The Board of Retirement welcomes you to its meetings, which are regularly held on the second Wednesday and the fourth Tuesday 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](http://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.

**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 July 24, 2012, Investment Meeting Minutes** [View](#)
5. **Consent Items (Cont.)**

b. Approval of Service Retirement(s) – **Sections 31499.14, 31670, 31662.2 & 31810**

1. Cindy Am, CSA, Effective 07-30-12
2. James Austin, HSA, Effective 08-01-12
3. Dennis Brighton, Planning, Effective 07-13-12
4. Judy Brown, HSA, Effective 08-04-12
5. Loveada Fresquez, Treasurer/Tax Collector, Effective 08-31-12
6. John Hallford III, Sheriff, Effective 05-31-12
7. Jennifer Hudson, Sheriff, Effective 08-02-12
8. Clara Juarez, CSA, Effective 08-08-12
9. Sharon Krediet, CSA, Effective 08-21-12
10. Patricia Lewman, DER, Effective 07-30-12
11. Barbara Peck, BHRS, Effective 08-25-12
12. Onan Rice, Sheriff, Effective 08-25-12
13. Neil Selover, DCSS, Effective 07-24-12
14. Philip Sugerman, CSA, Effective 08-02-12
15. Pamela Thompson-Blake, District Attorney, Effective 08-25-12
17. Sal Yang, CSA, Effective 08-01-12

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

1. Jennifer Alves, Courts, Effective 04-12-12
2. Theresa Borrelli, Auditor Controller, Effective 07-14-12
3. Chad Fielden, BHRS, Effective 07-07-12
4. David Fiore, CSA, Effective 06-30-12
5. Luke Gustafson, Probation, Effective 05-17-12
6. Doniece Hill, CSA, Effective 05-19-12
7. Mary Miller, HSA, Effective 07-14-12

6. **Executive Director**


   i. Cash Flow Management Presentation  [View]

b. Update on Current Status of Retirement Plan by EFI Actuaries  [View]
7. 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(a)

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 Government Code Section 54956.9(b)

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

9. Adjournment
PLEASE POST FOR EMPLOYEE VIEWING

BOARD OF RETIREMENT MINUTES

July 24, 2012

Members Present: Maria De Anda, Jim DeMartini, Gordon Ford, Darin Gharat, Jeff Grover, Mike Lynch, Ron Martin, Michael O’Neal, and Donna Riley

Alternate Member Present: Joan Clendenin, Alternate Retiree Representative

Staff Present: Rick Santos, Executive Director
Kathy Herman, Operations Manager
Kelly Cerny, Executive Board Secretary
Kathy Johnson, Accountant
Dawn Lea, Benefits Manager
Luiana Irizarry, Operations Specialist

Others Present: Fred Silva, General Legal Counsel
Harvey Leiderman, Reed Smith, via teleconference
Fletcher Alford, Gordon Rees LLP, via teleconference
Scott von Stein & Seth Taube, Medley Capital, LLC
Andre Hakkak, Barbara McKee & Casey Jones, White Oak Global Advisors, LLC
Paul Harte & Nathan Pratt, Strategic Investment Solutions (SIS), Inc.
Stan Risen, County Chief Executive Office

1. Meeting called to order at 2:00 p.m. by Jim DeMartini, Chair.

2. Roll Call

3. Announcements

None.

4. Public Comment

None.
5. **Consent Items**

Mr. Gharat requested to pull Consent Item #5b for discussion.

Motion was made by Maria DeAnda and seconded by Mike Lynch to approve the following items as listed.

Motion carried.

a. Approval of the July 11, 2012 Administrative Meeting Minutes

**Consent Item Pulled for Discussion**

5b. StanCERA’s Complaint Log of April 1, 2012 through June 30, 2012

Mr. Gharat requested staff continue to log all complaints regardless of whether it is directly related to StanCERA.

Motion was made by Jim DeMartini and seconded by Darin Gharat to direct staff to continue logging complaints regardless of whether it is directly related to StanCERA.

Motion carried.

6. **Closed Session**

Motion was made by Darin Gharat and seconded by Ron Martin to commence to Closed Session at 2:05 p.m.

M. O’Neal recused himself at 2:05 p.m.

Motion was made by Darin Gharat and seconded by Ron Martin to return to Open Session at 2:48 p.m.

M. O’Neal returned at 2:48 p.m.

J. Clendenin arrived at 2:48 p.m.

Ms. Cerny read the findings of the 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(a)

No Report.

