AGENDA

BOARD OF RETIREMENT
832 12th Street Ste. 600, Wesley W. Hall Board Room
Modesto, CA 95354

January 22, 2019
1:30 p.m.

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

CONSENT/ACTION ITEMS: Consent matters include routine administrative actions and are identified under the Consent Items heading. All other items are considered to be action items "Action" means that the Board may dispose of any item by any action, including but not limited to the following acts: approve, disapprove, authorize, modify, defer, table, take no action, or receive and file.

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. Call Meeting to Order
2. Roll Call
3. Announcements
4. Public Comment
5. Consent Items
   a. Approval of the December 18, 2018 Meeting Minutes View
   b. Monthly Staff Report View
   c. StanCERA Complaint Log View
   d. Applications for Service Retirement(s) – Government Code Sections 31499.14, 31670, 31662.2 & 31810
      1. Christianson, Adam – Sheriff – Effective 01-08-19 *
      2. Cockrell, Silvia – Workforce Development – Effective 01-01-19
      3. Dearing, Shari – Library – Effective 12-30-18
      4. Farnham, Deborah – Probation – Effective 01-19-19
      5. Gandarilla, Hermilo – HSA – Effective 01-10-19
      6. Ingalls, Ernest – Planning – Effective 01-05-19
      8. Klein, Lauren – Auditor/Controller – Effective 01-08-19
     10. Lundrigan, Lee – Clerk Recorder – Effective 01-08-19
     11. Moran, Marta – DCSS – Effective 01-20-19
d. Applications for Service Retirement(s) (Cont.) – **Government Code Sections 31499.14, 31670, 31662.2 & 31810**

12. Mulcahy, Maria Lucia – HSA – Effective 01-09-19
16. Snyder, Karen – BHRS – Effective 01-03-19
17. Spaulding, Jarrod – Sheriff – Effective 01-19-19 *
18. Wallace, Dave – Sheriff – Effective 12-25-18 *

* Indicates Safety Personnel

e. Applications for Deferred Retirement(s) – **Government Code Section 31700**

3. Vue, David – Sheriff – Effective 07-18-18

* Indicates Safety Personnel

f. Application for Death Benefit – **Government Code Section 31781, 31781.1, 31781.3**


6. **Verus – Investment Consultant**

a. December Flash Report

7. **Investment**

a. None

8. **Administrative**

a. Preliminary findings from the June 30, 2018 Actuarial Valuation and Experience Study

Agenda Item [View](#) Attachment 1 [View](#)

b. Information Technology Solutions (ITS) Project Update [View](#)

c. Board Room Committee Update

d. 2018 Executive Director Goals Update

Agenda Item [View](#) Attachment 1 [View](#)

e. Executive Director Goals for 2019

Agenda Item [View](#) Attachment 1 [View](#)
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:
       Stanislaus County Employees’ Retirement Association v. Buck Consultants,
       LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152
       Government Code Section 54956.9d)(4)

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

11. **Adjournment**
BOARD OF RETIREMENT MINUTES
December 18, 2018

1. Call Meeting to Order

Meeting called to order 1:30 p.m. by Trustee Lynch, Chair

2. Roll Call

Trustees Present:  Darin Gharat, Mike Lynch, Sam Sharpe, Jim DeMartini, Donna Riley, Jeff Grover, Michael O'Neal, Jeff Mangar and Mandip Dhillon

Trustees Absent:  NONE

Alternate Trustee: Rhonda Biesemeier, Alternate Retiree Representative

Staff Present:  Rick Santos, Executive Director
               Natalie Elliott, Interim Fiscal Services Manager
               Dawn Lea, Benefits Manager
               Kellie Gomes, Executive Board Assistant

Others Present:  Fred Silva, General Legal Counsel

3. Announcements

Kellie Gomes Announced two corrections to the minutes of 11/24/18: First, the minutes should reflect that Dawn Lea Benefits Manager and Chris Wisdom, Investment Officer were both present at the meeting. Second, the minutes should reflect that Trustee Gharat arrived at 1:52 p.m.

4. Public Comment

5. Consent Items

a. Approval of the November 27, 2018 Meeting Minutes

b. Monthly Staff Report

c. Applications for Service Retirement(s) – Government Code Sections 31499.14, 31670, 31662.2 & 31810

1.  Anderson, Randy – Stanislaus County Fire – Effective 12-28-18 *
2.  Behrens, Ellen – CSA – Effective 12-23-18
6.  Espinoza, Yvonne (Keimi) – Public Works – Effective 12-07-18
7.  Galbraith, Donna – CSA – Effective 12-03-18
8.  Mikawa, Ken – City of Ceres – Effective 12-29-18
10. Parsons, Todd – Sheriff – Effective 12-03-18 *
11. Pavao, David – Public Works – Effective 12-03-18
13. Sako, Harvey – Probation – Effective 12-07-18
c. Applications for Service Retirement(s) (Cont.) – Government Code Sections 31499.14, 31670, 31662.2 & 31810

14. Santos, Jeff – City of Ceres – Effective 12-16-18 *
17. Winkler, Steven – Public Works – Effective 12-31-18

* Indicates Safety Personnel

d. Applications for Deferred Retirement(s) – Government Code Section 31700

1. Barter, Jason – Probation – Effective 06-22-18 *
3. Hoang, Binh Thai – Probation – Effective 07-27-18 *
4. Sindal, Bal – DA – Effective 09-09-18
5. Soto-Cervantes, Amy – Probation – Effective 10-26-18

* Indicates Safety Personnel

e. Application for Death Benefit – Government Code Section 31781, 31781.1, 31781.3

1. Hinostroza, Antonio, Sheriff’s Department – Effective 11-25-18 – Active Member *
2. Ortega, Cynthia, KCSD – Effective 11-25-18 – Active Member

e. Application for Reciprocal Disability Retirement – Government Code Section 31838.5

1. Klinge, Joshua – Police Department – Effective 01-28-17 *
2. Zimmerman, Jonathan – Sheriff’s Department – Effective 02-24-18 *

g. Application of Disability Retirement – Government Code Section 31724

1. Cordova, Dolores – CSA – Non-Service Connected – Effective 02-24-18

Motion was made by Trustee Gharat and seconded by Trustee O’Neal to accept the consent items with the above mentioned corrections to the minutes made in announcements

Motion carried unanimously

6. Investment

a. Private Debt (Direct Lending) Education

b. Private Debt Fund Structure Presentation – White Oak Global Advisors

c. Private Investment Fund Tax & Accounting Forum
7. Verus – Investment Consultant
   a. November Flash Report

   All of the above items were presented by Verus Consultant, Ed Hoffman

8. Administrative
   a. Information Technology Solutions (ITS) Project Update
   b. Board Room Committee Update
   c. Report on Earnings Allocation for Fiscal Year Ended June 30, 2018
   d. Revised Travel and Education Policy

   Motion was made by Trustee Gharat and seconded by Trustee Grover to accept the Travel Education Policy as presented

   Motion carried unanimously

9. Closed Session

   Motion was made by Trustee Gharat and seconded by Trustee O'Neal to go into closed session at 3:06 p.m.

