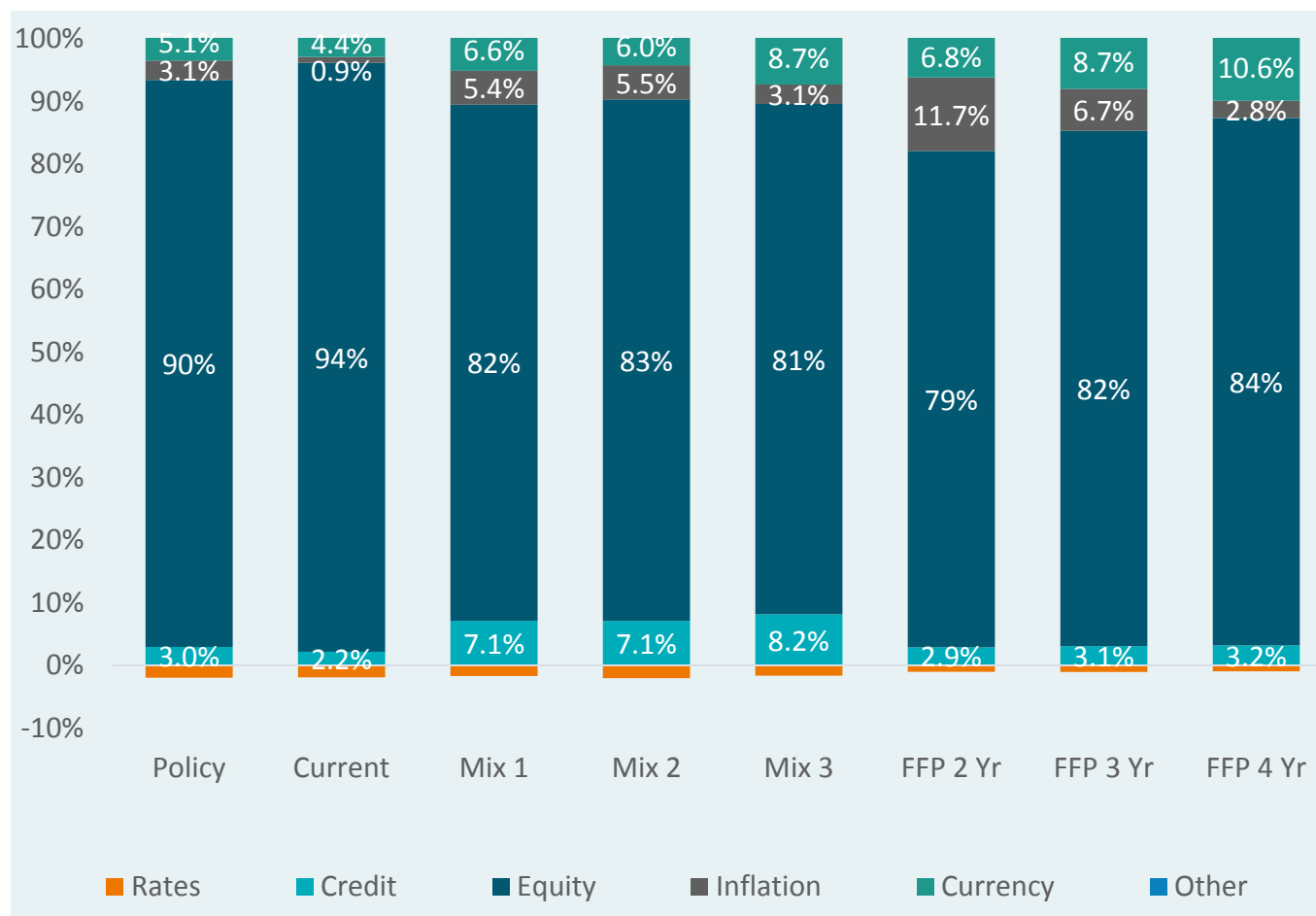


Risk contribution by asset class



Risk contribution based on Verus' Capital Market Assumptions

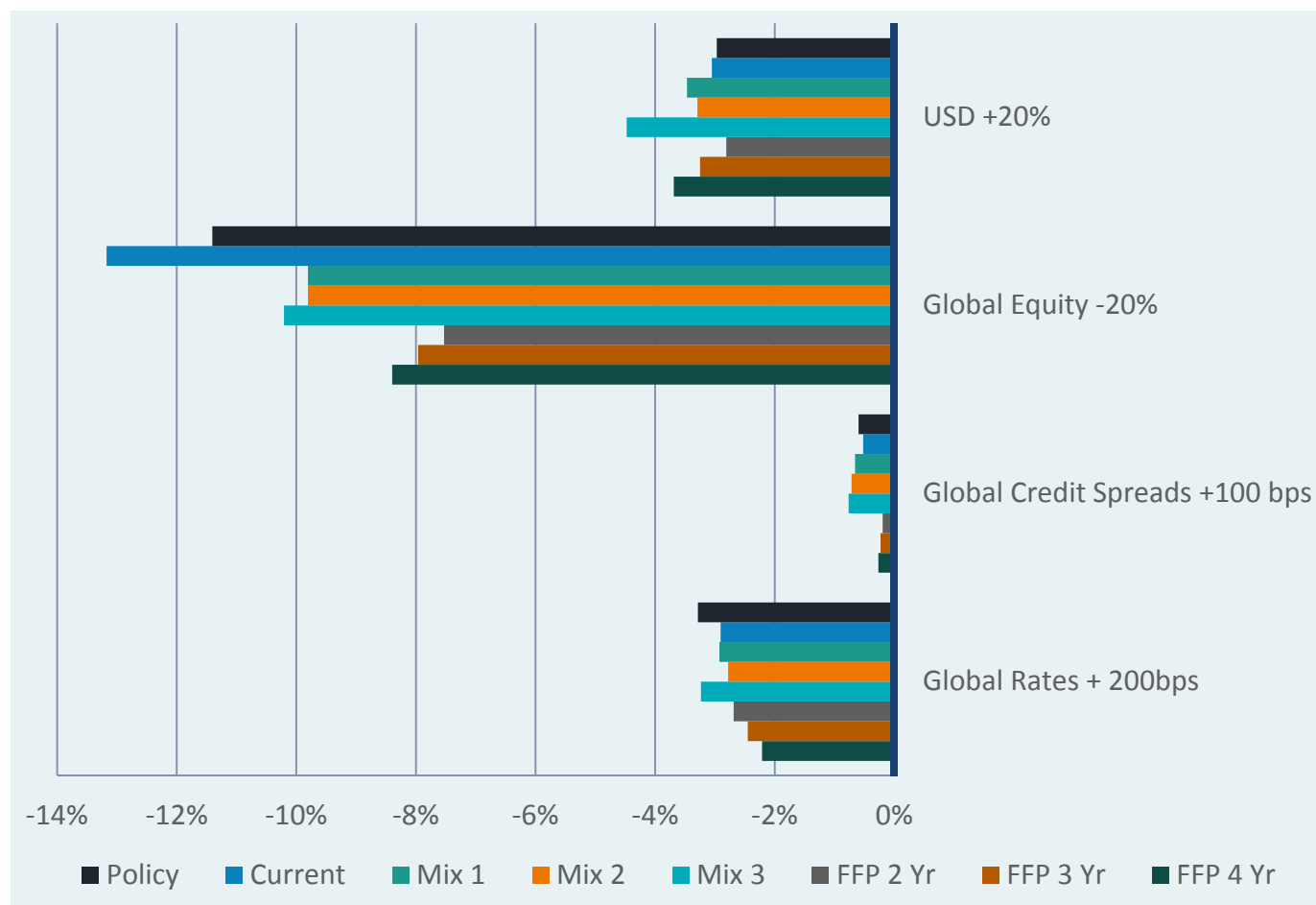
Risk contribution by risk factor