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
Government Code Section 54956.9(b)

No Report.
7. **Educational Presentation – Medley Capital, LLC - Opportunity Fund II**

Scott von Stein, Principal, and Seth Taube, Managing Partner and Senior Portfolio Manager of Medley Capital, LLC gave an educational presentation to the Board on Opportunity Fund II.

D. Gharat out at 3:23 p.m.

Recessed at 3:31 p.m.

Reconvened at 3:33 p.m.

8. **Educational Presentation – White Oak Global Advisors, LLC - Direct Lending Overview**

Andre Hakkak, Co-founder and Managing Partner, Barbara McKee, Co-founder and Managing Partner, and Casey Jones, Managing Director of White Oak Global Advisors, LLC gave an educational presentation to the Board on Direct Lending.

J. Grover out at 4:11 p.m.

R. Martin out at 4:13 p.m.

9. **Strategic Investment Solutions (SIS), Inc.**


      Mr. Harte presented the monthly performance review for the period ending June 30, 2012. StanCERA’s portfolio is $1.4 billion, a -2.13% decrease from the prior year. June had a 2.85% return, and the entire fiscal year saw a 0.25% return. This is 1.47% above StanCERA’s policy index return of 1.72%, 7.75% below the actuarial assumed rate of 8.0%.

   b. Report on “Top 10 Holdings” by StanCERA Investment Managers
10. **Members’ Forum (Information and Future Agenda Requests Only)**

Mr. DeMartini requested staff to place closed session items towards the end of the agendas. Staff will accommodate this request to the greatest extent possible.

11. **Adjournment**

Meeting adjourned at 4:58 p.m.

Respectfully submitted,

Rick Santos, Executive Director

APPROVED AS TO FORM:
FRED A. SILVA, GENERAL LEGAL COUNSEL

By: [Signature]

Fred A. Silva, General Legal Counsel
For the Retirement Board meeting
Held on August 8, 2012

TO: Retirement Board
FROM: Rick Santos, Executive Director

I. SUBJECT: Discussion and action on the implementation of a Cash Flow Management Plan

II. RECOMMENDATION: Direct staff to further explore the idea of plan implementation

III. ANALYSIS: Today’s presentation lays the groundwork for the idea of a simple cash flow management plan. The main points behind the plan are as follows:

1. Pre-fund all projected benefit payouts for the next 10 years. This would be accomplished by shifting a part of the equity portfolio to fixed income dedicated to the payment of those cash flows. This move inherently reduces risk in the portfolio.

2. Shift a commensurate amount of the equity portfolio to alternative investments. This would be accomplished by shifting a part of the equity portfolio into alternative strategies that meet the fund’s long-term objective. This move could inherently increase risk in the portfolio.

3. Revisit the allocation between the three major asset classes each year. Depending on market conditions, the economic environment and the ability to extend the coverage of future benefit payouts, make adjustments among the three major asset classes each year.

4. Over time, pre-fund as much of the future cash flows as possible. Currently, interest rates are at an all-time low and budgets are stretched thin. However, as the economic environment changes, there may be opportunities in the future to shift more of the portfolio into assets that insure a greater portion of our future benefit payouts.

Today’s presentation is made at a very high level. There are several details that need to be worked out before a functional plan can be put into place. However, staff did not wish to commit resources working out the details unless the Board is interested in pursuing the idea further. Issues that would need to be resolved include:

- Return expectations on the alternative asset classes
- The effect on the discount rate
- The effect on employer contributions
- The effect on the funded ratio and overall portfolio risk
- In-depth discussion and understanding of specific alternative asset classes
- Technical details and cost of the transition
IV. RISK: None

V. STRATEGIC PLAN: Goal 1, Strategy A: Explore options for a more flexible investment policy with greater diversification.

VI. BUDGET IMPACT: At this point, should the Board wish to proceed, staff time will be the most used resource. As details are worked out, the cost of the transition will become clearer and staff would report that information out during the next phase.

