ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
BOARD OF RETIREMENT
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CALIFORNIA

REGULAR MEETING
Monday, July 17, 2017
9:00 a.m.

AGENDA

The Orange County Board of Retirement welcomes you to this meeting. This agenda contains a brief general description of each item to be considered. The Board of Retirement encourages your participation. The public, plan members, beneficiaries, and/or representatives may speak to any subject matter contained in the agenda at the time the item is addressed. Except as otherwise provided by law, no action shall be taken on any item not appearing in the following agenda. Persons wishing to address items on the agenda should provide written notice to the Secretary of the Board prior to the Board's discussion on the item by filling out the Public Comment Form located in the back of the room. Members of the public may also comment during the Public Comment period at the end of Open Session. When addressing the Board, please state your name for the record prior to providing your comments. Speakers will be limited to three (3) minutes.

The Board may take action on any items included in the agenda.

Pledge of Allegiance

CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one action unless a Board Member or a member of the public requests separate action on a specific item.

BENEFITS

C-1 MATERIAL DISTRIBUTED

Application Notices	July 17, 2017
Death Notices	July 17, 2017

Recommendation: Receive and file.

C-2 OPTION 4 RETIREMENT ELECTION – JEFF GRIFFITH

Recommendation: Grant election of retirement benefit payment, Option 4, based on Segal Consulting actuarial report.

ADMINISTRATION

C-3 BOARD MEETINGS AND COMMITTEE MEETINGS

Governance Committee Meeting Minutes	June 8, 2017
Audit Committee Meeting Minutes	June 9, 2017
Regular Board Meeting Minutes	June 12, 2017
Audit Committee Meeting Minutes	June 12, 2017

Recommendation: Authorize meeting and approve minutes.

C-4 CEO FUTURE AGENDAS AND 2017 OCERS BOARD WORK PLAN

Recommendation: Receive and file.

C-5 GOVERNANCE COMMITTEE OUTCOMES FROM JUNE 8, 2017 MEETING

Recommendation:
The Governance Committee recommends that the Board of Retirement adopt:
(1) Budget Approval Policy, with revisions as approved by the Committee;
(2) Planning Policy, with revisions as approved by the Committee;
(3) Quiet Period Policy, with revisions as approved by the Committee; and
(4) Disability Retirement Policy, with non-substantive revisions as approved by the Committee.

C-6 AUDIT COMMITTEE OUTCOMES FROM JUNE 9, 2017 MEETING

Recommendation:
The Audit Committee recommends that the Board of Retirement approves:
(1) Receive and file the presentation of OCERS' Investment Fee Report
(2) Receive and file the review of OCERS' Investment Wire Transfer Process report
(3) Receive and file the presentation of New York State Retirement Fund's Scandal and OCERS' Policies
(4) Approve the selection of Cheiron as OCERS' Actuarial Auditor for the 2016 Actuarial Valuation

C-7 QUIET PERIOD – NON-INVESTMENT CONTRACTS

Recommendation: Receive and file.

C-8 LEGISLATIVE UPDATE

Recommendation: Receive and file.

C-9 CEM GLOBAL PENSION ADMINISTRATION CONFERENCE

Recommendation: Receive and file.

C-10 TRAVEL REPORT – PUBLIC RISK MANAGEMENT ASSOCIATION (PRIMA) ANNUAL CONFERENCE

Recommendation: Receive and file.

C-11 SECOND QUARTER 2017 EDUCATION AND TRAVEL EXPENSE REPORT

Recommendation: Receive and file.

C-12 SEPTEMBER 2017 STRATEGIC PLANNING WORKSHOP INVESTMENT FORUM AGENDA

Recommendation: Approve the agenda for September 13-14, 2017 Regular Meeting and Strategic Planning Workshop & Investment Forum.

C-13 TCA EXCLUDED WORKERS - UPDATE

Recommendation: Receive and file.

C-14 BOARD COMMUNICATIONS

Recommendation: Receive and file.

*** * * * * * END OF CONSENT AGENDA * * * * * * ***

INDIVIDUAL ITEMS AGENDA

I-1 INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE CONSENT AGENDA

I-2 ILLUSTRATIONS OF RETIREMENT COSTS, UNFUNDED ACTUARIAL ACCRUED LIABILITY AND FUNDED RATIO UNDER ALTERNATIVE ECONOMIC SCENARIOS

Presentation by Paul Angelo, Segal Consulting

Recommendation: Receive and file.

I-3 SENSITIVITY ANALYSIS OF ALTERNATIVE ECONOMIC ASSUMPTIONS
Presentation by Paul Angelo, Segal Consulting

Recommendation: Receive and file.

I-4 ARITHMETIC VS. GEOMETRIC METHODOLOGIES – INFORMATIONAL REVIEW
Presentation by Paul Angelo, Segal Consulting

Recommendation: Receive and file.

I-5 FUTURE SERVICE ONLY CONTRIBUTION RATE CREDIT CORRECTION
Presentation by Brenda Shott, Assistant Chief Executive Officer, OCERS and Paul Angelo, Segal Consulting

Recommendation: Approve revised employer contribution rates for employers eligible for the future service only rate credit for Fiscal Years 2015-2016, 2016-2017 and 2017-2018 and the related correction of employer contributions received.

I-6 REVIEW OF FUNDING POLICY TIMING AND RELATIONSHIP TO EXPERIENCE STUDIES
Presentation by Paul Angelo, Segal Consulting

Recommendation: Receive and file.

*** * * * * * * END OF INDIVIDUAL ITEMS AGENDA * * * * * ***

DISABILITY APPLICATIONS/MEMBER APPEALS AGENDA

1:00 P.M.

NOTE: WHEN CONSIDERING DISABILITY RETIREMENT APPLICATIONS OR MEMBER APPEALS OF BENEFIT OR DISABILITY RETIREMENT DETERMINATIONS, THE BOARD MAY ADJOURN TO CLOSED SESSION TO DISCUSS MATTERS RELATING TO THE MEMBER'S APPLICATION OR APPEAL, PURSUANT TO GOVERNMENT CODE SECTIONS 54957 OR 54956.9. IF THE MATTER IS A DISABILITY APPLICATION UNDER SECTION 54957, THE MEMBER MAY REQUEST THAT THE DISCUSSION BE IN PUBLIC.

****

D-1: Hominder Bharadwaj

Coach Operator, Orange County Transportation Authority
Date of employee filed application for service connected disability retirement: 10/22/2014

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF OCTOBER 22, 2014. (GENERAL MEMBER) (D-1)

D-2: Karen Cushing
Coach Operator, Orange County Transportation Authority
Date of employee filed application for service connected disability retirement: 09/06/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF SEPTEMBER 6, 2016. (GENERAL MEMBER) (D-2)

D-3: Leticia Hernandez
Eligibility Technician, Orange County Social Services Agency
Date of employee filed application for non-service connected disability retirement: 06/14/2016

STAFF RECOMMENDATION IS TO GRANT NON-SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF JUNE 14, 2016. (GENERAL MEMBER) (D-3)

D-4: Craig Stone
Fire Apparatus Engineer, Orange County Fire Authority
Date of employee filed application for service connected disability retirement: 04/14/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF APRIL 14, 2016. (SAFETY MEMBER) (D-4)

D-5: Valerie Thomson
Social Worker II, Orange County Social Services Agency
Date of employer filed application for service and non-service connected disability retirement: 04/29/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF JULY 22, 2016. (GENERAL MEMBER) (D-5)

D-6: An Tu
Coach Operator, Orange County Transportation Authority
Date of employee filed application for service connected disability retirement: 04/11/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF APRIL 11, 2016. (GENERAL MEMBER) (D-6)