Risk contribution based on BarraOne's Capital Market Assumptions

Stress test

TAIL RISK – STRESS TEST



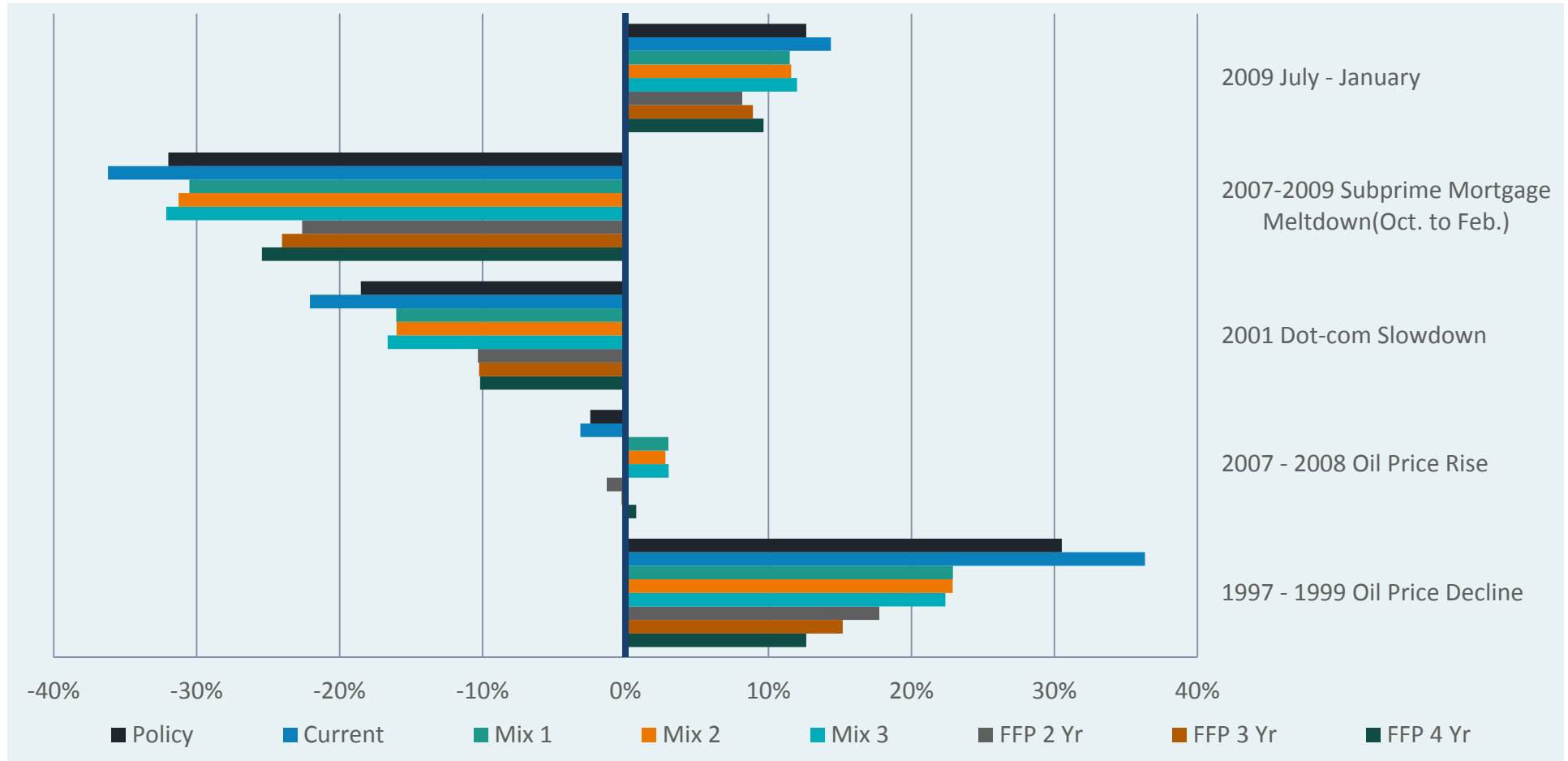
BarraOne's risk decomposition analysis can hypothesize how the different portfolios would have performed in certain hypothetical stress tests or historical environments.

This analysis is based on how the risk factors inherent in the current index holdings reacted in those environments.

Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Historical scenario analysis

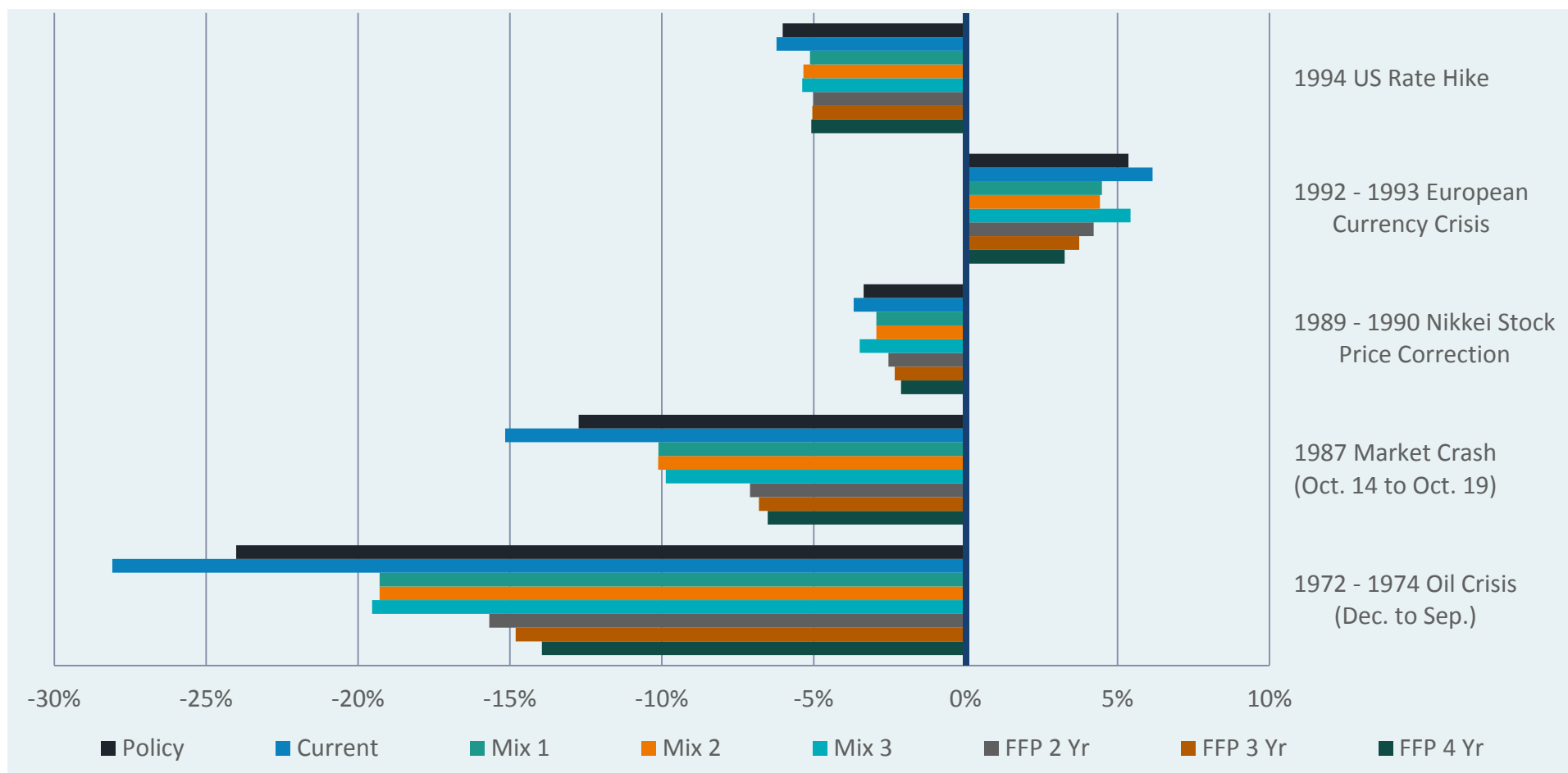
TAIL RISK – SCENARIO ANALYSIS



Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Historical scenario analysis