   Motion carried unanimously

   a. Discussion and Action regarding Public Employment
      Government Code Section 54954.5

   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:
      Stanislaus County Employees' Retirement Association v. Buck Consultants,
      LLC, Mediation Pursuant to Evidence Code Sections 1115, 1119, 1152
      Government Code Section 54956.9d(4)

   Motion was made by Trustee Grover and seconded by Trustee Gharat to go into open session at 3:13 p.m.

   Motion carried unanimously
After discussing the performance of the Executive Director under item 9a in closed session, the issue of the Executive Director’s compensation was discussed in open session.

Motion was made by Trustee Dhillon and seconded by Trustee Riley to accept the recommendation of the Executive Director Evaluation Review Committee and award Rick Santos, Director of StanCERA an increase in salary to bring him to the top of the band (approximately 3%) for this review period. This will bring the Director to the top of his band and remain eligible for all other Cost of living increases granted by the Board of Supervisors in the future.

Motion carried unanimously

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

Donna Riley invited all to attend the swearing in ceremonies on the 7th of January at 4:00 p.m.

Rick Santos wished Dawn Lea well in retirement and congratulated her on her 22 years of service to StanCERA and many more with the County

11. **Adjournment**

Meeting adjourned at 3:17 p.m.

Respectfully submitted,

[Signature]

Rick Santos, Executive Director

APPROVED AS TO FORM:
Fred Silva, GENERAL LEGAL COUNSEL

By: [Signature]
Fred Silva, General Legal Counsel
January 22, 2019
Retirement Board Agenda Item

TO: Retirement Board
FROM: Rick Santos, Executive Director

I. SUBJECT: Monthly Staff Report

II. ITEM NUMBER: 5.b

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

a) Member & Employer Services (MESS) – During the month of December 2018, Member and Employer Services Staff processed 32 new hires (all General members) 15 terminations, 9 member requests resulting in 30 estimates and 7 member requests resulting in 6 buy back contracts. There were 24 individual counseling sessions.

b) Investment Governance and Compliance – During December, work was completed on the Investment Government Compliance document and various capital calls were funded and asset allocation targets maintained. The Director has also begun the recruitment process for the Retirement Investment Officer. During last year’s recruitment, there were 4 candidates that met the criteria for the position and StanCERA has been talking to these over the past few weeks. We anticipate making an offer to a potential candidate sometime in January.

c) Fiscal Services – Employer and employee contributions totaling $9,171,346 were received through 17 different payroll batches in December. 29 contribution refunds and death benefit payouts totaling $180,052 were processed which includes refund of contributions for one deceased active member. The retiree payroll for December totaled $10,500,462 and was processed as scheduled.

Staff continues to partner with Member Services in defining the business rules for the new pension software. Two of the upload employers have produced the new import file for testing. The third upload employer is working on producing the import file. Staff will begin parallel testing the import files starting early February. Tegrit has completed the calculators for the new pension system and final testing is in progress.

Construction on the new Board Room Tenant Improvements has started with minimal noise interruption. A request for bid for the audio/video system is in progress and should be final the last week in January. Everything is going smooth to date with an anticipated completion mid-March.

Staff is in the process of recruiting for an Information Technology employee for StanCERA. This position which has been open for over a year and a half could possibly be filled by mid-February.
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

_____________________
Natalie Elliott, Fiscal Services Manager
January 22, 2019
Retirement Board Agenda Item

TO: Retirement Board

FROM: Alaine Taa, Administrative Assistant

I. SUBJECT: StanCERA Complaint Log

II. ITEM NUMBER: # 5.c

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS:

There was one complaint between October 1 and December 31, 2018. When there are complaints, staff keeps a tally of duplicate complaints to better gauge the extent of any problems. Any complaints received for the quarter are listed below:

<table>
<thead>
<tr>
<th>Number of Complaints</th>
<th>Caller Status</th>
<th>Nature of Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retiree</td>
<td>A retiree was concerned that the envelope her Advice Notice was mailed in was unsealed. She was worried that her personal information could be seen and wanted to ensure that her envelope was sealed before it was mailed out.</td>
</tr>
</tbody>
</table>

The number of complaints this quarter remained consistent to the previous report period July 1 through September 30, 2018.

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

Natalie Elliott, Fiscal Services Manager
January 22, 2019
Retirement Board Agenda Item

TO: Retirement Board

FROM: Rick Santos, Executive Director

I. SUBJECT: Preliminary findings from the June 30, 2018 Actuarial Valuation and Experience Study

II. ITEM NUMBER: 8.a.

III. ITEM TYPE: Discussion and Action

IV. STAFF RECOMMENDATION: (Option 1, page 31, Attachment 1) Lower the discount rate from 7.25% to 7.0%. Lower the inflation assumption from 3.0% to 2.75%. Lower the Retiree COLA assumption from 2.7% to 2.6%. Maintain the real wage growth assumption at 0.25%. Implement all other demographic assumption changes revealed in the triennial experience study.

V. ANALYSIS: This agenda item presents preliminary findings from the June 30, 2018 actuarial valuation and experience study (Attachment 1). Each year, StanCERA performs an actuarial valuation which sets funded status and employer contribution rates for the following fiscal year. In addition, every three years, an experience study is performed based on data from 3 prior fiscal years. The experience study sets new economic and demographic assumptions for the plan and affect funded status and employer and employee contribution rates.

Today’s discussion will be led by the system’s actuary, Graham Schmidt from Cheiron. Mr. Schmidt will be presenting the preliminary findings from both the actuarial valuation and experience study. Among other things, he will be querying the board on the following potential economic assumption changes:

✓ **Discount rate** – the discount rate is the assumed return on assets and is used to discount (derive a present value for) future liability payments. The lower return that is assumed to be earned on assets, the higher the required employer and employee contributions and the lower the funded status. The discount rate is comprised of a real return component and a return for inflation. Currently, StanCERA’s assumed discount rate is 7.25%.

✓ **Inflation** – in addition to its relation to the the discount rate, the inflation assumption also comes into play for predicting wage growth, retiree COLA’s and ultimately projected benefits at retirement. The combined effect of the inflation component on funded status and contribution rates is not necessarily definitive. On one hand, if inflation expectations are lowered, projected employee salaries decrease as do projected retiree COLA increases (increasing the funded status and lowering the expected cost of the plan). On the other hand, since inflation is a component of the assumed return on assets, this would lower the discount rate which would drive funded status down and contribution rates higher. Currently, StanCERA assumes 3% inflation annually.

✓ **Retiree COLAs** – this assumption sets the rate at which retiree benefits are expected to increase due to inflation. Even though the inflation component is a major consideration for this assumption there is a difference between the two assumptions. Since StanCERA’s COLA increases are calculated as the lesser of the actual CPI increase or 3%, there will always be a downward bias (below 3%) on the long-term retiree COLA assumption.
Currently, StanCERA’s COLA assumption stands at 2.70%.

Real wage growth – this assumption sets the general wage growth component above inflation. Currently, StanCERA’s real wage growth component is 0.25%. In general, as this assumption is pushed higher (all other things being equal), funded status drops and contribution rates increase.