D-7: Janice Denham
Legal Processing Supervisor, Orange County Superior Court

Date of employee filed application for service and non-service connected disability retirement: 05/08/2015

STAFF RECOMMENDATION IS TO REFER THE MATTER TO A HEARING OFFICER TO GATHER ADDITIONAL EVIDENCE AND FOR FURTHER ANALYSIS OF THE RECORD REGARDING PERMANENT INCAPACITY AND JOB CAUSATION. (GENERAL MEMBER) (D-7)

D-8: Carole Barber
Information Processing Technician, Orange County Sheriff's Department
Date of employer filed application for service and non-service connected disability retirement: 05/16/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-8)

D-9: Donald Ferl
Construction Inspector, Orange County Sanitation District
Date of employer filed application for service and non-service connected disability retirement: 12/12/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-9)

D-10: Edith Hartzler
Office Technician, Orange County Social Services Agency
Date of employer filed application for service and non-service connected disability retirement: 04/11/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-10)

D-11: Roy Hendy
Senior Mechanic, Orange County Sanitation District
Date of employee filed application for service connected disability retirement: 03/23/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-11)

D-12: Michael Marroquin
Deputy Sheriff II, Orange County Sheriff's Department

Date of employer filed application for service and non-service connected disability retirement: 04/01/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (SAFETY MEMBER) (D-12)

D-13: Guillermina Sanchez
Sheriff's Special Officer II, Orange County Sheriff's Department
Date of employer filed application for service and non-service connected disability retirement: 09/02/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-13)

D-14: Donald Wendt
Kennel Attendant I, Orange County Community Resources
Date of employer filed application for service and non-service connected disability retirement: 08/05/2016

STAFF RECOMMENDATION IS TO DENY SERVICE AND NON-SERVICE CONNECTED DISABILITY RETIREMENT WITHOUT PREJUDICE DUE TO THE MEMBER'S FAILURE TO COOPERATE. (GENERAL MEMBER) (D-14)

D-15: Jose Luis Saavedra
Maintenance Crew Supervisor IV, Orange County Public Works
Date of employee application for service and non-service connected disability retirement: 10/18/2012

STAFF RECOMMENDATION IS TO ADOPT THE FINDINGS AND RECOMMENDATIONS OF THE HEARING OFFICER AND GRANT THE APPLICANT'S APPLICATION FOR SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF JULY 27, 2012. (GENERAL MEMBER) (D-15)

D-16: Craig Casey
Fire Captain, Orange County Fire Authority
Date of employee filed application for service connected disability retirement:
10/07/2010

STAFF RECOMMENDATION IS FOR THE BOARD TO ADOPT THE FINDINGS AND RECOMMENDATIONS OF THE HEARING OFFICER AND DENY THE APPLICANT'S APPLICATION FOR SERVICE CONNECTED DISABILITY RETIREMENT. (SAFETY MEMBER) (D-16)

D-17: Lydia Gonzalez

STAFF RECOMMENDATION IS TO APPROVE THE MEMBER'S PETITION FOR REASSIGNMENT OF THE HEARING OFFICER ASSIGNED TO HER BENEFIT DETERMINATION APPEAL. (GENERAL MEMBER) (D-17)

D-18: David Rocha

STAFF RECOMMENDATION IS TO AFFIRM STAFF'S DETERMINATION THAT MR. ROCHA'S RETIREMENT ALLOWANCE WAS CALCULATED PROPERLY AND DENY MEMBER'S APPEAL. (GENERAL MEMBER) (D-18)

D-19: Rick Edgmon

AFFIRM STAFF'S DETERMINATION THAT MR. EDGMON SHOULD BE REQUIRED TO REPAY THE TOTAL AMOUNT OF THE BENEFITS OVERPAID TO HIM SINCE HE RETIRED ON NOVEMBER 11, 2005 IN THE APPROXIMATE AMOUNT OF $237,107.79. STAFF ALSO RECOMMENDS THAT OCERS FORGO THE COLLECTION OF INTEREST ON THE OVERPAYMENT, AND THAT MR. EDGMON BE GIVEN 20 YEARS TO REPAY THE OVERPAYMENT THROUGH MONTHLY DEDUCTIONS TO HIS RETIREMENT ALLOWANCE. (SAFETY MEMBER) (D-19)

****

PUBLIC COMMENTS: At this time members of the public may address the Board of Retirement regarding any items within the subject matter jurisdiction of the Board, provided that no action may be taken on non-agendized items unless authorized by law.

BOARD MEMBER COMMENTS

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS

COUNSEL COMMENTS

****

CLOSED SESSION ITEMS

E-1 CONFERENCE REGARDING LITIGATION THAT HAS BEEN INITIATED (GOVERNMENT CODE SECTION 54956.9(d)(1)) O.C. Department of Education v. OCERS, CA

Superior Court, Orange County, (Case No. 30-2016-00836897)
Adjourn pursuant to Government Code Section 54956.9(d)(1).

Recommendation: Take appropriate action.

E-2 CONFERENCE REGARDING SIGNIFICANT EXPOSURE TO LITIGATION (ONE MATTER) (GOVERNMENT CODE SECTION 54956.9)
Adjourn pursuant to Government Code section 54956.9(d)(2)

Recommendation: Take appropriate action.

ADJOURNMENT: (IN MEMORY OF THE ACTIVE MEMBERS, RETIRED MEMBERS, AND SURVIVING SPOUSES WHO PASSED AWAY THIS PAST MONTH)

NOTICE OF NEXT MEETINGS

INVESTMENT COMMITTEE MEETING
July 27, 2017
9:00 A.M.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701

INVESTMENT MANAGER MONITORING SUBCOMMITTEE MEETING
August 3, 2017
9:00 A.M.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701

REGULAR BOARD MEETING
August 21, 2017
9:00 A.M.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701

All supporting documentation is available for public review in the retirement office during regular business hours, 8:00 a.m. – 5:00 p.m., Monday through Thursday and 8:00 a.m. – 4:30 p.m. on Friday.

It is OCERS' intention to comply with the Americans with Disabilities Act ("ADA") in all respects. If, as an attendee or participant at this meeting, you will need any special assistance beyond that normally provided, OCERS will attempt to accommodate your needs in a reasonable manner. Please contact OCERS via email at adminsupport@ocers.org or call 714-558-6200 as soon as possible prior to the meeting to tell us about your needs and to determine if accommodation is feasible. We would appreciate at least 48 hours' notice, if possible. Please also advise us if you plan to attend meetings on a regular basis.

C-1

Orange County Employees Retirement System
Retirement Board Meeting
July 17, 2017
Application Notices

Member Name	Agency/Employer	Retirement Date
Bean, Pamela	OCTA	5/1/2017
Bennett, Robert	Social Services Agency	4/1/2017
Blair, Katherine	Superior Court	4/1/2017
Burton, Mary	OCTA	5/6/2017
Carter, Cynthia	OCTA	4/24/2017
Castaneda, Honesto	Auditor-Controller	5/12/2017
Chiem, Mai	Health Care Agency	5/12/2017
Counselman, John	Sheriff's Department	5/22/2017
Elam, Barbara	Social Services Agency	5/23/2017
Erickson, Linda	Transportation Corridor Agency (TCA)	5/5/2017
Holms, Anne	Fire Authority (OCFA)	5/1/2017
Leaper, Jerome	Fire Authority (OCFA)	3/31/2017
Luong, My	Health Care Agency	5/12/2017
Maldonado, Marina	Probation	4/29/2017
McCown, Fredrick	OCTA	5/17/2017
Morrison, Robert	Assesor	5/2/2017
Mosher, Linda	Probation	5/12/2017
Norman, Diana	Superior Court	5/16/2017
O'Leary, John	Sheriff's Department	5/12/2017
Olson, Janelle	Superior Court	4/25/2017
Orona, Jesus	Sheriff's Department	4/27/2017
Pascual, Norisa	County Clerk/Recorder	4/28/2017
Peterson, Scott	OCTA	4/27/2017
Ryan, Thomas	Social Services Agency	5/12/2017
Sanders, Scott	County Executive Office (CEO)	4/28/2017
Shodiya, Saundra	Probation	4/28/2017
Stewart, Pamela	Probation	5/12/2017
Taylor, Kevin	Fire Authority (OCFA)	5/3/2017
Tuller, Lois	Social Services Agency	5/12/2017
Wong, Michael	Sheriff's Department	4/28/2017