______________________________________________
Rick Santos, Executive Director
Cash Flow Management
Today’s Agenda

I. Review current risks

II. What is cash flow management?

III. The cash flow management plan

IV. The next step - Decide whether staff should pursue this concept
I. Review Current Risks

1. Contribution Rate Volatility
2. Aging Demographics
3. Asset Risk (Drawdown)
4. Ability to Achieve Expected Return
Risk 1

Contribution Rate Volatility

Distribution of Future Employer Contribution Rates

Current Assumptions
Average Return through 2020 = 8%
Risk 2

Aging Demographics
Flow of Funds

Contributions -> $ -> Benefits

Investments
Risk 3

Asset or Drawdown Risk

![Graph showing asset and return over time.](Image)
Risk 4

Ability to Achieve Expected Return

Annualized Return

Year

Annualized Return

0.00% 2.00% 4.00% 6.00% 8.00% 10.00% 12.00% 14.00%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
II. Cash Flow Management

- Cash flow management
  - Attempts to align future receipts with future payouts
  - Cover a portion of your future payouts using future contributions and fixed income
  - Money not being used to cover future payouts can be allocated to riskier investments
  - Similar to a shift in one’s personal portfolio relative to age
Two Forms of Cash Flow Control

- The benefits
  - Retirement
  - Death and disability
  - Refunds
- The assets
  - Employer contributions
  - Employee contributions
  - Asset flow
Controlling the Benefits

- Benefit levels
  - High benefit levels $\rightarrow$ more assets needed
  - More assets needed $\rightarrow$ search for higher returns
  - Search for higher returns $\rightarrow$ greater asset risk
  - Greater asset risk $\rightarrow$ contribution rate uncertainty

- 2nd Tier implemented January 2011
  - Will reduce pension risk down the road
  - Down the road $\rightarrow$ 15-20 years

- StanCERA’s Role
  - Possible for plan sponsors to create other tiers
  - StanCERA’s can only administer
Controlling the Assets

- Means managing your **cash flows**
  - Recognizing *when* your cash flows are due
  - Systematically allocates risk based on cash flows
  - Characteristics of a cash management plan
    - Assets mature as short duration cash flows come due
    - Long duration cash flows offer opportunities for taking risk and increasing return
    - Plan decides short/long split
    - Can be implemented over time with input from sponsors

- StanCERA’s role
  - Full control over investment strategy
  - Full control over management of cash flows
Cash Flows

“Benefit Payments”

- Characteristics
  - Mostly illiquid
  - Lump sum distributions are not allowed

- Advantages
  - Reasonably predictable
  - No disintermediation (no “run” on the bank)

- Disadvantages
  - Can’t be changed
  - Inflation adjusted
**Cash Flows**

**“Receipts”**

- **Major sources**
  - Employer and employee contributions
  - Equity Dividends
  - Bond principal and coupon payments

- **Advantages**
  - Fairly reliable and liquid
  - Have some control over timing

- **Disadvantages**
  - Strong correlation with economic environment
## Cash Flows

"Reliability and Control of Receipts"

<table>
<thead>
<tr>
<th>Source</th>
<th>Reliability</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer</td>
<td>High</td>
<td>Some</td>
</tr>
<tr>
<td>Employee</td>
<td>High</td>
<td>None</td>
</tr>
<tr>
<td>Bonds</td>
<td>High</td>
<td><strong>Total</strong></td>
</tr>
<tr>
<td>Dividends</td>
<td>Uncertain</td>
<td>Little</td>
</tr>
</tbody>
</table>
Cash Flows

“A Pension Cash Flow Mismatch”

- Asset Income + Contributions = Benefits
- Plan has control over asset income
  - Fixed income interest and principal
  - Equity dividends
  - Sale of assets (affects future cash flows)
- Mismatch: Asset Income + Contributions < Benefits
  - Sale of assets may be the only way
  - Asset price is at the market’s mercy
Cash Flows

“Extreme Examples of Cash Flow Mismatches”

- Savings and Loan Crisis
  - Long real estate investments (assets)
  - Short demand deposits (liabilities)
- Bernie Madoff
  - Investor money, less the skim (assets)
  - Investor money plus interest (liabilities)
  - Faltering economy created investor demands for cash
- Lehman Bros.
  - Real estate investments defaulting (assets)
  - Creditors still want their debt payments (liabilities)
Cash Flows

“Pension Cash Flows are Different”

- **Advantages (huge)**
  - Short-term cash demands are predictable
  - Majority of payments aren’t due for over 12 years
  - Little optionality embedded in the liabilities
  - Natural source of liquidity (contributions)

- **Disadvantages**
  - Can’t alter the benefits
  - Contributions are limited
  - Currently, price of liquidity is expensive
III. Cash Flow Management Plan

- **Goal**
  
  "Fund as much of our future cash flows as possible while balancing market constraints with employer budget considerations"

- **Strategies**
  1. Cover projected cash flow shortfall for 10 years
  2. Move to illiquid assets to fund long-term liabilities
  3. Revisit projected cash flow shortfall problem each year
  4. Be ready to take advantage of rising interest rates
Remember This Picture?