Also as part of the experience study, there will be recommended changes regarding our demographic assumptions. Mr. Schmidt will be discussing those changes and the impact on funded status and employer contribution rates. He will also be prepared to talk about different combinations of assumption changes and how these will affect the plan.

Recently, staff queried nearly all 1937 Act Systems regarding their discount rate, inflation and real return assumptions. The exhibit below reveals the mean, median and mode of our analysis:

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Discount Rate</th>
<th>Inflation</th>
<th>Real Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>7.11%</td>
<td>2.82%</td>
<td>4.29%</td>
</tr>
<tr>
<td>Median</td>
<td>7.00</td>
<td>2.83</td>
<td>4.25</td>
</tr>
<tr>
<td>Mode</td>
<td>7.00</td>
<td>3.00</td>
<td>4.25</td>
</tr>
<tr>
<td>StanCERA</td>
<td>7.25</td>
<td>3.00</td>
<td>4.25</td>
</tr>
</tbody>
</table>

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
2018 Preliminary Valuation and Economic Assumptions

January 22, 2019

Graham A. Schmidt, ASA, EA, MAAA, FCA
Jonathan Chipko, FSA, EA, MAAA, FCA
Topics for Discussion

- Preliminary 2018 Valuation Results Prior to Assumption Changes
  - Executive Summary and Highlights
  - Changes Since Last Valuation
- Historical Review
- Demographic Assumptions
- Economic Assumptions
- Next Steps
## Stanislaus County Employees’ Retirement Association

### Summary of Key Valuation Results

*(in millions)*

<table>
<thead>
<tr>
<th>Valuation Date</th>
<th>June 30, 2017</th>
<th>June 30, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Year End</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td>Actuarial Liability</td>
<td>$ 2,648.2</td>
<td>$ 2,786.8</td>
</tr>
<tr>
<td>Actuarial Value of Assets*</td>
<td>1,968.2</td>
<td>2,100.3</td>
</tr>
<tr>
<td>Unfunded Actuarial Liability (Actuarial Value)</td>
<td>$ 680.0</td>
<td>$ 686.5</td>
</tr>
<tr>
<td>Funding Ratio (Actuarial Value)</td>
<td>74.3%</td>
<td>75.4%</td>
</tr>
<tr>
<td>Market Value of Assets</td>
<td>1,973.8</td>
<td>2,105.1</td>
</tr>
<tr>
<td>Unfunded Liability (Market Value)</td>
<td>$ 674.4</td>
<td>$ 681.7</td>
</tr>
<tr>
<td>Funding Ratio (Market Value)*</td>
<td>74.5%</td>
<td>75.5%</td>
</tr>
<tr>
<td>Net Employer Full Contribution Rate</td>
<td>31.65%</td>
<td>31.11%</td>
</tr>
</tbody>
</table>

* Net of non-valuation reserves
• Investment return on the market value of assets was 7.8%, net of investment expenses, compared to the 7.25% assumed rate of return.

• The actuarial return on assets was 7.9%, which resulted in a $12.4 million gain and decreased the contribution rate by 0.35% of pay. There are approximately $4.8 million in deferred asset gains not yet recognized in the smoothed asset value.

• The FY17-18 actuarial cost exceeded the actual contribution by $5.6M (due to phase-in of assumption changes and one-year lag), increasing the contribution rate by 0.16% of pay.
• The net impact of all other changes, including salary, demographic and minor programming changes, decreased the contribution rate by 0.35% of pay
  • Losses from salary and retiree COLA increases higher than expected
  • Offset by reduction in employer normal cost rate of ~0.2%, due to movement of new hires into PEPRA tiers
  • Because overall payroll grew by more than assumption (5.70% vs. 3.25% assumed) UAL and admin expense rate decreased by 0.48% of pay, but no impact on dollar amount

• The amortization period for the UAL has dropped to 18 years. The Plan no longer experiences “negative amortization” (i.e. the payment on the unfunded is more than the interest on the UAL). This means that the UAL is expected to decrease each year if all assumptions are realized.
Changes Since Last Valuation (Prior to Assumption Changes)

### Stanislaus County Employees’ Retirement Association

#### Employer Contribution Reconciliation (in millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Total</th>
<th>Normal Cost</th>
<th>Amortization</th>
<th>Admin Exp</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYE 2019 Net Employer Contribution Rate</td>
<td>31.65%</td>
<td>11.77%</td>
<td>18.94%</td>
<td>0.94%</td>
</tr>
<tr>
<td>Change Due to Asset Gain</td>
<td>-0.35%</td>
<td>0.00%</td>
<td>-0.35%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Change Due to Contribution Shortfall</td>
<td>0.16%</td>
<td>0.00%</td>
<td>0.16%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Change Due to Demographic Changes</td>
<td>0.20%</td>
<td>-0.22%</td>
<td>0.42%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Change Due to Effect of Payroll on Amortization</td>
<td>-0.48%</td>
<td>0.00%</td>
<td>-0.46%</td>
<td>-0.02%</td>
</tr>
<tr>
<td>Change Due to Programming Changes</td>
<td>-0.07%</td>
<td>-0.15%</td>
<td>0.08%</td>
<td>0.00%</td>
</tr>
<tr>
<td>FYE 2020 Net Employer Contribution Rate</td>
<td>31.11%</td>
<td>11.40%</td>
<td>18.79%</td>
<td>0.92%</td>
</tr>
</tbody>
</table>
Demographic Assumptions

• To be presented in full at next meeting
  – Mortality
    • Lower expectations for future improvement
    • Most significant change: expected to reduce overall contribution rate by ~1.6% of pay
  – Decrements
    • Retirement: minor changes (later retirements)
    • Termination: no changes to overall rates, increase likelihood of reciprocity
    • Disability: lower rates, particularly Safety duty-related
Demographic Assumptions

– Merit salary increases
  • Set rates to 5% for first five years of service for General

– Other recommended assumption changes
  • Lower terminal pay loads (vacation cashouts)
  • Increase expected commencement age to 61 for General reciprocal transfers
  • Update administrative expense assumption
Economic Assumptions

• Background
• Assumptions
  – Inflation
  – Wage Growth
  – COLAs
  – Expected Return on Assets
Economic Assumptions

• Building block approach
  – Inflation is the foundation for all economic assumptions
    • Expected Return (Nominal) = Inflation + Real Return
    • Base Wage growth = Inflation + Real Wage Growth
  – Assumptions must be reasonable, both individually AND in aggregate
  – Current Assumptions
    • Inflation – 3.00%, Wage Growth – 3.25%
    • COLAs – 2.70% for 3.00%
    • Expected Return: 7.25% nominal (net of investment expenses), 4.25% real
Inflation

- Current Assumption: 3.00%
- Verus Assumption: 2.10% (10-year)
- Historical (annual rates shown below)
  - Average annual price inflation of 4.0% since 1968, 2.6% since 1988, 1.4% since 2008
Inflation