Orange County Employees Retirement
Retirement Board Meeting
July 17, 2017
Death Notices

Retired Members	*Agency/Employer*	*Date of Death*
Bouwmeester, Augustus	OC Public Works	5/22/2017
Buchanan, David	OCTA	5/22/2017
Chapman, Merle	Public Defender	5/20/2017
Gerber, Lea	Social Services Agency	6/1/2017
Kies, Anthony	Public Defender	5/31/2017
Ledgard, Julia	OC Community Resources	6/16/2017
Legacy, Jean-Marie	Health Care Agency	6/2/2017
Melanson, Mary	Probation	6/15/2017
Martin, Paul	Sheriff's Department	5/18/2017
Obrazda, Richard	OCTA	6/7/2017
Remp, Robert	Sheriff's Department	5/20/2017
Robben, Joseph	Sheriff's Department	5/31/2017
Siegel, Nancy	County of Orange	6/14/2017
Stancheck, Joseph	Assessor	5/26/2017
Tabb, Josh	Sheriff's Department	5/30/2017
Thornton, Margaret	OCTA	6/15/2017
Tinney, Wanda	Social Services Agency	6/2/2017
Wells, Fenrick	Sheriff's Department	6/9/2017
Williams, Howard	OC Public Works	6/21/2017
Wright, Robert	OC Public Works	6/3/2017

Surviving Spouses		*Date of Death*
Le, Thoa Thi		6/7/2017
Moore, Margaret		6/18/2017
Nelson, Eileen		5/6/2017
Shannon, Robert		6/9/2017

C-2

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Suzanne Jenike, Assistant CEO, External Operations

SUBJECT: **OPTION 4 RETIREMENT ELECTION – JEFF GRIFFITH**

Recommendation

Grant election of retirement benefit payment, Option 4, based on Segal Consulting's actuarial report.

Background/Discussion

This member has requested Option 4 as the benefit payment option for his service retirement allowance effective May 26, 2017. The Orange County Employees Retirement System (OCERS) was joined in the member's dissolution of marriage and under the terms of the Domestic Relations Order (DRO), the member's ex-spouse was awarded a lifetime continuance as a percentage of the member's allowance.

The approval of Option 4 will not increase OCERS liability because the cost of this Option 4 benefit is proportional to the cost of the other benefit plans. Segal Consulting has calculated the member's monthly allowance as indicated in the attached letter as well as the allowance payable to the member's ex-spouse.

Submitted by:

S. J. – APPROVED

Suzanne Jenike
Assistant CEO, External Operations

Segal Consulting

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8283 www.segalco.com

DIRECT DIAL NUMBER
415-263-8254

E-MAIL ADDRESS
mmiller@segalco com

PERSONAL AND CONFIDENTIAL

July 11, 2017

Ms. Adina Bercaru
Member Services Manager
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

Re: Orange County Employees Retirement System
Option 4 Calculation for Jeff Griffith

Dear Adina:

Pursuant to your request, we have determined the Option 4 benefits payable to Jeff Griffith and his ex-spouse based on the unmodified benefit and other information provided in the System's request dated July 5, 2017.

The monthly benefits payable to the member and the ex-spouse and the data we used for our calculations are as follows:

Member's Date of Birth	
Ex-Spouse's Date of Birth	-
Date of Retirement	May 26, 2017
Plan of Membership	General Plan J
Monthly Unmodified Benefit	$5,486.56
Ex-Spouse's Share of Monthly Unmodified Benefit	20.28%
Type of Retirement	Service Retirement

Option 4 Benefit

The ex-spouse bears the cost of Option 4 reduction for the DRO benefit	**Payable while the Member is Alive**	**Payable After the Member's Death while the Ex-Spouse is Alive**
Monthly Benefit Payable to Member		
Annuity	$1,264.90	
Pension	3,108.99	
Total	$4,373.89	$0
Monthly Benefit Payable to Ex-Spouse (or to the estate of the ex-spouse if the ex-spouse pre-deceases the member)	$1,006.48*	$1,006.48

* *This is equal to 20.28% of the member's unmodified benefit (i.e., 20.28% * $5,486.56 or $1,112.67) adjusted further to provide a benefit payable over the ex-spouse's lifetime.*

Actuarial Assumptions

Effective interest rate of 4.126214% per year, which is calculated using an investment return assumption of 7.25% per year together with a cost-of-living adjustment assumption of 3.00% per year.

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 40% male and 60% female for members.

RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 60% male and 40% female for beneficiaries.

The actuarial calculations contained in this letter were performed under the supervision of Molly Calcagno, ASA, who is a member of the American Academy of Actuaries and who meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions herein.

Please let us know if you have any comments or questions. As in all matters pertaining to the interpretation and application of the law, Plan, or individual Option 4 Calculation provisions, you should be guided by the advice of the Plan's Legal Counsel.

Sincerely,

Molly Calcagno

Molly Calcagno, ASA
Assistant Actuary

/gxk

5495415v1/05794.001

C-3

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CALIFORNIA 92701

GOVERNANCE COMMITTEE MEETING
June 8, 2017
10:00 a.m.

MINUTES

The Chair called the meeting to order at 10:03 a.m. Attendance was as follows:

Present: Roger Hilton, Chair; Shawn Dewane, Vice Chair; David Ball; Chris Prevatt

Staff: Steve Delaney, Chief Executive Officer; Suzanne Jenike, Assistant CEO, External Operations; Gina Ratto, General Counsel; Brenda Shott, Assistant CEO, Internal Operations; Brenda Vazquez, Recording Secretary; Anthony Beltran , Audio Visual Technician

A. PROPOSED REVISIONS TO THE BUDGET APPROVAL POLICY

Presented by Brenda Shott, Assistant CEO, Internal Operations

Recommendation: Recommend that the Board of Retirement approve revisions to the Budget Approval Policy that would exclude investment management related fees from the annual administrative budget.

Ms. Shott presented revisions to the *Budget Approval Policy* in light of the Board's direction to staff to determine a more effective way to track, report, and manage investment management fees. Staff recommends that OCERS discontinue budgeting for investment management fees and related expenses as part of the annual administrative budget process. Revisions to the *Budget Approval Policy* were presented to clarify this recommended change. Ms. Shott informed the Committee that she forwarded the proposed revisions to Ms. Freidenrich and reported that Ms. Freidenrich was not in favor of removing investment management fees from the annual budget.

Following discussion, a **motion** was made by Mr. Ball, **seconded** by Mr. Prevatt, to move forward to the Board the proposed revisions to the *Budget Approval Policy*.

The **motion passed unanimously.**

B. SCHEDULED REVIEW OF POLICIES

Ms. Ratto gave an introduction to the three policies up for review.

1. **Planning Policy**
   Presented by Steve Delaney, Chief Executive Officer

Recommendation: Approve, and recommend that the Board approve, proposed revisions to the Planning Policy.

Mr. Delaney gave an overview of the revisions made to the *Planning Policy*. The revisions are intended to clarify OCERS' strategic and business planning processes.