TAIL RISK – SCENARIO ANALYSIS



Scenario analysis based on risk factors in current policy index and computed as hypothetical scenarios using MSCI BarraOne

Investment model evaluation summary

Selection Criteria	Investment Models							
	Policy	Current	Mix 1	Mix 2	Mix 3	FFP 2 Yr	FFP 3 Yr	FFP 4 Yr
Risk/Return Metrics								
Expected Return	6.1%	6.1%	7.1%	7.0%	7.1%	7.0%	7.1%	7.2%
Volatility	10.1%	11.1%	10.9%	11.0%	10.7%	9.2%	9.5%	10.0%
Sharpe Ratio	0.44	0.41	0.51	0.49	0.51	0.57	0.57	0.55
% chance of meeting 7.75%	30%	32%	42%	41%	42%	40%	41%	43%
Daily VaR (95% confidence, \$MM)	\$18.2	\$21.5	\$15.4	\$16.5	\$18.4	\$11.1	\$12.1	\$12.5
Daily CVaR (95% confidence, \$MM)	\$26.5	\$29.5	\$25.6	\$26.4	\$28.0	\$20.5	\$21.1	\$22.3
2007-2009 Drawdown (Simulation)	-32.0%	-36.2%	-30.5%	-31.3%	-32.1%	-22.6%	-24.0%	-25.4%
1st Percentile (1 Year, MVA)	-21.7%	-23.4%	-24.4%	-25.0%	-24.2%	-21.0%	-21.7%	-22.4%
Risk Factors								
Portfolio Complexity	low	low	high	high	med	high	high	high
Leverage	low	low	high	med	med	high	high	high
Peer/Headline Risk	low	low	med	med	med	high	high	high
Liquidity Risk	low	low	high	high	low	high	med	low
Tail Risk	high	high	med	high	high	low	low	low
Equity Risk Allocation	high	high	med	med	med	low	med	med

Appendix

Date horizon of historical scenario analysis

Scenario	From	To
1972 - 1974 Oil Crisis (Dec. to Sep.)	December 1, 1972	September 30, 1974
1987 Market Crash (Oct. 14 to Oct. 19)	October 14, 1987	October 19, 1987
1989 - 1990 Nikkei Stock Price Correction	December 29, 1989	March 30, 1990
1992 - 1993 European Currency Crisis	September 1, 1992	August 13, 1993
1994 US Rate Hike	January 31, 1994	December 13, 1994
1997 - 1999 Oil Price Decline	January 8, 1997	February 16, 1999
2001 Dot-com Slowdown	March 10, 2001	October 9, 2002
2007 - 2008 Oil Price Rise	January 18, 2007	June 27, 2008
2007-2009 Subprime Mortgage Meltdown(Oct. to Feb.)	October 1, 2007	February 27, 2009
2009 July - January	July 1, 2009	December 31, 2009