- Markets provide data on inflation assumptions by investors

<table>
<thead>
<tr>
<th>Time to Maturity</th>
<th>Conventional Yield</th>
<th>TIPS Yield</th>
<th>Break Even Inflation</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Years</td>
<td>2.68%</td>
<td>1.08%</td>
<td>1.60%</td>
</tr>
<tr>
<td>10 Years</td>
<td>2.83%</td>
<td>1.02%</td>
<td>1.81%</td>
</tr>
<tr>
<td>20 Years</td>
<td>2.98%</td>
<td>1.11%</td>
<td>1.87%</td>
</tr>
</tbody>
</table>

**Expected Inflation Based on Market Data**

- **7/1/2018**
- **7/1/2017**
- **7/1/2016**

**Break-Even Inflation Based on Treasury Bond Yields**
Inflation

- Survey of Professional Forecasters published by Philadelphia Federal Reserve (10 years: 2018-2027)
- Cheiron survey of CALAPRS plan assumptions (2017 valuations)

### Survey of CPI Assumptions

<table>
<thead>
<tr>
<th>Economic Forecasters</th>
<th>California Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>1.84%</td>
</tr>
<tr>
<td>25th Percentile</td>
<td>2.10%</td>
</tr>
<tr>
<td>50th Percentile</td>
<td>2.21%</td>
</tr>
<tr>
<td>75th Percentile</td>
<td>2.40%</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.60%</td>
</tr>
</tbody>
</table>
• Markets predicting low inflation (less than 3.0%) over short and long-term
• Current assumption (3.00%) reasonable from historical perspective, but higher than current markets expectations going forward
• Trend for public plans has been to gradually reduce inflation expectations
• Recommendation: consider reduction to 2.75%
  – Reducing inflation assumption reduces estimate of future benefits (through lower salary and COLA growth)
  – However, if real return held constant, lower inflation results in lower investment return assumption and higher estimate of liabilities
Wage Growth

• Pay for members expected to grow by
  – Base wage growth (economic assumption)
  – Plus individual amount based on longevity (demographic assumption)

• Base wage growth
  – Inflation, plus possible real-wage factor
  – Current assumption: assume 0.25% annual base wage growth above inflation
Wage Growth

• Arguments for low real wage growth assumption
  – Budgetary environment (short, medium, long-term)
  – Political environment
  – Crowding out of wages from other areas of compensation (healthcare and pension costs)
  – Although evidence shows presence of historical real wage growth, increase in mean real wages higher than median
• Social Security Average Wage Index has grown by 2.7% since 2002 (0.7% higher than inflation), but **median** compensation has only grown by 2.3% (0.3% higher)
Wage Growth

• Arguments for maintaining a positive real-wage growth assumption
  – Relaxing of some pressures
    • Improved budgetary environment
    • Slowing of other compensation cost increases (i.e. lower medical trend rates)
  – Many experts predict return of some level of real wage growth (Social Security projections based on 0.6% - 1.8% assumed real wage growth)

• Recommendation: maintain 0.25% real wage growth assumption
  – Increase in real wage growth to 0.50% also reasonable
    • More conservative and consistent with peers
COLA Growth

• Operation of COLA
  – Benefits grow by Bay Area CPI (rounded to 0.5%), subject to 3% caps
  – Bank accumulated if CPI growth exceeds cap

• If inflation equals the assumption every year, average COLA growth should equal minimum of cap, inflation
  – Example: 3.00% inflation each year, cap of 3.0%, average COLA growth = 3.0%
COLA Growth

• If inflation NOT the same every year, average COLA growth should be less than the cap (though possibly only slightly)
  – Assume 2% inflation for first 10 years of retirement, 4% next 10 years
  – Average inflation over time period equals 3%, but with a 3.0% cap, average COLA growth equals 2.5%
    • Inflation auto-correlated (influenced by prior year’s rate), so impact will be greater in low inflation environment
• Cheiron has performed stochastic testing of COLA growth
  – 250 trials, using average ultimate inflation level of 3.00% and 2.75%
  – Recommendation:
    • 2.70% COLA growth (same as current assumption) if retain 3.00% inflation assumption
    • 2.60% COLA growth if 2.75% inflation
Expected Rate of Return

• Steps for calculation of expected returns
  – Collect assumptions of returns, risks, and correlations from investment consultant(s)
  – Model adopted target portfolio using inputs

• Current assumption
  – Nominal return: 7.25%, Inflation: 3.00%,
  – Real Return = 7.25% - 3.00% = 4.25%
  – Net of investment, not administrative expenses
    • Administrative expenses addressed as separate assumption
Expected Rate of Return

Using Verus’s Long-Term Capital Market Projections

10-year return & risk assumptions

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Index Proxy</th>
<th>Ten Year Return Forecast</th>
<th>Standard Deviation</th>
<th>Sharpe Ratio</th>
<th>Sharpe Ratio</th>
<th>Sharpe Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Geometric</td>
<td>Arithmetic</td>
<td>Forecast</td>
<td>(g)</td>
<td>(a)</td>
</tr>
<tr>
<td>Equities</td>
<td></td>
<td>4.5%</td>
<td>5.6%</td>
<td>15.7%</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>U.S. Large Cap</td>
<td>S&amp;P 500</td>
<td>21.5%</td>
<td>0.20</td>
<td>0.36</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>U.S. Small Cap</td>
<td>Russell 2000</td>
<td>20.0%</td>
<td>0.36</td>
<td>0.54</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>International Developed</td>
<td>MSCI EAFE</td>
<td>22.3%</td>
<td>0.36</td>
<td>0.54</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>International Developed Hedged</td>
<td>MSCI EAFE Hedged</td>
<td>22.3%</td>
<td>0.36</td>
<td>0.54</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>International Small</td>
<td>MSCI EAFE Small Cap</td>
<td>22.3%</td>
<td>0.36</td>
<td>0.54</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>International Small Hedged</td>
<td>MSCI EAFE Small Cap Hedged</td>
<td>22.3%</td>
<td>0.36</td>
<td>0.54</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Emerging Markets</td>
<td>MSCI EM</td>
<td>25.6%</td>
<td>0.35</td>
<td>0.51</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Global Equity</td>
<td>MSCI ACWI</td>
<td>25.6%</td>
<td>0.35</td>
<td>0.51</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Private Equity</td>
<td>Cambridge Private Equity</td>
<td>25.6%</td>
<td>0.35</td>
<td>0.51</td>
<td>0.61</td>
<td></td>
</tr>
<tr>
<td>Fixed Income</td>
<td>Cash</td>
<td>2.5%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Treasury</td>
<td>U.S. Treasury</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Sovereigns ex-U.S.</td>
<td>BBG Global Sovereign ex-U.S.</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Global Sovereigns ex-U.S.</td>
<td>BBG Global Sovereign ex-U.S.</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Core Fixed Income</td>
<td>BBG Barclays Aggregate Bond</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Core Plus Fixed Income</td>
<td>BBG Barclays U.S. Corporate IG</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Short-Term Govt/Credit</td>
<td>BBG Barclays U.S. Gov/Credit 1-3 Year</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Long-Term Credit</td>
<td>BBG Barclays Long U.S. Corporate</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>High Yield Corp. Credit</td>
<td>BBG Barclays Corporate High Yield</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Bank Loans</td>
<td>BBG/LSTA</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Global Credit</td>
<td>BBG Barclays Global Credit</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Global Credits Hedged</td>
<td>BBG/Barclays Global Credit Hedged</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Emerging Markets Debt (Hard)</td>
<td>BBG EM Global Developed</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Emerging Markets Debt (Local)</td>
<td>BBG EM Global Developed</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Private Credit</td>
<td>Bank Loans + 1000 bps</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Other</td>
<td>Other Securities</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Commodities</td>
<td>Bloomberg Commodity</td>
<td>2.6%</td>
<td>0.20</td>
<td>0.33</td>
<td>0.40</td>
<td>0.28</td>
</tr>
<tr>
<td>Hedge Funds</td>
<td>HFRI Fund of Funds</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Hedge Funds ex-U.S.</td>
<td>HFRI Fund of Funds</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Hedge Funds - Equity Hedge</td>
<td>HFRI Equity Hedge</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Hedge Funds - Event Driven</td>
<td>HFRI Event Driven</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Hedge Funds - Relative Value</td>
<td>HFRI Relative Value</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Hedge Funds - Macro</td>
<td>HFRI Macro</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Real Estate</td>
<td>NCREIF Property</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Value Add Real Estate</td>
<td>NCREIF Property + 120bps</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Opportunistic Real Estate</td>
<td>NCREIF Property + 400bps</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>REITs</td>
<td>NAREIT</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>S&amp;P Global Infrastructure</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Risk Parity</td>
<td>Risk Parity</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Recovery Rate</td>
<td>Russell 2000 Index</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
<tr>
<td>Inflation</td>
<td>Inflation</td>
<td>4.5%</td>
<td>5.5%</td>
<td>15.9%</td>
<td>0.13</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Source: Verus
Expected Rate of Return