Following discussion, a **motion** was made by Mr. Ball, **seconded** by Mr. Dewane, to move forward to the Board the proposed revisions to the *Planning Policy*.

The **motion passed unanimously.**

2. **Quiet Period Policy**
Presented by Gina M. Ratto, General Counsel

Recommendation: Approve, and recommend that the Board approve, proposed revisions to the Quiet Period Policy.

Ms. Ratto gave an overview of the proposed revisions to the *Quiet Period Policy.* She explained that the proposed revisions will extend the policy to all OCERS' contracts for services and to communications with all parties who are financially interested in those contracts. The proposed revisions also clarify the types of communications that are not prohibited under the policy.

Mr. Prevatt asked Ms. Ratto to add a provision to the policy to make the CEO responsible for notifying the Board members and staff of pending solicitations.

Mr. Hilton requested the language in the policy be modified to reflect, "*Board members*" rather than, "*Board and Investment Committee members*".

Following discussion, a **motion** was made by Mr. Ball, **seconded** by Mr. Dewane, to move forward to the Board the proposed revisions to the *Quiet Period Policy*.

The **motion passed unanimously.**

3. Disability Retirement Reemployment Policy
Presented by Suzanne Jenike, Assistant CEO, External Operations

Recommendation: Approve, and recommend that the Board approve, proposed revisions to the Disability Retirement Reemployment Policy.

Ms. Ratto reported that staff does not recommend any changes to the *Disability Retirement Reemployment Policy*.

Mr. Ball asked if AB 283 would require any changes in OCERS processes. Ms. Ratto responded no -- OCERS' current evaluation process for peace officer disability retirement determinations meets the requirements of AB 283 so no changes would be necessary if the bill passes.

Following discussion, a **motion** was made by Mr. Ball, **seconded** by Mr. Prevatt, to move forward to the Board the proposed revisions to the *Disability Retirement Reemployment Policy*.

The **motion passed unanimously.**

C. OCERS' PROCESSES FOR ACCOUNTS PAYABLE, EXPENSE REIMBURSEMENT AND APPROVALS THEREOF
Presented by Gina M. Ratto, General Counsel

Recommendation: Take appropriate action.

Ms. Ratto explained this item was placed on the agenda at Mr. Dewane's request.

Mr. Dewane addressed the Committee and staff. He asked questions regarding OCERS' processes for approving accounts payable items and expense reimbursements, how items are recorded on expense reports and reported and the wire transfer process.

Ms. Shott answered Mr. Dewane's questions.

Following discussion, a **motion** was made by Mr. Dewane, **seconded** by Mr. Prevatt, to receive and file.

The **motion passed unanimously.**

D. BOARD AND COMMITTEE AGENDA FORMAT
Presented by Gina M. Ratto, General Counsel

Recommendation: Take appropriate action.

Ms. Ratto explained this item was placed on the agenda at Mr. Dewane's request.

Mr. Dewane addressed the Committee and staff. He asked questions regarding the processes for placing items on an agenda, pulling items from an agenda, and taking public comments.

The Committee and staff addressed Mr. Dewane's questions and explained the processes.

Following discussion, a **motion** was made by Mr. Prevatt, **seconded** by Mr. Dewane, to receive and file.

The **motion passed unanimously.**

Meeting adjourned at 11:00 a.m.

PUBLIC COMMENTS:
None

COMMITTEE MEMBER COMMENTS

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS:

COUNSEL COMMENTS:

The next Committee meeting was set for September 5, 2017 at 9:30 a.m.

Submitted by:

____

Steve Delaney
Secretary to the Board

Approved by:

____

Roger Hilton, Chair

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

BOARD OF RETIREMENT
2223 WELLINGTON AVENUE, SUITE 100
SANTA ANA, CA 92701

AUDIT COMMITTEE MEETING
June 9, 2017
1:00 p.m.

MINUTES

The Chair called the meeting to order at 1:05 p.m. and read the opening statement for the record. Attendance was as follows:

Present: Charles Packard, Chair; Frank Eley, Vice Chair; Shari Freidenrich

Absent: Eric Gilbert

Staff: Brenda Shott, Assistant CEO; Internal Operations; Suzanne Jenike, Assistant CEO, External Operations; Gina Ratto, General Counsel; David James, Director of Internal Audit; Mark Adviento, Internal Auditor; Stina Walander-Sarkin, Investment Analyst; Shanta Chary, Director of Investment Operations; Anthony Beltran, Audio/Visual Technician; Bill Singleton, Recording Secretary

At staff's request, Item C was the first item addressed.

Ms. Freidenrich arrived at 1:12 p.m.

A. 2016 FINANCIAL STATEMENTS AUDIT
Presentation by Linda Hurley, Macias, Gini & O'Connell

Recommendations:

1. Approve OCERS' Audited Financial Statements for the Year Ended December 31, 2016.
2. Direct staff to finalize OCERS' 2016 Comprehensive Annual Financial Report (CAFR) and present it to the Board of Retirement at their regularly scheduled Board meeting on June 12, 2017.
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2016.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2016" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

Ms. Shott gave an overview of the 2016 CAFR. She thanked OCERS Finance staff for their great collaborative work on the 2016 CAFR. Ms. Shott reported there were no material changes since the preliminary financial statements were presented in March.

Ms. Linda Hurley from MGO gave an overview of the Independent Auditor's Report. MGO was pleased to report no adjustments or differences to impact their opinion. MGO issued an unmodified (clean) opinion on the Financial Statements. MGO thanked management for their cooperation and great job on the CAFR.

Ms. Freidenrich requested that staff should make the Audit Committee aware of what the Committee's responsibilities are when looking at the financial statements.

Following discussion, a **motion** was made by Mr. Eley, **seconded** by Ms. Freidenrich to approve OCERS' Audited Financial Statements for the Year Ended December 31, 2016; direct staff to finalize OCERS' 2016 Comprehensive Annual Financial Report (CAFR) and present it to the Board of Retirement at their regularly scheduled Board meeting on June 12, 2017; approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2016; and receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2016" and their "Independent Auditor's Report on Internal control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*.".

The **motion passed unanimously.**

B. GASB 68 VALUATION AND AUDIT REPORT

Presentation by Brenda Shott, Assistant CEO

Recommendations:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2016 for distribution to employers.

Ms. Shott introduced the GASB 68 Valuation and Audit Report. She explained the differences between the net pension liability versus the unfunded actuarial accrued liability. Ms. Shott presented the Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016. The schedule and related notes were audited by OCERS' independent auditor, Macias Gini & O'Connell LLP (MGO). Once the audit report and GASB 68 valuation are approved by the Audit Committee and Board of Retirement, it will be made available to participating employers.

Following discussion, a **motion** was made by Mr. Eley, **seconded** by Ms. Freidenrich to approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016 and approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2016 for distribution to employers.

The **motion passed unanimously**.

Break – 3:24 p.m.

Reconvened – 3:35 p.m.

Item I was taken out of order due to the RFP finalists' flight schedules.

C. DIRECTIVE TO REVIEW OCERS INVESTMENT FEE REPORT
Presentation by Steve Delaney, CEO

Recommendation: Receive and file.

Mr. Delaney began by reiterating what had been previously discussed during the March 20th Regular Board meeting and continued to the March 29th Audit Committee meeting, as well as the May 15th Regular Board meeting. Mr. Delaney was joined by members of OCERS' Finance, Investment and Legal department to provide additional background on the current status of fee reporting at OCERS as well as creating a project timeline to produce the Annual Investment Fee Report.

Ms. Chary gave an overview of how the fee report was created and the objective of the report. Further, she emphasized how the various fees are allocated.