Source: MSCI BarraOne

10 year return & risk assumptions

Asset Class	Index Proxy	Ten Year Return Forecast		Standard Deviation Forecast	Sharpe Ratio Forecast	Ten Year Historical Sharpe Ratio
		Geometric	Arithmetic			
Equities						
US Large	S&P 500	5.7%	6.7%	14.7%	0.25	0.47
US Small	Russell 2000	4.7%	6.5%	19.8%	0.13	0.40
International Developed	MSCI EAFE	9.5%	11.0%	18.2%	0.41	0.25
International Small	MSCI EAFE Small Cap	9.2%	11.0%	19.7%	0.36	0.32
Emerging Markets	MSCI EM	11.5%	13.9%	23.7%	0.40	0.40
Private Equity	Cambridge Private Equity	7.7%	10.2%	23.7%	0.24	1.07
Fixed Income						
Cash	30 Day T-Bills	2.1%	2.1%	0.6%	-	-
US TIPS	Barclays US TIPS 5 - 10	2.6%	2.8%	6.3%	0.07	0.47
US Treasury	Barclays Treasury 7 - 10 year	2.2%	2.4%	6.4%	0.01	0.65
Global Sovereign ex US	Barclays Global Treasury ex US	2.5%	2.8%	7.9%	0.05	0.18
Core Fixed Income	Barclays US Aggregate Bond	3.1%	3.2%	3.2%	0.31	0.96
Core Plus Fixed Income	Barclays US Corporate IG	3.8%	4.0%	5.9%	0.29	0.67
Short-Term Gov't/Credit	Barclays US Gov't/Credit 1 - 3 year	2.3%	2.3%	1.3%	0.17	1.09
Short-Term Credit	Barclays Credit 1 - 3 year	2.6%	2.6%	2.3%	0.22	0.88
Long-Term Credit	Barclays Long US Corporate	3.7%	4.3%	11.0%	0.15	0.55
High Yield Corp. Credit	Barclays High Yield	5.2%	5.8%	10.5%	0.30	0.61
Bank Loans	S&P/LSTA	3.7%	4.1%	8.7%	0.19	0.44
Global Credit	Barclays Global Credit	1.9%	2.2%	7.4%	-0.02	0.49
Emerging Markets Debt (Hard)	JPM EMBI Global Diversified	5.7%	6.1%	8.9%	0.41	0.72
Emerging Markets Debt (Local)	JPM GBI EM Global Diversified	6.2%	7.0%	12.9%	0.32	0.46
Private Credit	High Yield + 200 bps	7.8%	8.4%	10.5%	0.55	-
Other						
Commodities	Bloomberg Commodity	4.1%	5.7%	18.2%	0.11	-0.10
Hedge Funds	HFRI Fund of Funds	6.0%	6.4%	9.1%	0.43	0.29
Core Real Estate	NCREIF Property	5.1%	5.9%	13.2%	0.23	0.93
REITs	Wilshire REIT	5.1%	8.1%	26.4%	0.11	0.38
Inflation		2.1%	-	-	-	-

Both geometric and arithmetic return forecasts have been included. It is important that users of this information understand how we derived it. Our forecast process involves the use of a wide range of data inputs (of a variety of different types) to create geometric return forecasts for individual asset classes – this is the process described at length in this document. We use an industry standard formula to convert these to arithmetic return forecasts, and provide both for client use.

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

More broadly, it is important that the user of these forecasts remembers that return forecasts (whoever provides them) are there to provide a guide to the likely future, no more. While we believe that the approach described in this document is an appropriate one to use for those purposes, and that the forecasts resulting from that approach are meaningful and fit for the uses to which they will be put, users of any such forecasts should always bear in mind the fact that the single most difficult thing to predict is the future, and approach that exercise with appropriate skepticism.