• Modeling Results
  – Average real return of 4.43% (6.53% nominal) under Verus assumptions
    • Very close to Verus’s computed geometric return (4.5%)
  – Reran results using capital market assumptions from broader survey
    • Horizon Actuarial Services, 10- and 20-year expectations
Expected Rate of Return

• **Modeling Results**
  – Simulated returns should be adjusted for investment expenses of consultant, custodian and fees for passively managed portfolios
    • Should be minimal (i.e. single digit basis points)
    • Assumed returns already net of active management expenses for private / non-traditional classes
### Expected Rate of Return

- **Modeling Results**

<table>
<thead>
<tr>
<th>Source</th>
<th>Nominal</th>
<th>Inflation</th>
<th>Real</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verus</td>
<td>6.53%</td>
<td>2.10%</td>
<td>4.43%</td>
</tr>
<tr>
<td>Horizon (Survey, 10-year)</td>
<td>6.56%</td>
<td>2.24%</td>
<td>4.32%</td>
</tr>
<tr>
<td>Horizon (Survey, 20-year)</td>
<td>7.32%</td>
<td>2.47%</td>
<td>4.85%</td>
</tr>
</tbody>
</table>
### Expected Rate of Return

- **Modeling Results**
  - Likelihood of achieving various returns over 10/20 years

<table>
<thead>
<tr>
<th>Consultant</th>
<th>Nominal</th>
<th>Real</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.75%</td>
<td>7.00%</td>
</tr>
<tr>
<td>Verus</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>Horizon (10)</td>
<td>48%</td>
<td>45%</td>
</tr>
<tr>
<td>Horizon (20)</td>
<td>60%</td>
<td>56%</td>
</tr>
<tr>
<td>Average</td>
<td>52%</td>
<td>48%</td>
</tr>
</tbody>
</table>

Classic Values, Innovative Advice
Expected Rate of Return

• Modeling Results
  – Distribution of 10-year expected returns

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Verus (10 years)</th>
<th>Horizon Survey (10 years)</th>
<th>Horizon Survey (20 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nominal</td>
<td>Real</td>
<td>Nominal</td>
</tr>
<tr>
<td>95th</td>
<td>12.07%</td>
<td>9.97%</td>
<td>12.02%</td>
</tr>
<tr>
<td>75th</td>
<td>8.77%</td>
<td>6.67%</td>
<td>8.77%</td>
</tr>
<tr>
<td>50th</td>
<td>6.53%</td>
<td>4.43%</td>
<td>6.56%</td>
</tr>
<tr>
<td>25th</td>
<td>4.34%</td>
<td>2.24%</td>
<td>4.40%</td>
</tr>
<tr>
<td>5th</td>
<td>1.26%</td>
<td>-0.84%</td>
<td>1.37%</td>
</tr>
</tbody>
</table>
Expected Rate of Return

- Current real return assumption (4.25%) is reasonable
  - Verus projects 52% chance of achieving 4.25% real return over 10 years
  - Broader Horizon survey shows similar expectations over 10-year (4.32%) period
  - Slightly higher (4.85%) over 20-year periods
- On nominal basis, slightly less than 50-50 chance of achieving 7.25% return
  - Verus likelihood only 41%; 45% including average of Horizon medium and long term expectations
  - However, Verus and Horizon consultants’ assumptions would result in expected liability gains from lower inflation
  - Likelihood increases to 48% if reduce to 7.00%
Expected Rate of Return

• Recommendation
  – Multiple sets of reasonable assumptions are possible, including current assumptions
  – Trustees should consider their risk tolerance
    • How likely do you want to be of achieving the expected return?
    • How much volatility can the plan sponsors handle?
Expected Rate of Return

• Recommendation
  – Maintain real return assumption of 4.25%
  
  – Consider reduction in inflation assumption from 3.00% to 2.75%
    • Nominal return would decrease from 7.25% to 7.00%
    • COLA growth decrease from 2.70% to 2.60%
    • Wage growth decrease from 3.25% to 3.00% (if maintain 0.25% real wage growth assumption)

  – If reduce inflation assumption, consider increase in real wage growth assumption from 0.25% to 0.50%
    • Would result in retaining 3.25% wage growth assumption

  – Chart on next slide demonstrates preliminary total cost (i.e. employer + employee) impact of several sets of assumptions
## Preliminary Sensitivity Analysis