Contributions → Investments → $ → Benefits

August 8, 2012
Cash Flow Management
Change due to Cash Flow Management

Traditional Portfolio with “Significant” Exposure to Illiquid Assets

Fixed Income Investments Covering 10 Years of Cash Flows

10 Years of Contributions

10 Years of Benefit Payouts
### Cash Flows

**“StanCERA Projected Benefit Payments”**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Benefit Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-13</td>
<td>$88.3</td>
</tr>
<tr>
<td>13-14</td>
<td>94.2</td>
</tr>
<tr>
<td>14-15</td>
<td>100.4</td>
</tr>
<tr>
<td>15-16</td>
<td>106.6</td>
</tr>
<tr>
<td>16-17</td>
<td>113.5</td>
</tr>
<tr>
<td>17-18</td>
<td>120.7</td>
</tr>
<tr>
<td>18-19</td>
<td>128.3</td>
</tr>
<tr>
<td>19-20</td>
<td>136.0</td>
</tr>
<tr>
<td>2020 and beyond</td>
<td>$5,244.0</td>
</tr>
</tbody>
</table>

1. In millions

---

August 8, 2012

Cash Flow Management
## Cash Flows

**“StanCERA Projected Receipts”**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Contributions</th>
<th>Bond Receipts&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-13</td>
<td>$57.6</td>
<td>$74.2</td>
<td>$131.8</td>
</tr>
<tr>
<td>13-14</td>
<td>63.0</td>
<td>43.4</td>
<td>106.4</td>
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<tr>
<td>14-15</td>
<td>66.4</td>
<td>30.5</td>
<td>96.9</td>
</tr>
<tr>
<td>15-16</td>
<td>68.8</td>
<td>46.1</td>
<td>114.9</td>
</tr>
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<td>16-17</td>
<td>71.3</td>
<td>47.3</td>
<td>118.6</td>
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<td>17-18</td>
<td>73.9</td>
<td>43.7</td>
<td>117.6</td>
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<td>18-19</td>
<td>76.5</td>
<td>45.9</td>
<td>122.4</td>
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<td>19-20</td>
<td>79.2</td>
<td>36.9</td>
<td>116.1</td>
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<tr>
<td>2020 beyond</td>
<td>$2,432.4</td>
<td>$421.7</td>
<td>$2,854.1</td>
</tr>
</tbody>
</table>

1. In millions
2. Based on current portfolio

August 8, 2012

Cash Flow Management
# Cash Flows

"10 - Year Cash Flow Analysis\(^1\)"

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Payouts</th>
<th>Receipts</th>
<th>Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>$94.2</td>
<td>$106.4</td>
<td>$(12.2)</td>
</tr>
<tr>
<td>14-15</td>
<td>100.4</td>
<td>96.9</td>
<td>3.5</td>
</tr>
<tr>
<td>15-16</td>
<td>106.6</td>
<td>114.9</td>
<td>(8.3)</td>
</tr>
<tr>
<td>16-17</td>
<td>113.5</td>
<td>118.6</td>
<td>(5.0)</td>
</tr>
<tr>
<td>17-18</td>
<td>120.7</td>
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<td>3.2</td>
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<td>19-20</td>
<td>136.0</td>
<td>116.1</td>
<td>19.9</td>
</tr>
<tr>
<td>20-21</td>
<td>144.2</td>
<td>128.4</td>
<td>15.8</td>
</tr>
<tr>
<td>21-22</td>
<td>152.3</td>
<td>113.3</td>
<td>38.9</td>
</tr>
<tr>
<td>22-23</td>
<td>160.6</td>
<td>114.5</td>
<td>46.2</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>$1,256.9</td>
<td>$1,149</td>
<td>$107.9</td>
</tr>
</tbody>
</table>

1. In millions
## Strategy 1

“Cover projected cash flow shortfall\(^1\)”

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Payouts</th>
<th>Receipts(^2)</th>
<th>Shortfall</th>
<th>PV@2%</th>
<th>PV@3%</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>$94.2</td>
<td>$106.4</td>
<td>$(12.2)</td>
<td>$(11.7)</td>
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<td>14-15</td>
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<td><strong>$1,149</strong></td>
<td><strong>$107.9</strong></td>
<td><strong>$86.6</strong></td>
<td><strong>$77.6</strong></td>
</tr>
</tbody>
</table>