Ms. Walander-Sarkin provided an overview of how the fee report is compiled each year. She stated that a spreadsheet is sent out to all managers and they provide the numbers to OCERS. Surveys are received by the end of April and the material is presented in August. Ms. Walander-Sarkin stated that the fee report will be more detailed than what is legally required.

Ms. Ratto gave an overview of Government Code section 7514.7, which became effective January 1, 2017, and mandates that OCERS require its alternative investment managers to disclose certain listed fees and to annually report this information publicly.

Ms. Shott gave an overview of how other systems outside of California are reporting their investment fees.

Following discussion, a **motion** was made by Mr. Eley, **seconded** by Ms. Freidenrich to receive and file.

The **motion passed unanimously.**

D. REVIEW OF OCERS' INVESTMENT WIRE TRANSFER PROCESS
Presentation by David James, Director of Internal Audit

Recommendation: Receive and file.

Mr. James explained that at the direction of the Audit Committee, Internal Audit completed a review of OCERS' investment wire transfer process. Based on the Internal Audit review, it was concluded that OCERS' current processes for approving investment wire transfers, for performing due diligence prior to an investment and ongoing due diligence after an investment, provide adequate internal controls to prevent fraud and monitor investments. Internal Audit does not recommend additional changes to these processes or staffing for these processes at this time.

Mr. Packard asked for clarification on Investment staff approving a fund and then performing a wire transfer.

Following discussion, a **motion** was made by Ms. Freidenrich, **seconded** by Mr. Eley to receive and file.

E. NEW YORK STATE COMMON RETIREMENT FUND'S SCANDAL AND OCERS' POLICIES
Presentation by David James, Director of Internal Audit

Recommendation: Receive and file.

Mr. James gave an overview of the New York State Common Retirement fund's scandal. He explained the controls that were not in place in that fund and how OCERS compares to their fund. He also explained the policies that OCERS has in place addressing the risk of investment fraud and inappropriate gifts. Such policies include *OCERS Staff Code of Ethics and Standards of Professional Conduct Policy, OCERS' Procurement and Contracting Policy, Due Diligence Policy, OCERS' Annual Disclosure Policy, Acceptance and Reporting of Gifts Policy, Travel Policy, Investment Placement Agent Policy, and OCERS Ethics, Compliance, and Fraud Hotline* in which suspected illegal acts can be anonymously reported for investigation.

Following discussion, a **motion** was made by Ms. Freidenrich, **seconded** by Mr. Eley to receive and file.

The **motion passed unanimously.**

F. HOTLINE UPDATE
Presentation by David James, Director of Internal Audit

Recommendation: Receive and file.

The Committee requested this item be moved to the next Audit Committee meeting.

G. AUDIT COMMITTEE INQUIRY ON ADMINISTRATIVE TIME IN INTERNAL AUDIT
Presentation by David James, Director of Internal Audit

Recommendation: Receive and file.

The Committee requested this item be moved to the next Audit Committee meeting.

H. STATUS OF INTERNAL AUDITS AND AUDIT PROJECTS
Presentation by David James, Director of Internal Audit

Recommendation: Receive and file.

The Committee requested this item be moved to the next Audit Committee meeting.

I. ACTUARIAL AUDIT RFP FINALISTS' PRESENTATIONS
Presentation by Daniel Wade and Mark Olleman of Milliman
Presentation by Graham Schmidt and Anne Harper of Cheiron

Recommendation: Take appropriate action.

Mr. James informed the Committee that OCERS completed an evaluation of the six submissions for the actuarial audit RFP. The evaluation was performed by a panel consisting of members of OCERS' executive management and Internal Audit. OCERS has asked the two finalists – Milliman and Cheiron - to make presentations to the Audit Committee.

Daniel Wade and Mark Olleman from Milliman gave their presentation to the Audit Committee. They gave an overview on their company, public sector and audit expertise, and project approach.

Anne Harper and Graham Schmidt from Cheiron gave their presentation to the Audit Committee. They gave an overview on their company, their staff, relevant experience, and key audit questions.

Mr. Eley left at 4:21 p.m. during Cheiron's presentation.

Mr. Eley returned at 4:56 p.m.

Ms. Freidenrich provided her evaluation in regards to Milliman and Cheiron's presentations.

Mr. Packard provided his evaluation in regards to Milliman and Cheiron's presentations.

Following discussion, a **motion** was made by Ms. Freidenrich, **seconded** by Mr. Packard to recommend Cheiron as the Actuarial Auditor to the Board.

Due to Mr. Eley's absence during the presentation by Cheiron, there was not a quorum; therefore, Mr. Eley abstained from voting.

The **motion passed unanimously.**

Meeting adjourned at 5:54 p.m.

PUBLIC COMMENTS:
None

COMMITTEE MEMBERS COMMENTS:
None

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS:

Submitted by:	**Approved by:**
Steve Delaney	Charles Packard
Secretary to the Committee	Committee Chair

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM
BOARD OF RETIREMENT
2223 E. WELLINGTON AVENUE, SUITE 100
SANTA ANA, CALIFORNIA

REGULAR MEETING
Monday, June 12, 2017
9:00 a.m.

MINUTES

Chair Ball called the meeting to order at 9:01 a.m.

Attendance was as follows:

Present: David Ball, Chair; Chris Prevatt, Vice Chair; Eric Gilbert, Chuck Packard, Russell Baldwin, Shawn Dewane, Roger Hilton; Wayne Lindholm, Frank Eley and Shari Freidenrich

Also Present: Steve Delaney, Chief Executive Officer; Brenda Shott, Assistant CEO, Finance and Internal Operations; Suzanne Jenike, Assistant CEO, External Operations; Catherine Fairley, Director of Member Services; Jenny Sadoski, Director of Information Technology; David James, Director of Internal Audit; Gina Ratto, Chief Legal Officer; Lee Fink, Deputy Chief Legal Officer; Anthony Beltran, Visual Technician; Megan Cortez; Disability Coordinator; Cammy Danciu, Recording Secretary.

Guests: Harvey L. Leiderman, ReedSmith LLP, Julie Goldsmith Reiser, Cohen Milstein Sellers & Toll

Mr. Hilton led the Pledge of Allegiance.

Ms. Freidenrich arrived at 9:02am

CONSENT AGENDA

All matters on the Consent Agenda are to be approved by one action unless a Board Member or a member of the public requests separate action on a specific item.

Chair Ball pulled items C-4, C-5 and C-6 for discussion.

BENEFITS

C-1 MATERIAL DISTRIBUTED

Application Notices	June 12, 2017
Death Notices	June 12, 2017

Recommendation: Receive and file.

ADMINISTRATION

C-2 BOARD MEETINGS AND COMMITTEE MEETINGS

Regular Board Meeting Minutes May 15, 2017
Recommendation: Authorize meeting and approve minutes.

C-3 CEO FUTURE AGENDAS AND 2017 OCERS BOARD WORK PLAN

Recommendation: Receive and file.

C-4 DIRECTIVE TO REVIEW OCERS INVESTMENT FEE REPORT

Recommendation: Receive and file.

C-5 DIRECTIVE TO REVIEW NEW YORK STATE COMMON RETIREMENT FUND'S SCANDAL

Recommendation: Receive and file.

C-6 2017 STRATEGIC PLANNING WORKSHOP – PROPOSED AGENDA TOPICS

Recommendation: Receive and file.

C-7 2017 – 2019 STRATEGIC PLAN – QUARTERLY REVIEW

Recommendation: Receive and file.

C-8 QUIET PERIOD – NON-INVESTMENT CONTRACTS

Recommendation: Receive and file.

C-9 LEGISLATIVE UPDATE

Recommendation: Receive and file.

C-10 BOARD COMMUNICATIONS

Recommendation: Receive and file.