### Stanislaus County Employees’ Retirement Association

#### FYE 2020 Contributions

<table>
<thead>
<tr>
<th>Cost</th>
<th>Expense</th>
<th>Amortization of UAL</th>
<th>Gross Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline Prior to Any Assumption Changes</td>
<td>21.04%</td>
<td>0.92%</td>
<td>18.79%</td>
</tr>
<tr>
<td>Demographic Assumption Changes Only</td>
<td>21.00%</td>
<td>0.99%</td>
<td>16.66%</td>
</tr>
<tr>
<td>Difference from FYE 2020 Baseline</td>
<td>-0.04%</td>
<td>0.07%</td>
<td>-2.13%</td>
</tr>
<tr>
<td>Demographic and Economic Assumption Changes Option 1</td>
<td>21.48%</td>
<td>0.99%</td>
<td>17.88%</td>
</tr>
<tr>
<td>Investment Return: 7.00%, Wage Inflation: 3.00%</td>
<td>CPI: 2.75%, COLA: 2.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from FYE 2020 Baseline</td>
<td>0.44%</td>
<td>0.07%</td>
<td>-0.91%</td>
</tr>
<tr>
<td>Difference from FYE 2020 Demo Assumption Changes Only</td>
<td>0.48%</td>
<td>0.00%</td>
<td>1.22%</td>
</tr>
<tr>
<td>Demographic and Economic Assumption Changes Option 2</td>
<td>22.06%</td>
<td>0.99%</td>
<td>17.88%</td>
</tr>
<tr>
<td>Investment Return: 7.00%, Wage Inflation: 3.25%</td>
<td>CPI: 2.75%, COLA: 2.60%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference from FYE 2020 Baseline</td>
<td>1.02%</td>
<td>0.07%</td>
<td>-0.91%</td>
</tr>
<tr>
<td>Difference from FYE 2020 Demo Assumption Changes Only</td>
<td>1.06%</td>
<td>0.00%</td>
<td>1.22%</td>
</tr>
</tbody>
</table>

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 solely fall on the employers or the employees but will be split between them.
Next Steps

- Board to provide direction to Actuary on assumptions to use to complete actuarial valuation
  - In particular: discount rate, inflation rate, real wage growth
- Finalize Actuarial Valuation results
  - Compute impact of assumption changes on employee and employer rates
  - Results shown at in this presentation are preliminary (proceeding with peer review)
- Adopt June 30, 2018 Actuarial Valuation and FYE 2020 Contribution Rates
The purpose of this presentation is to present the preliminary results of the annual actuarial valuation and experience study of the Stanislaus County Employees’ Retirement Association (StanCERA). This presentation is for the use of the StanCERA in accordance with applicable law.

In preparing our presentation, we relied on information (some oral and some written) supplied by the StanCERA. 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 credentialed actuaries, we 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. We are not an attorneys, and our firm does not provide any legal services or advice.

This presentation was prepared exclusively for the StanCERA 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 July 1, 2018. The assumptions and methods used for the baseline results are the same as those used in the preparation of the actuarial valuation report as of July 1, 2017.

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
Consulting Actuary

Jonathan Chipko
Consulting Actuary
Baseline 12/01/2016
STATUS

Expended Remaining

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

Budget Duration

Risks & Issues:
No new high-level risks have been identified at this time.

To further mitigate the impacts of Dawn Lea’s retirement on 12/29/18, the role of Project Manager has been reassigned to Jamie Borba, Member and Employer Services Specialist. It is intended that Jamie will remain Project Manager through the duration of the project, regardless of who is hired into Dawn’s vacant position. Because Jamie has been extensively involved in the implementation project since its inception, she will bring continuity of experience and knowledge to the project.

Accomplishments:
- Assisted with on-boarding of Jamie Borba into Project Management role at StanCERA.
- Worked with StanCERA to further resolution of key issues related to employer reporting and to initiate efforts to resume testing of employer import files.
- Continued work with StanCERA testers to accomplish the current UAT on the benefit calculator interface and record all outstanding issues as PIRs.

Upcoming:
- Resume testing of new employer reporting data files from County and Courts in Arrivos and provide assistance to City of Ceres, as needed.
- Implement special document type permissions in Imaging production environment.
- Conclude Phase 4D, Calculators, through resolution of outstanding issues, achieving StanCERA’s deliverable acceptance of BSRDs and UAT.
<table>
<thead>
<tr>
<th>Ongoing Project Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Facilitate weekly Project Manager’s meetings and create meeting minutes.</td>
</tr>
<tr>
<td>➢ Facilitate monthly Steering Committee Meetings and create meeting minutes.</td>
</tr>
<tr>
<td>➢ Participate in Tegrit work sessions, review meeting minutes, and compile resulting decision logs and action items (Calculators).</td>
</tr>
<tr>
<td>➢ Regularly review action items for follow up and completion.</td>
</tr>
<tr>
<td>➢ Review and hold group review sessions for BSRD deliverables made by Tegrit (BSR030 and BSR031).</td>
</tr>
<tr>
<td>➢ Track requirements, as discussed in work sessions and BSRDs, using the RTM and meet with StanCERA PM to update requirements confirmation.</td>
</tr>
<tr>
<td>➢ Manage and participate in system testing efforts, including review of test scripts, compiling of results, input of PIRs, and tracking of issue resolution.</td>
</tr>
</tbody>
</table>
January 22, 2019
Retirement Board Agenda Item

TO: Retirement Board
FROM: Rick Santos, Executive Director

I. SUBJECT: 2018 Executive Director Goals Update - Quarter 4

II. ITEM NUMBER: 8.d

III. ITEM TYPE: Information Only

IV. STAFF RECOMMENDATION: None

V. ANALYSIS: This is the Quarter 4 Executive Director goals update for 2018 (Attachment 1). Completed progress and tasks for 2018 are denoted by green bullet points and the quarter completion period is also noted. All progress for the year 2018 is included in this final report.

For 2018, staff was able to complete nearly every goal/task set forth at the beginning of the year. There were however, three strategic objective action items not completed that will be rolled over into 2019 or even 2020. It should be noted that 2019 is the final year of the current strategic plan. Staff will soon be recommending a path forward for a new strategic vision and plan for 2020 and beyond.

All general and ongoing items noted in Attachment 1 were completed and/or maintained in 2018 except the RFP for general legal counsel. Earlier this year, with approval from the Board, staff proposed delaying this requisition until 2019.

With respect to the strategic objective action items, the following three are being delayed:

1. **Strategic Objective #2, Action Plan 1 – “Monitor Investment Manager Thesis”**: This action item falls under the plan to “Maintain and improve the comprehensive internal investment governance process”. This item is meant to create a quantitative and qualitative process by which staff and the Board may use to determine whether a manager is performing as expected. This item was slated to be completed this year, however, with the exit of the Retirement Investment Officer it will be completed in 2019.

2. **Strategic Objective #4, Action Plan 5 – “Formal implementation of new StanCERA Org Structure”**: This action item falls under the plan to “Create an organizational structure that maximizes recruitment potential and encourages staff development for future leadership positions”. It has been determined that this task is best completed after implementation of the new pension system. The efficiencies that will be derived from the new system are not entirely known and understood at this time. Work will move around the office more efficiently and will be much more tractable. As such, the Organization and the way we administer our business may change dramatically.

   Additionally, StanCERA has had an unfilled management position for the past 8 years and whether this position is even needed or how it may be utilized is up for debate at this time. There are many considerations to staffing levels that simply cannot be ascertained today. There is a chance that current staffing levels are sufficient or will even be too high after system go-live, depending on efficiencies gained and StanCERA member growth.

   Another important aspect of the creation of a new Org Structure has to do with succession planning. StanCERA is a small Organization and there are several important aspects to succession planning because of our size. For example, understanding where the
vulnerabilities truly lie can be complicated. Should the Organization attempt to grow and promote organically from within or should we focus more on educational and training processes for external candidates when incumbents retire? What positions are easily recruitable and which ones cause operational difficulties should they quickly become vacant?