1. Analysis done over a 10-year period; All amounts in millions
2. Receipts include bond portfolio cash flows and employer and employee contributions
Strategy 2

“Move to illiquid assets to fund long-term liabilities”

- What is a liquidity premium?
  - “A premium that investors will demand when a given security can not be easily converted into cash or converted at fair market value on short notice”

- Why use assets that pay a liquidity premium?
  - Long dated cash flows do not require immediate liquidity
  - Markets compensate those investors willing to provide liquidity in times of stress

- Risks
  - Returns may be volatile
  - Headline risk; “Plan is moving into riskier asset classes”
Strategy 3

“Revisit Projected Cash Flow Shortfall Problem Each Year”

- Market conditions may change
  - Interest rates may rise
- Budget constraints may lighten
- Flexibility exists in funding and rate setting
  - Maintain 10 years
  - Increase funding years
  - Decrease funding years
- Goal: Transition to complete funding over time
Cash Flow Management Evolution
(example only)

June 30, 2012

Equities 60.4%

Fixed Income 38.2%

Alternatives 1.4%

June 30, 2013

Equities 44.2%

Fixed Income 48.4%

Alternatives 7.4%

June 30, 2020

Equities 50.0%

Fixed Income 30.0%

Alternatives 20.0%

Equities
Fixed Income
Alternatives
Strategy 4
“Be Ready to Take Advantage of Rising Interest Rates”

- Interest rates are at historical lows
  - Cost to fund defined benefits at all time high
  - Government’s cost to finance debt at all time low

- Rise in interest rates at some point
  - Investors may grow weary of low yields
  - Inflation likely (may be an incentive for inflation)

- As rates rise, cost to fund benefits comes down
Treasury Rates 1990-Present

Cost to Fund 10 Years of Cash Flow Shortfall

Current: $77.6 Million
Average: $50.0 Million
High: $30.1 Million

If interest rates were at the all-time high, we could insure all future cash flows and have $100,000,000 left over!
Alternative Investments

Examples

- Private Equity (venture, LBO)
- Direct Lending
- Mezzanine Debt
- Distressed Lending
- Direct real estate
- Infrastructure
Cash Flow Management Summary

- Recognize timing and size of cash flows
- Maintain prudent overall risk profile
  - Shift part of the portfolio into illiquid assets
  - Shift commensurate amount into fixed income
- Transition portfolio over time
  - Market conditions will change
  - Budget constraints will change
- Adjust portfolio as conditions warrant
Cash Flow Management Summary

- **Advantages**
  1. *Simple* - easy to explain and understand
  2. *Flexible* - adjust allocation each year as conditions warrant
  3. *Awareness* - forces us to address market conditions each year
  4. *Clear Objective* - provides direction for portfolio management

- **Disadvantages**
  1. Process is slow
  2. Peer comparison may suffer
  3. Fixed income yields very low today
IV. The Next Step

- Today’s discussion high level
- Questions
  - Is the Board interested?
  - Should staff bring back more detail?
  - Should we incorporate into asset allocation study?
Stanislaus County Employees’ Retirement Association

BOARD MEETING
AUGUST 8, 2012

GRAHAM SCHMIDT, ASA
EFI ACTUARIES
Agenda

- GASB Changes
- Model Funding Policies (California Actuarial Advisory Panel)
- Economic Assumptions
- Work Plan
Revised GASB Accounting Statements

- Plan Changes (GASB 67)
  - Replaces GASB 25
- Employer Changes (GASB 68)
  - Replaces GASB 27
- Impact on StanCERA
- Impact on Employers
- Timing
Plan Changes – Unfunded Liability

• Unfunded Actuarial Accrued Liability (UAAL) vs. Net Pension Liability (NPL)
  
  o Current:
    - UAAL = Actuarial Accrued Liability (AAL) minus Actuarial (smoothed) Value of Assets (AVA)
    - Funded Ratio = Actuarial Value of Assets divided by Actuarial Accrued Liability (AVA / AAL)
  
  o Replacement:
    - NPL = Total Pension Liability (TPL) minus Plan Net Position (market value of assets)
    - Funded Ratio = Plan Net Position divided by Total Pension Liability (MVA / TPL)
Plan Changes – Discount Rate