*** * * * * * END OF CONSENT AGENDA * * * * * * ***

INDIVIDUAL ITEMS AGENDA

I-1 INDIVIDUAL ACTION ON ANY ITEM TRAILED FROM THE CONSENT AGENDA

C-4 - DIRECTIVE TO REVIEW OCERS INVESTMENT FEE REPORT

Mr. Delaney noted that the OCERS Board's Audit Committee had just met the Friday before to discuss the OCERS Investment fee report. It was too soon to share the materials considered by the committee, however, the materials will come to the Board as part of the July 17, 2017 Board agenda packet. Noting that the committee was working to meet the challenges posed by Board Chair Ball to make the fee report more actionable on a legal, policy and managerial level, Mr. Delany provided a verbal update as to what had been considered. The committee was informed that OCERS already has a strong foundation with an award winning fee report, the use of templates for gathering data as well as having requirements included in contracts. Also, Molly Murphy, OCERS new CIO, will take the lead on this project upon her arrival on June 23, 2017.

Mr. Delaney then laid out an anticipated timeline. First he reported that the Audit materials of June 9, 2017 will be available in the July 17, 2017 Board packet. Second, he noted that the fourth annual OCERS Investment fee report will be released in August. Prior to that, the Audit Committee will meet to provide further input and suggestions. Furthermore, Tom Hickey will be attending the 2017 Strategic Planning Workshop where he will tackle where the "line" should be drawn when determining fees as opposed to expenses. Lastly, the first legal report as required by GC 7514.7 (AB 2833) will be presented with an effective date of January 1, 2018.

C-5 - DIRECTIVE TO REVIEW NEW YORK STATE COMMON RETIREMENT FUND'S SCANDAL

David James gave an update of the New York State common retirement fund's scandal that he also discussed at the June 9, 2017 Audit Committee meeting.

Mr. Ball commented that this New York scandal is an example of how controls and processes are needed in order to avoid situations like this.

Mr. Packard stated that the Audit Committee conducted a deep dive when looking at wire transfers and concluded that OCERS has good controls and procedures put in place.

Mr. Ball thanked the Audit Committee and the amount of extra effort that they have been giving.

C-6 – 2017 STRATEGIC PLANNING WORKSHOP – PROPOSED AGENDA TOPICS

Ms. Freidenrich made a comment regarding a possible reserve policy agenda topic for the 2017 Strategic Planning Workshop, to be held in September, and stated that it seems OCERS doesn't have a formal policy in place for this complicated process.

Mr. Delaney stated that we do have policies related to reserves in place at OCERS, however the question of earnings has come up and that's what the proposed topic would be discussed during the Strategic Planning Workshop if so directed. Mr. Delaney will also work with Ms. Shott to bring materials forward for this topic at some future point.

Following discussion, a **motion** was made by Mr. Packard, **seconded** by Mr. Baldwin to move the entire consent calendar.

The motion carried **unanimously**.

I-2 AOCDS POST MANDATORY TRAINING BENEFIT CORRECTION

Presentation by Steve Delaney, Chief Executive Officer, OCERS; and Suzanne Jenike, Assistant Chief Executive Officer External Operations, OCERS

Recommendation: Staff recommends the Board correct the underpaid benefits by:

1. Correcting (increasing) the monthly benefit going forward; and
2. Reimbursing members the full amount of the underpaid benefits retroactive to their effective date of retirement; and
3. Paying the members 3% interest compounded annually on the underpaid benefits; and
4. Collecting the underpaid benefits and interest thereon from the County by including the amount in the 2017 UAAL amortization as an actuarial loss.

Staff recommends the Board correct the overpaid benefits, effective July 1, 2017, by:

1. Correcting (decreasing) the monthly benefit going forward; and
2. Continuing to collect the full amount of the overpaid benefits retroactive to the effective date of retirement from the County by leaving the amount in the County's UAAL.

In addition, staff recommends that the Board direct staff to work with the County payroll department so that:

1. The employer properly reports pensionable pay items to OCERS in the future; and
2. Employee and employer contributions are charged and collected on those pensionable pay items on a biweekly basis.

Mr. Delaney and Ms. Jenike presented the AOCDS post mandatory training benefit correction overview and reviewed the information discussed in the May 15, 2017 Regular Board Meeting.

Mr. Prevatt asked how the overpayment will be collected.

Ms. Jenike stated that OCERS has some say as to how the collection of money will occur.

Mr. Hilton's biggest concern is the controls going forward and made clear OCERS needs to do a better job going forward.

Mr. Packard said he doesn't want this to be something to deal with in the future. He stated that he strongly encourages the way this item is repeated to be electronic not manual to alleviate errors.

Mr. Delaney stated that OCERS is looking at process improvements to avoid errors in the future.

Ms. Ratto stated that any member would have the right to appeal any decisions made by the board.

Ms. Freidenrich stated that there needs to be a better method in the audits conducted to reveal a more diversified sample testing.

Ms. Freidenrich asked that a citation of the section of the policy be added in staff's recommendation in order to protect the Board as well as the member.

Mr. Ball asked if section D from the policy could be included in staff's recommendation.

Mr. Hilton amended the original motion to incorporate new language.

Linda Hallogan, Director of Communication, AOCDS, read a letter from Mr. Tom Dominguez in support of staff's recommendation.

Mr. Ball apologized to the members for this very unfortunate situation and the hardship caused by this error and stated that OCERS is working diligently to ensure this doesn't happen in the future.

Following discussion, a **motion** was made by Mr. Hilton, **seconded** by Mr. Dewane to approve staff recommendation based upon the terms of the overpaid and underpaid planned benefits policy and specifically in reference to paragraphs 8D and 4 of that policy.

The motion carried **8-1** with voting as follows:

AYES	**NAYS**	**ABSTAIN**	**ABSENT**
Mr. Dewane	Mr. Lindholm		
Mr. Eley			
Ms. Freidenrich			
Mr. Packard			
Mr. Baldwin			
Mr. Hilton			
Mr. Prevatt			
Chair Ball			

The Board recessed for break at 10:07am
The Board reconvened from break at 10:18am

I-3 ACTUARIAL DECEMBER 31, 2016 VALUATION
Presentation by Paul Angelo and Andy Yeung, Segal Consulting

Recommendation: Approve the Actuarial Valuation and Review as of December 31, 2016 and adopt contribution rates for Fiscal Year 2018 – 2019 as recommended by Segal Consulting.

Mr. Paul Angelo summarized the Actuarial December 31, 2016 valuation.

Following discussion, a **motion** was made by Mr. Eley, **seconded** by Mr. Prevatt to approve the Actuarial Valuation and Review as of December 31, 2016 and adopt contribution rates for Fiscal Year 2018 – 2019 as recommended by Segal Consulting.

The motion carried **unanimously.**

Mr. Angelo also presented the selection of Alternative Economic Assumptions for Use in Sensitivity Analyses, a new deliverable required by the most recent OCERS contract with Segal Consulting.

Mr. Lindholm asked for the supporting backup for the inflation and return rates for the five and ten year average.

Mr. Angelo stated that the Experience Study will be presented in more detail in the August or September Regular Board meeting.

Mr. Ball and Mr. Eley asked Mr. Angelo to modify two out of the four alternatives to reflect an alternate percentage rate for real return and inflation.

Mr. Ball directed Mr. Angelo to come back to the Board with the modified alternatives as discussed by himself and Mr. Eley.

I-4 GASB 68 VALUATION AND AUDIT REPORT

Presentation by Brenda Shott, Assistant Chief Executive Officer and Tracy Bowman, Director of Finance

Recommendation: Approve the following recommendations from the Audit Committee during a meeting held on June:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2016 for distribution to employers.

Ms. Shott presented the GASB 68 Valuation and Audit Report.