To create an Org structure based on the way we do business today and without fully vetting our strengths and weaknesses is premature. Since the Organization is in the final year of its current 3 year Strategic Plan, staff feels that these issues and what an optimal Org structure may look like should be thoroughly and thoughtfully vetted with staff and the Board of Retirement. As such, staff plans on presenting this topic for discussion later in the year with a proposed new Org structure implementation sometime in 2020.

3. **Strategic Objective #3, Action Plan 2 – “Formalize StanCERA’s peer review philosophy”**: This action item falls under the plan to “Standardize communication and establish a formal peer review process for internal and external documents and external communications”. Staff feels that a philosophy or policy on peer review can actually be developed in 2019. However, an implementation process and plan should wait until we achieve go-live with the system. Consequently, staff intends to create a formal document stating the Organization’s philosophy on peer review in 2019, but delay formal implementation and the associated details until 2020.

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
Executive Director Goals

Strategic Goals 2018 Progress Quarter 4

(Attachment 1)

General and/or Ongoing Items

1. Continued communication, outreach and transparency with major stakeholders such as County, County BOS, Local Governments, Special Districts and Employee Groups
   - Various meetings with Ceres, Courts and County staff regarding pension software implementation
2. Facilitate transition of StanCERA’s asset allocation
   - StanCERA asset allocation within current targets
3. Continued progress on the System data clean-up project
   - Ongoing member file audit work
4. Continued monitoring of StanCERA lawsuits
5. Director Professional Development
   - Attend SOA Annual Conference
6. Facilitate RFP for General Legal Counsel – to be completed in 2019
7. Oversee Information Technology Solutions Project
   - Consult with consultants from Linea and Tegrit regularly
   - Consult with subject matter experts on all phases of the project
8. Oversee and completion of day to day administrative functions
   - All normal administrative functions completed on time
   - Outstanding disabilities (as of 1/8/2019): 11
9. Training of Investment Officer
10. Biennial By-Law Review
    - Process complete
    - Currently reviewing in-house policies and procedures

Items Tied to the 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

Strategic Plan Objective #1: Action Plan with Deliverables

1. Implementation of Functionally Focused Portfolio Concept
   ✓ Fund the Liquidity sub-portfolio by June 30th
      - Benefit projection matrix complete (Q1)
      - Contribution projection matrix complete (Q1)
      - Expense projection matrix complete (Q1)
Executive Director Goals

2018

- Liquidity sub portfolio funding complete (Q2)
  ✔ Training of new investment staff on FFP process and maintenance of reporting projection and process tools

2. Consult regularly with plan sponsors regarding salary and retirement projections
   - Meet with Stanislaus County officials each year
     - Met with County officials on payroll projections (Q1)
     - Discuss salary projections with Courts (Q1)
   - Meet with City of Ceres officials each year
     - Discuss salary projections with City of Ceres (Q1)

3. Consult regularly with plan sponsors regarding pension contribution projections
   - Meet each year with all plan sponsors
     - Discussed anticipated demographic changes related to future pension costs with most plan sponsors (Q2/Q3)

4. Monitor and assess capital market expectations on a continual basis
   - Monitor trends in the general level of interest rates and market value of StanCERA liabilities
     - Complete (Q2)
   - Report at least annually (April/May) to the Board of Retirement on the general level of interest rates and market value of StanCERA liabilities and trends
     - Complete (Q2)
   - Report annually (April/May) to the Board of Retirement the consideration of any changes in the FFP process
     - Complete (Q2)
   - Provide the Board, at least annually, a review of capital market conditions and assumptions on a forward-looking basis for all major asset classes
     - Complete (Q2)
   - At least annually, recommend asset allocation changes (if applicable) to the Board of Retirement for consideration
     - Complete (Q2)

5. Maintain awareness of the cash flow process
   - Work with alternative investment managers on contribution and distribution projections
     - Pacing schedule completed (Q3)
   - Project and reconcile (semi-annually) budget expenditures
     - Mid-year budget review complete February 27, 2018 (Q1)
     - Expense matrix for FFP process complete (Q1)
     - Monitor and report cash flow process each quarter (Q1, Q2)
Executive Director Goals

2018

- Annual reconciliation (July/August) of the FFP shortfall projections and source of cash flows
  - Complete (Q2)

Strategic Objective # 2

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

Strategic Plan Objective #2: Action Plan with Deliverables

1. Maintain and improve the comprehensive internal investment governance process
   - Train internal investment staff on general processes and procedures and the data collection process
     - Training begun on general processes and database maintenance (Q1)
   - Monitor IPS compliance
     - Investment Governance Compliance Document Complete (Q4)
   - Monitor investment manager thesis – Task Not Complete

2. Maintain a comprehensive internal investment data repository
   - Database up to date as of 9/30/2018 (Q4)

3. Develop and maintain auxiliary performance reporting
   - Continue to develop and enhance auxiliary reporting with an eye towards simplicity
     - Reworked Value-Added analysis to account for long-term cumulative experience (Q1)
     - Reworked Investment Fee Summary to account for manager ins and outs (Q2)
     - Reworked Auxiliary Investment Report with additional visual graphs (Q4)
   - Enhance reporting format and aesthetics
   - Work to develop a valid benchmark for alternative investments
     - Benchmarks developed for alternative investments (Q3)

4. Provide StanCERA staff opportunities to enhance their knowledge regarding the investment governance process
   - Provide opportunities for internal staff to attend seminars and conferences dedicated to alternative investments
     - Staff attendance of the ILPA Conference (Q2)
   - Provide opportunities for internal staff to attend seminars and conferences related to understanding investment contracts, ADV and SOC reports
     - Approved attendance to SSAE/SOC training seminars (Q3)
Strategic Objective #3

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

Strategic Plan Objective #3: Action Plan with Deliverables

1. Train for succession planning to prepare for StanCERA’s future and continue to cross-train staff to optimize efficacies for staffing level fluctuations.
   ✓ Develop training plan and philosophy for staff succession into manager roles
     • Recently completed StanCERA Education Policy is one component of succession planning (Q1)
   ✓ Implement new StanCERA Org Structure – See Strategic Objective #4, Action Plan #5
     • In development phase of StanCERA Org Structure (Q2)
     • Q3 Note: Recommend waiting until implementation of most functionality of new pension administration system. Work flow functionality may change the way the Organization does business which could in turn influence the Org structure decision

2. Standardize communication and establish a formal peer-review process for internal and external documents and external communications.
   ✓ Annual staff training on communication standards and implementation
     • Communication Standards Document complete (Q4)
   ✓ Formalize StanCERA’s peer review philosophy – Task Not Complete

3. Develop and implement an educational policy and plan for staff.
   ✓ Formalize expected training requirements
     • Processes laid out in new StanCERA Education Policy (Q1)
   ✓ Identify individual staff educational needs annually through the annual employee evaluation process
     • Processes laid out in new StanCERA Education Policy (Q1)
   ✓ Formalize the individual employee education expected outcome
     • Processes laid out in new StanCERA Education Policy (Q1)
     • Directives formalized in the completed StanCERA Education Policy. The execution of these directives will be accomplished at the staff-supervisor level, generally during the annual evaluation (Q1)
     • Staff training/education completed and signed off on (Q4)
4. Develop and implement a team-building action plan.
   ✓ Hold a minimum one team building event annually
     • Complete (Q4)

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.