- **Discount Rate**
  - Current: use expected return on assets
  - Replacement:
    - Use expected return on assets for benefit payments expected to be paid from plan assets
      - Projection done on *closed group* basis, and funding policy in practice
      - Projection includes future employer and employee contributions for current members
    - Use municipal bond index rate to discount other benefit payments
    - If plan not making actuarial contributions, or if using lengthy amortization, use lower discount rate
Plan Changes – Cost Method

- **Actuarial Cost Method**
  - Current: AAL allows choice of methods (Entry Age variations, Projected Unit Credit, etc.)
  - Replacement: NPL uses specific cost method (Individual Entry Age to Final Decrement)

- **New standards require measuring impact of:**
  - Some Ad-hoc COLAs (if look like regular COLAs)
  - Gain-sharing policies (excess earnings, 13th check, etc.)
Pension expense: Amount to be shown as accrual for pension on income statement

- Current rules
  - Expense known as Annual Required Contribution (ARC)
  - Normal (Service) Cost, plus an amount necessary to amortize Unfunded Liability over a period up to 30 years
  - Assets smoothed, then amortized
    - No hard limits on smoothing rules
  - For StanCERA (and other ‘37 Act plans), ARC has been the same as Funding Contribution
Employer Changes - Pension Expense

**New rules:**

- **New Pension Expense = Normal Cost, plus interest on Total Pension Liability, plus current period recognized changes in Total Pension Liability, plus deferred changes from prior years**
  - Full amount on UAL of all benefit changes (for actives or retirees) recognized immediately
  - Gains / losses or assumption changes amortized over expected working lifetime, including retirees
    - Short period (i.e. less than 10, probably 5-7 years)
  - Five year smoothing of asset gains/losses
    - No amortization of asset gains / losses after smoothing – much more volatile than current ARC
Intentional split between Expense vs. Funding by GASB

- New Expense significantly more volatile than ARC
  - Shorter amortization gains/losses & assumption changes
  - No amortization for plan changes
  - Could be negative or greater than 100% of payroll with large investment changes or experience study

- Most plans will NOT contribute pension expense (unlike ARC)
Employer Changes - Pension Expense

- Continue to show actual contribution versus actuarially determined contributions in Required Supplementary Information (RSI)
  - Similar to current schedule showing ARC vs. % contributed

- What does Pension Expense represent???
  - Technical answer: balancing item for Net Pension Liability
  - An answer in search of a question?
What goes on the Balance Sheet of the Employer?

- Current measure: Net Pension Obligation
  - Show accumulated contributions greater/less than ARC on balance sheet

- New measure: Statement of Net Position (GASB 63)
  - Move “unfunded liability” from notes to balance sheet
  - Net Pension Liability (NPL), and deferred outflows/inflows
    - NPL = UAAL using market value of assets
    - Deferred outflows/inflows = Deferred investment gain/losses, plus deferred active liability gain/loss and assumption changes
    - Unrecognized changes in assets and liabilities may have the effect of smoothing impact on balance sheet
Employer Changes - Disclosures

- For cost-sharing plans: share of employer’s Net Pension Liability, expense, etc.
  - Some flexibility on how to determine each employer’s share

- Additional disclosures:
  - Impact of +/-1% change in discount rate
  - Enhanced disclosures on derivation of investment return assumption

- Required to use Fiscal Year end results
  - But can use measurement date as early as end of prior fiscal year
  - Example: for FYE 6/30/2015, measurement date could be anytime from 6/30/2014-6/30/2015
Impact on StanCERA

- May have small impact on discount rate, depending on amortization policy
- Already showing Funded ratio on Market and Actuarial asset value basis in valuation report
- Change in Actuarial Cost Method
  - Entry Age Normal-to-Decrement -> Entry Age Normal-to-Final
  - Aggregate Normal Cost -> Individual Normal Cost
- Excess earnings policy likely de minimis
Impact on Employers

Most impact is on employers:

- Moves unfunded liability from Notes to Balance Sheet
  - Not expecting across-the-board downgrades by rating agencies, especially if plans making actuarial contributions

- For multi-employer cost-sharing plan, each employer assigned share of Net Pension Liability, pension expense, etc.
  - County, Ceres, (Special Districts?) will require separate pension expense calculation, deferred inflows/outflows, etc.
Effective Dates:

- GASB 67 (Plan) effective trust years beginning after June 15, 2013
- GASB 68 (Employer) effective fiscal years beginning after June 15, 2014
Model Funding Policies