Following discussion, a **motion** was made by Mr. Hilton, **seconded** by Mr. Dewane to approve the following recommendations from the Audit Committee during a meeting held on June:
1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2016 for distribution to employers.

The motion carried **unanimously.**

I-5 2016 AUDITED FINANCIAL STATEMENTS AND COMPREHENSIVE ANNUAL FINANCIAL REPORTS
Presentation by Brenda Shott, Assistant Chief Executive Officer and Tracy Bowman, Director of Finance

Recommendation: Approve the following recommendations presented to the Audit Committee during a meeting held on June 9, 2017:

1. Approve OCERS' audited financial statements for the year ended December 31, 2016.
2. Direct staff to finalize OCERS' 2016 Comprehensive Annual Financial Report (CAFR)
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2016.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2016" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

Ms. Shott presented the 2016 Audited Financial Statements and Comprehensive Annual Financial reports.

Mr. Packard stated that the Audit Committee thoroughly reviewed the CAFR information and concluded that the CAFR should be accepted and that it was very well done.

Mr. Dewane asked if the auditors have independent access to the Board and does the auditor act independently of the staff and have conversations throughout the audit process with members of the Audit Committee.

Ms. Shott replied that the auditors are independent and remain independent and have direct contact with the Audit Committee.

Following discussion, a **motion** was made by Ms. Freidenrich, **seconded** by Mr. Dewane to approve the following recommendations presented to the Audit Committee during a meeting held on June 9, 2017:

1. Approve OCERS' audited financial statements for the year ended December 31, 2016.
2. Direct staff to finalize OCERS' 2016 Comprehensive Annual Financial Report (CAFR)
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2016.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2016" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*."

The motion carried **unanimously.**

I-6 BUSINESS CONTINUITY AND DISASTER RECOVERY PLAN UPDATE
Presentation by Jenny Sadoski, Director of Information Technology, and Jon Gossard, I.T. Manager, OCERS

Recommendation: Receive and file.

Ms. Sadoski provided an overview of the business continuity and disaster discovery plan.

Mr. Hilton excused himself at 11:03am
Mr. Hilton returned at 11:05am

Mr. Ball asked Ms. Sadoski to elaborate on the private cloud and what exactly it encompasses.

Ms. Sadoski stated that with the private cloud the hardware and infrastructure is owned by OCERS but is located in a shared co-location facility.

Mr. Packard asked who has access to the racks and the machines themselves and expressed his concern that not all IT staff should be allowed to have access.

Ms. Freidenrich asked what the advantages are in having an offsite, local secondary location.

Ms. Sadoski replied that the consultants recommended significant upgrades and changes needed to bring it up to an adequate data center. Ultimately the consultant recommended a professionally managed facility.

Mr. Eley stated that whomever OCERS picks as the provider, there will always be a security issue. He also asked how he can be assured that voicemails will not be hacked through using a cloud based phone system.

Ms. Sadoski stated that OCERS makes every effort to keep up with new technology and constantly improving methods to prevent hackers from being successful in penetrating firewalls but she cannot give Mr. Eley a guarantee that OCERS will never be hacked.

Mr. Dewane asked if OCERS uses a 2 form identification factor when logging in to OCERS computers.

Ms. Sadoski said no, but is working on implementing that soon.

Mr. Ball commented that it might be interesting to take a field trip to the off-site locations.

Mr. Prevatt stated that there's no way to protect against everything in protecting OCERS information. He stated that it might be good to contract out if a server goes down in the offsite location. He stated that OCERS has done a good job in preparing for a disaster recovery.

Mr. Ball thanked staff for staying on top of the systems and of all their hard work.

Following discussion, a **motion** was made by Mr. Prevatt, **seconded** by Mr. Dewane to receive and file the business continuity and disaster recovery plan.

The motion carried **unanimously.**

I-7 CYBER SECURITY OVERVIEW
Presentation by Jenny Sadoski, Director of Information Technology, and Jon Gossard, I.T. Manager, OCERS

<u>Recommendation</u>: Receive and file.

<u>Mr. Lindholm excused himself for the day at 11:37am</u>

<u>Mr. Prevatt excused himself at 11:39am</u>
<u>Mr. Prevatt returned at 11: 42am</u>

Ms. Sadoski presented the Cyber Security Overview.

Mr. Ball asked about having a group come together on a more formalized and structured basis and sit down for discussion regarding security issues. He asked that CEO Delaney give some thought to the creation of a subcommittee that could help with this issue.

Ms. Shott stated that OCERS currently has a subscription to Gartner and that they offer services such as cyber security, research resources and technical analysts who specialize in various areas. OCERS is able to meet with analysts whenever needed.

Following discussion, a **<u>motion</u>** was made by Mr. Prevatt, **<u>seconded</u>** by Mr. Dewane to receive and file the cyber security overview.

The motion carried **<u>unanimously.</u>**

I-8 ANNUAL BUSINESS PLAN PROGRESS – MID-YEAR REVIEW
Presentation by Steve Delaney, Chief Executive Officer, OCERS

<u>Recommendation</u>: Receive and file.

Mr. Delaney presented only the changes that occurred in the business plan mid-year review.

<u>Mr. Hilton excused himself at 11:52am</u>
<u>Mr. Hilton returned at 11:54am</u>

Following discussion, a **<u>motion</u>** was made by Mr. Dewane, **<u>seconded</u>** by Mr. Packard to receive and file the annual business plan progress – mid-year review.

The motion carried **<u>unanimously.</u>**

<u>The Board recessed for lunch at 11:55am</u>
<u>The Board returned from lunch at 1:00pm</u>

*** * * * * * * END OF INDIVIDUAL ITEMS AGENDA * * * * * ***

<u>DISABILITY APPLICATIONS/MEMBER APPEALS AGENDA</u>

1:00 P.M.

NOTE: WHEN CONSIDERING DISABILITY RETIREMENT APPLICATIONS, THE BOARD MAY FIND IT NECESSARY TO DISCUSS MATTERS RELATING TO THE EVALUATION OF THE WORK PERFORMANCE OF AN EMPLOYEE WHO HAS APPLIED FOR DISABILITY RETIREMENT, OR DISCUSS COMPLAINTS OR CHARGES MADE AGAINST SUCH EMPLOYEE. IF THIS OCCURS, THE BOARD MAY ADJOURN TO A CLOSED SESSION TO DISCUSS SUCH MATTERS PURSUANT TO GOVERNMENT CODE SECTION 54957, UNLESS THE EMPLOYEE REQUESTS THAT THE DISCUSSION BE IN PUBLIC.

Megan Cortez, Disability Coordinator, presented D-1 to the Board along with the staff recommendation.

D-1: Nicholas Casson
Firefighter, Orange County Fire Authority
Date of employee filed application for service connected disability retirement: 05/05/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF THE DAY FOLLOWING THE LAST DAY OF COMPENSATION. (SAFETY MEMBER) (D-1)

Following discussion, a **motion** was made by Mr. Gilbert, **seconded** by Mr. Packard, to grant service connected disability retirement with an effective date of the day following the last day of compensation. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley			Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Gilbert			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-2 to the Board along with the staff recommendation.

D-2: Jesse Gonzales
Landfill Equipment Operator, Orange County Waste and Recycling
Date of employee filed application for service connected disability retirement: 05/03/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF MAY 3, 2016. (GENERAL MEMBER) (D-2)

Following discussion, a **motion** was made by Mr. Baldwin, **seconded** by Mr. Eley, to grant service connected disability retirement with an effective date of May 3, 2016. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT

Mr. Eley			Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Hilton			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-3 to the Board along with the staff recommendation.