Strategic Plan Objective #4: Action Plan with Deliverables

1. Implementation of Electronic Member Filing Content Management System
   ✓ Complete the internal verification of back file conversion
     • Task complete (Q1)
   ✓ Ongoing EDMS plan developed
     • Long-term plan developed (not yet documented) to use part-time help on imaging and scanning documents. This plan will be revised and reworked as the organization gets closer to go live with the new system (Q2)
   ✓ Paper member files archived
     • Task complete (Q1)
     • Archived member files moved offsite (Q2)

2. Enhance stakeholder education and communication opportunities
   ✓ Formally meet with all plan sponsors, no less than annually
     • Various meetings with all plan sponsors regarding pension administration system (Q3)
     • Board of Supervisors Review of 2017 Actuarial valuation (Q2)
     • Meet with Special District regarding pension funding and the state of future contribution rates (Q3)

3. Substantial completion of Pension Software System implementation
   • Implementation on track and current as of 9/30/2018 (project extended 5 months due to re-evaluation of StanCERA resources)

4. Design and rollout of improved StanCERA website (Task to be completed in 2019)

5. Create an organizational structure that maximizes recruitment potential and encourages staff development for future leadership positions - Task Not Complete
   ✓ Formal implementation of new StanCERA Org Structure
     • In development stage (Q2)
Q3 Note: Recommend waiting until implementation of most functionality of new pension administration system. Work flow functionality may change the way the Organization does business which could in turn influence the Org structure decision.
January 22, 2019
Retirement Board Agenda Item

TO: Retirement Board
FROM: Rick Santos, Executive Director

I. SUBJECT: Executive Director Goals for 2019

II. ITEM NUMBER: 8.e

III. ITEM TYPE: Discussion and Action

IV. STAFF RECOMMENDATION: None

V. ANALYSIS: This agenda item sets forth the Executive Director goals for the calendar year 2019 (Attachment 1). The Organization is now in the final year of its current strategic plan. This agenda item is broken down into 3 sections; items accomplished during the prior 2 years, those items left to accomplish for 2019 and items that need to be pushed out and become a part of StanCERA’s new strategic vision and plan for the following 3 years.

**Items accomplished within the 2017-2019 Strategic Plan**

StanCERA staff were (will be) able to accomplish everything set forth in the 2017-2019 Strategic Plan except for items relating to the completion of the Pension Administration Project. Originally, a target completion date for the project was for the fall/winter 2019/2020 period. As such, staff incorporated important components and milestones relating to the project completion into its strategic plan and Executive Director goals for the entire 2017-2019 period. Those few remaining items will now be incorporated into the new Strategic Plan and are included in the third section of this analysis.

Notable goals accomplished during the 2017-2019 period include:

- **Implementation of the functionally focused portfolio** – this process has allowed StanCERA to maintain benefit payment coverage for a 7-year period for each of the past 2 fiscal years
- **Increased awareness of capital market conditions and expectations** – the Board now receives updated capital market conditions every year instead of every 3 years. This has allowed the Organization to remain more nimble in looking at its asset allocation and considering changes on an ongoing basis
- **Creation and maintenance of an investment database** – With the creation of an investment database, the Organization can quickly and easily produce reports and analysis regarding portfolio and individual manager performance. Additionally, the database has allowed automation of legislatively mandated AB 2833 reporting down to the click of a button
- **Providing staff opportunities to enhance their skill sets and knowledge base** – Through the creation of an education policy, staff have the ability to attend classes related to leadership, investment governance, accounting and pension administration
- **Enhanced employee training and education** – establishment of a formal training program
- **Implementation of an Electronic Member filing system** – For the most part, StanCERA is now virtually paperless and 90% of all paper files have been moved offsite
Remaining items to be accomplished in calendar year 2019

The remaining items to be accomplished in 2019 (Attachment 1) pertain mainly to investment governance. They include things such as monitoring IPS compliance, manager reporting, fee reconciliation and manager thesis. Other items include formalization of StanCERA's peer review philosophy and a complete overhaul of StanCERA's website.

Remaining items to become a part of StanCERA’s new Strategic Plan and vision for 2020-2022

Due entirely to the Pension Administration System project completion, the following items will be moved into the 2020-2022 Strategic Plan:

- Workflow design and implementation
- Implementation of a formal peer review process
- Development of a permanent Electronic Database Management System (EDMS) process
- Creation of a member education program through remote access
- Implementation of a member web portal
- Restructuring of the Organization

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
Executive Director Goals 2019

Strategic Goals 2019

(Attachment 1)

General and/or Ongoing Items

1. Continued communication, outreach and transparency with major stakeholders such as County, County BOS, Local Governments, Special Districts and Employee Groups
2. Maintenance of StanCERA’s asset allocation targets
3. Continued progress on the System data clean-up project
4. Continued monitoring of StanCERA lawsuits
5. Director Professional Development
6. Facilitate RFP for General Legal Counsel
7. Oversee Information Technology Solutions Project
8. Oversee and completion of day to day administrative functions
9. Completion of internal policy revisions
10. Complete hiring of MESS Manager, IT Specialist and Retirement Investment Officer

Items Tied to the 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

Strategic Plan Objective #1: Action Plan with Deliverables

1. Implementation of Functionally Focused Portfolio Concept
   - Training of new investment staff on FFP process and maintenance of reporting projection and process tools
2. Maintain awareness of the cash flow process
   - Creation and maintenance of a database specifically designed to house contribution and benefit data
Strategic Objective #2

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

Strategic Plan Objective #2: Action Plan with Deliverables

1. Maintain and improve the comprehensive internal investment governance process
   ✓ Train internal investment staff on general processes and procedures of the data collection process
   ✓ Enhance the fee reconciliation process for the alternative investments
   ✓ Monitor IPS compliance
   ✓ Creation of a policy regarding Organizational views on philosophy, monitoring and maintenance of investment manager thesis
   ✓ Monitor and analyze all documentation from investment managers including SOC/ADV reports, contract changes, quarterly and fiscal year end reports and MFN clauses
   ✓ Research the Organization’s capacity to effectively monitor manager trading costs

2. Maintain a comprehensive internal investment data repository
   ✓ Develop written processes for downloading, storing and maintaining investment data
Strategic Objective # 3

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

Strategic Plan Objective #3: Action Plan with Deliverables

1. Standardize communication and establish a formal peer-review process for internal and external documents and external communications.
   ✔ Formalize StanCERA’s peer review philosophy
**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.

Strategic Plan Objective #4: Action Plan with Deliverables

1. Implementation of Electronic Member Filing Content Management System
   - Permanent EDMS solution developed (implementation to take place in 2020)

2. Design and rollout of new StanCERA Website
   - Complete RFP process for a Web Designer
   - Contract with new vendor
   - Convert data to new website