Correlation assumptions

	Cash	US Large	US Small	Developed Large	Developed Small	EM	PE	TIPS	US Treasury	Global Sovereign	US Core	US Core Plus	Short –Term Govt/Credit	Short-Term Credit	Long-Term Credit	US HY	Bank Loans	Global Credit	EMD USD	EMD Local	Commodities	Hedge Funds	Real Estate	REITs	Inflation
Cash	1																								
US Large	-0.1	1																							
US Small	-0.1	0.9	1																						
Developed Large	0.0	0.9	0.8	1																					
Developed Small	0.0	0.8	0.8	1.0	1																				
EM	0.1	0.8	0.7	0.9	0.9	1																			
PE	-0.2	0.7	0.7	0.8	0.8	0.7	1																		
TIPS	0.0	0.2	0.1	0.2	0.3	0.3	0.2	1																	
US Treasury	0.0	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	0.6	1																
Global Sovereign	0.0	0.2	0.2	0.4	0.4	0.4	0.5	0.6	0.5	1															
US Core	0.0	0.1	0.0	0.1	0.1	0.1	0.0	0.8	0.9	0.6	1														
US Core Plus	-0.1	0.4	0.3	0.5	0.5	0.5	0.6	0.7	0.5	0.5	0.8	1													
Short –Term Govt/Credit	0.3	-0.1	-0.1	0.1	0.1	0.1	-0.2	0.6	0.6	0.6	0.7	0.6	1												
Short-Term Credit	0.0	0.3	0.3	0.5	0.5	0.5	-0.2	0.6	0.2	0.5	0.6	0.8	0.7	1											
Long-Term Credit	-0.1	0.3	0.2	0.4	0.4	0.4	0.1	0.6	0.5	0.5	0.8	1.0	0.4	0.6	1										
US HY	-0.1	0.7	0.7	0.8	0.8	0.7	0.6	0.4	-0.2	0.3	0.2	0.6	0.1	0.6	0.5	1									
Bank Loans	-0.1	0.6	0.6	0.6	0.6	0.6	0.2	0.2	-0.4	0.0	0.0	0.4	-0.1	0.5	0.3	0.9	1								
Global Credit	-0.1	0.6	0.5	0.8	0.8	0.7	0.7	0.6	0.2	0.8	0.6	0.8	0.5	0.8	0.7	0.7	0.5	1							
EMD USD	-0.1	0.6	0.5	0.7	0.7	0.7	0.5	0.7	0.3	0.5	0.6	0.8	0.4	0.7	0.7	0.8	0.6	0.8	1						
EMD Local	0.1	0.7	0.6	0.8	0.8	0.8	0.6	0.5	0.1	0.6	0.4	0.6	0.3	0.5	0.5	0.7	0.4	0.8	0.8	1					
Commodities	0.1	0.5	0.4	0.6	0.6	0.7	0.2	0.3	-0.2	0.4	0.1	0.3	0.1	0.4	0.2	0.5	0.4	0.6	0.5	0.6	1				
Hedge Funds	0.1	0.7	0.6	0.8	0.8	0.8	0.7	0.2	-0.3	0.1	0.0	0.4	0.0	0.4	0.2	0.6	0.6	0.6	0.5	0.6	0.7	1			
Real Estate	-0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.1	-0.1	0.1	0.0	0.2	-0.1	-0.1	0.1	0.2	0.0	0.2	0.2	0.3	0.0	0.3	1		
REITs	0.0	0.8	0.8	0.7	0.6	0.6	0.6	0.2	-0.1	0.3	0.2	0.4	0.0	0.3	0.4	0.7	0.5	0.6	0.6	0.6	0.3	0.4	0.4	1	
Inflation	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	-0.3	0.0	-0.3	-0.2	-0.2	0.0	-0.3	0.2	0.4	0.0	0.0	0.1	0.3	0.2	0.1	0.1	1

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

Disclaimers / Disclosures

Past performance is no guarantee of future results. The information presented in this report is provided pursuant to the contractual agreement (the “Contract”) by and between Stanislaus County Employees’ Retirement Association (“Client”) and Verus Advisory, Inc. (“Company”). In the event of conflict between the terms of this disclosure and the Contract, the Contract shall take precedence. Client is an institutional counter-party and in no event should the information presented be relied upon by a retail investor.

The information contained in this report may not be copied, reproduced or distributed, in whole or in part, nor may its contents or facts or terms of any securities (if any) contained therein be disclosed to any other person except in accordance with the terms of the Contract.

The information presented has been prepared by the Company from sources that it believes to be reliable and the Company has exercised all reasonable professional care in preparing the information presented. However, the Company cannot guarantee the accuracy of the information contained therein. The Company shall not be liable to Client or any third party for inaccuracy or in-authenticity of information obtained or received from third parties in the analysis or for any errors or omissions in content.

The information presented does not purport to be all-inclusive nor does it contain all information that the Client may desire for its purposes. The information presented should be read in conjunction with any other material furnished by the Company. The Company will be available, upon request, to discuss the information presented in the report that Client may consider necessary, as well as any information needed to verify the accuracy of the information set forth therein, to the extent Company possesses the same or can acquire it without unreasonable effort or expense. Nothing contained therein is, or should be relied on as, a promise, representation, or guarantee as to future performance or a particular outcome. Even with portfolio diversification, asset allocation, and a long-term approach, investing involves risk of loss that the client should be prepared to bear.

The material may include estimates, outlooks, projections and other “forward-looking statements.” Such statements can be identified by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “anticipates,” or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward-looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.