- California Actuarial Advisory Panel
- Exposure Draft
- Where do StanCERA current policies fit?
California Actuarial Advisory Panel

- Established based on recommendation from Public Employee Post-Employment Benefits Commission

- Purpose: “To provide impartial and independent information on pensions, other postemployment benefits, and best practices to public agencies”
  - Establishing law says “opinions ... are nonbinding and advisory only”
  - Prohibits the opinions of the panel from being used as the basis of litigation

- Responsibilities include “Defining the range of actuarial model policies and best practices for public retirement plan benefits”
Panel recently issued exposure draft on model funding policies, with request for comments

- Intent to provide guidance to actuaries and others on plan funding

Defined five categories for elements of funding policies

- Model, Acceptable, Acceptable but Not Generally Recommended, Not Recommended, Not Acceptable
  - Terminology expected to change before final document issued (particularly “Acceptable but Not Generally Recommended”)
  - Specifically avoided “best practice”; model practice is a safe harbor, not necessarily best method for funding all plans
Document identifies five policy objectives
- Fully fund benefits
- Maintain generational equity
- Manage contribution volatility
- Support accountability and transparency
- Address principal/agent issues

Discussion of how various policies achieve (or do not achieve) objectives
- Actuarial cost methods
- Asset smoothing
- Amortization policy
- Other policies (direct rate smoothing, etc.)
# Summary Grid

This summary does not include all the policy alternatives discussed in the CAAP Model Funding Policies document. Please direct all comments to the complete document.

<table>
<thead>
<tr>
<th>Category</th>
<th>Actuarial Cost Method</th>
<th>Asset Smoothing Method</th>
<th>UAA/L Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Practices</td>
<td>Entry Age cost method</td>
<td>Smooth actuarial gain or loss on market value (MVA)</td>
<td>Layered fixed amortization periods by source of UAA/L</td>
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<td>Level percent of pay</td>
<td>Fixed smoothing periods</td>
<td>Level percent of pay amortization</td>
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<td></td>
<td>“Funding to retirement age”</td>
<td>Maximum MVA corridors</td>
<td>Amortization periods:</td>
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<td></td>
<td>Individually based Normal Cost</td>
<td>5 years, 50%/150% corridor</td>
<td>Active or Inactive plan amendments:</td>
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<td></td>
<td>Normal Cost based on current benefit structure (“replacement life” Entry Age)</td>
<td>7 years, 60%/140% corridor</td>
<td>Demographic or up to 15 years</td>
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<td>10 years, 70%/130% corridor</td>
<td>Experience Gain/loss:</td>
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<td>Combine smoothing layers only to avoid “tail volatility”</td>
<td>15 to 20</td>
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<td>Assumption / method changes:</td>
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<td>15 to 25</td>
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<td>Early Retirement Incentives:</td>
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<td>5 or less</td>
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<td>Surplus:</td>
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<td>30 years</td>
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<td>Level dollar fixed period layered amortization</td>
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<td>with model amortization periods</td>
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<td>Rolling amortization of a single gain/loss layer with period that avoids negative amortization, with model periods for other sources of UAA/L</td>
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<tr>
<td>Acceptable Practices</td>
<td>Projected Unit Credit method</td>
<td>Five year (or shorter)</td>
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<td></td>
<td>Aggregate cost method, with Entry Age based disclosures</td>
<td>Smoothing with no corridor</td>
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<td></td>
<td>Frozen Initial Liability method, with Entry Age Based disclosures</td>
<td>Rolling smoothing periods with model corridors plus additional analysis</td>
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<td>Entry Age method with “Funding to Decrement” or or with Normal Cost based on composite projected benefit</td>
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<tr>
<td>Acceptable but Not Generally Recommended Practices</td>
<td>Aggregate or Frozen Initial Liability without Entry Age based disclosures</td>
<td>15 years, 80%/120% corridor</td>
<td>Layered fixed amortization periods ≤ 25 years for all sources of UAA/L</td>
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<td>Rolling amortization of a single gain/loss layer ≤ 20 years</td>
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<td>Rolling amortization of assumption/method changes with period that avoids negative amortization ≤ 20 years fixed amortization of method change</td>
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<td>30 year fixed amortization of method change</td>
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<tr>
<td>Non-recommended Practices</td>
<td>Entry Age with Normal Cost based on open tier (“Ultimate” Entry Age)</td>
<td>Longer than 5 year smoothing with no corridor</td>
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<tr>
<td>Unacceptable Practices</td>
<td>Traditional Unit Credit for pay related plans</td>
<td>Longer than 15 year smoothing</td>
<td>Layered fixed amortization periods &gt; 30 years</td>
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<td>Rolling amortization of a single gain/loss layer &gt; 25 years</td>
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<td>Rolling amortization of entire UAA/L (including plan changes) ≤ 20 years</td>
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<td></td>
<td>Single fixed amortization period, with periodic restarts</td>
</tr>
</tbody>
</table>
## Where do StanCERA’s policies fit?

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<tr>
<th>Category</th>
<th>Funding Method</th>
<th>Asset Smoothing</th>
<th>Amortization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Entry Age Normal (Individual, to Final Decrement)</td>
<td><strong>Five Years, up to 50% Corridor</strong></td>
<td>Layered Amortization of Each Source of UAL Over 5 to 20 Years</td>
</tr>
<tr>
<td>Acceptable</td>
<td>Entry Age Normal (Funding to Decrement)</td>
<td></td>
<td>Rolling Amortization of Gain/Loss, Layered Amortization of All Other Sources</td>
</tr>
<tr>
<td>Acceptable/NGR</td>
<td>Entry Age Normal (Aggregate Tier Normal Cost)</td>
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<td><strong>Layered fixed periods &lt;= 25 years</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rolling Amortization of Entire UAL Except for Plan Amendments</td>
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<tr>
<td>Not Recommended</td>
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<td></td>
<td><strong>Rolling Amortization of Entire UAL Over &lt;= 20 Years</strong></td>
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<tr>
<td>Unacceptable</td>
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<td></td>
<td>Rolling Amortization of Gain/Loss &gt; 25 years</td>
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<td></td>
<td>Rolling Amortization of Entire UAL &gt; 20 years</td>
</tr>
</tbody>
</table>
Economic Assumptions

- Background
- Assumption Review
  - Inflation
  - Wage Growth
  - Post-Retirement Benefit Growth (COLA)
  - Expected Return on Assets
Building block approach

- Inflation is the foundation for all economic assumptions
  - Expected Return (Nominal) = Inflation + Real Return
  - Base Wage growth = Inflation + Real Wage Growth
  - COLA growth = Inflation +/- Impact of Caps (and Bank)

- Assumptions must be reasonable individually AND in aggregate
Assumption Review

- **Current Assumptions**
  - Inflation, wage growth: 3.5% / 3.75%
    - Current pay reductions / freeze built into short-term projections
  - Expected Return: 8.00% nominal, 4.50% real
    - Net of investment and administrative expenses
  - COLA growth: 2.7%
    - Based on 3% cap, 3.5% inflation
Assumption Review

- **Review assumptions as part of Experience Study**
  - **Trend towards lower inflation expectations**
    - Market expectations of inflation less than 3%, over medium and long-term horizons
  - **Trend towards lower return expectations**
    - Will collect expected returns from investment advisor (SIS) and other consultants
    - Other systems have reduced returns: CalPERS (7.75%->7.5%), CalSTRS (8%->7.75%->7.5%)
  - **Reflect StanCERA’s investment policy**
    - Include possible changes resulting from Asset/Liability study
  - **New GASB rules will require return gross of administrative expenses for accounting (add separate item to cost calculation)**
Expected Rate of Return

Likelihood of Achieving Expected Return

Nominal Rate of Return

Likelihood of Achieving Expected Return

0% 2% 4% 6% 8% 10% 12% 14% 16% 18% 20%
## Work Plan

### Complete Experience Study and 6/30/2012 Actuarial Valuation

<table>
<thead>
<tr>
<th>Task</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect demographic data</td>
<td>Completed</td>
</tr>
<tr>
<td>Review / reconcile demographic information</td>
<td>August – September</td>
</tr>
<tr>
<td>Develop demographic and economic assumption recommendations</td>
<td>September – October</td>
</tr>
<tr>
<td>Present preliminary Experience Study findings, Receive Board feedback</td>
<td>November</td>
</tr>
<tr>
<td>Present preliminary Actuarial Valuation results</td>
<td>December</td>
</tr>
<tr>
<td>Finalize 6/30/2012 Valuation</td>
<td>1\textsuperscript{st} quarter, 2013</td>
</tr>
</tbody>
</table>
Agenda

- GASB Changes
- Model Funding Policies
- Economic Assumptions
- Work Plan
Contact Information

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