D-3: Amadeo Guerrero

Laborer, Orange County Waste and Recycling
Date of employee filed application for service and non-service connected disability retirement: 06/22/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF JUNE 22, 2016. (GENERAL MEMBER) (D-3)

Following discussion, a **motion** was made by Mr. Prevatt, **seconded** by Mr. Packard, to grant service connected disability retirement with an effective date of June 22, 2016. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley			Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Hilton			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-4 to the Board along with the staff recommendation.

D-4: Wendy Kahapea

Group Counselor II, Orange County Social Services Agency
Date of employer filed application for service and non-service connected disability retirement: 03/03/2016
Date of employee filed application for service and non-service connected disability retirement: 03/23/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF MARCH 4, 2016, THE DAY FOLLOWING THE LAST DAY OF REGULAR COMPENSATION AS A GROUP COUNSELOR I. FIND THE APPLICANT IS CAPABLE OF PERFORMING OTHER DUTIES IN THE SERVICE OF THE COUNTY OF ORANGE PURSUANT TO GOVERNMENT CODE SECTION 31725.65. GRANT A SUPPLEMENTAL DISABILITY RETIREMENT PAYMENT ALLOWANCE IN THE AMOUNT OF THE SALARY DIFFERENCE BETWEEN THE HIGHER AND LOWER PAYING POSITIONS EFFECTIVE MARCH 4, 2016, THE DATE OF THE POSITION CHANGE UNTIL THE LAST DAY OF COMPENSATION. (GENERAL MEMBER) (D-4)

Mr. Baldwin asked Ms. Cortez to comment on this topic as to why Ms. Kahapea returned to work.

Ms. Cortez stated that Ms. Kahapea is capable of performing other duties in the County of Orange and therefore she took a pay cut into a different classification to continue working.

Jane Oatman, member of the public spoke on behalf of the applicant and encouraged the board to approve staff recommendation.

Following discussion, a **motion** was made by Mr. Baldwin, **seconded** by Mr. Packard, grant service connected disability retirement with an effective date of March 4, 2016, the day following the last day of regular compensation as a Group Counselor I. Find the applicant is capable of performing other duties in the service of the County of Orange pursuant to Government Code Section 31725.65. Grant a supplemental disability retirement payment allowance in the amount of the salary difference between the higher and lower paying positions effective March 4, 2016, the date of the position change until the last day of compensation. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley			Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Hilton			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-5 to the Board along with the staff recommendation.

D-5: Joseph McClintock
Sergeant, Orange County Sheriff's Department
Date of employee filed application for service and non-service connected disability retirement: 05/23/2016

STAFF RECOMMENDATION IS TO GRANT SERVICE CONNECTED DISABILITY RETIREMENT WITH AN EFFECTIVE DATE OF SEPTEMBER 4, 2015. (SAFETY MEMBER) (D-5)

Following discussion, a **motion** was made by Mr. Hilton, **seconded** by Mr. Packard, to grant service connected disability retirement with an effective date of September 4, 2015. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley			Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Hilton			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-6 to the Board along with the staff recommendation.

D-6: Carl Pollitt
Deputy Sheriff II, Orange County Sheriff's Department
Date of employee filed application for service connected disability retirement: 08/25/2015

STAFF RECOMMENDATION IS TO DENY SERVICE CONNECTED DISABILITY RETIREMENT DUE TO INSUFFICIENT EVIDENCE OF PERMANENT INCAPACITY AND JOB CAUSATION, DENY THE APPLICATION AS IT WAS NOT FILED TIMELY PURSUANT TO GOVERNMENT CODE SECTION 31722. (SAFETY MEMBER) (D-6)

Mr. Hilton asked Ms. Cortez to provide more insight on job causation.

Ms. Cortez stated that Carl's condition is hypertension and controlled with medication however if it led to heart trouble, this happened after he left employment. Also she stated that hypertension is not covered by the heart presumption.

Ms. Ratto confirmed that hypertension is not sufficient for the heart presumption.

Following discussion, a **motion** was made by Mr. Baldwin, **seconded** by Mr. Packard to deny service connected disability retirement due to insufficient evidence of permanent incapacity and job causation, deny the application as it was not filed timely pursuant to government code section 31722. The motion carried **6-1** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley	Mr. Hilton		Mr. Lindholm
Ms. Freidenrich			Mr. Dewane
Mr. Packard			
Mr. Baldwin			
Mr. Prevatt			
Chair Ball			

Megan Cortez, Disability Coordinator, presented D-7 to the Board along with the staff recommendation.

D-7: Shayla Moore
Coach Operator, Orange County Transportation Authority
Date of employee filed application for service connected disability retirement: 09/16/2008

STAFF RECOMMENDATION IS FOR THE BOARD TO DISMISS THE APPEAL WITHOUT PREJUDICE PURSUANT TO THE ADMINISTRATIVE HEARING PROCEDURES, RULE 23. (GENERAL MEMBER) (D-7)

Following discussion, a **motion** was made by Mr. Prevatt, **seconded** by Mr. Eley to dismiss the appeal without prejudice pursuant to the administrative hearing procedures, Rule 23. The motion carried **7-0** with voting as follows:

AYES	NAYS	ABSTAIN	ABSENT
Mr. Eley			Mr. Lindholm

Ms. Freidenrich	Mr. Dewane
Mr. Packard	
Mr. Baldwin	
Mr. Prevatt	
Chair Ball	
Mr. Hilton	

Board adjourned into closed session to discuss item D-8 at 1:12pm
Board reconvened from closed session at 1:35pm

D-8: Rick Edgmon

AFFIRM STAFF'S DETERMINATION THAT MR. EDGMON SHOULD BE REQUIRED TO REPAY THE TOTAL AMOUNT OF THE BENEFITS OVERPAID TO HIM SINCE HE RETIRED ON NOVEMBER 11, 2005 IN THE APPROXIMATE AMOUNT OF $237,107.79. STAFF ALSO RECOMMENDS THAT OCERS FORGO THE COLLECTION OF INTEREST ON THE OVERPAYMENT, AND THAT MR. EDGMON BE GIVEN 20 YEARS TO REPAY THE OVERPAYMENT THROUGH MONTHLY DEDUCTIONS TO HIS RETIREMENT ALLOWANCE.

(MEMBER) (D-8)

The Board adjourned into closed session at 1:36pm
Mr. Hilton excused himself for the day at 2:02pm
Mr. Gilbert stepped out at 2:21pm
Mr. Gilbert returned at 2:22pm
The Board reconvened from closed session at 2:42pm

Mr. Ball stated there is no reportable action taken in closed session. Item D-8 will be continued to the July 17, 2017 Regular Board meeting at the request of the member.

PUBLIC COMMENTS: At this time members of the public may address the Board of Retirement regarding any items within the subject matter jurisdiction of the Board, provided that no action may be taken on non-agendized items unless authorized by law.

N/A

BOARD MEMBER COMMENTS

N/A

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS

Ms. Jenike gave the board an update on the membership policy, the part-time issue that the Board ratified several months ago. She has been working with Plan Sponsors and they are cooperating fully. She will report with complete details in the July 17, 2017 Regular Board meeting.

COUNSEL COMMENTS

N/A

****

CLOSED SESSION ITEMS

E-1 CONFERENCE REGARDING SIGNIFICANT EXPOSURE TO LITIGATION (ONE MATTER) (GOVERNMENT CODE SECTION 54956.9)
Adjourn pursuant to Government Code section 54956.9(d)(2)

Recommendation: Take appropriate action.

No reportable action taken.

E-2 CONFERENCE REGARDING INITIATION OF LITIGATION (ONE MATTER) (GOVERNMENT CODE SECTION 54956.9)
Adjourn pursuant to Government Code section 54956.9(d)(4) to consider whether to initiate litigation.

Recommendation: Take appropriate action.

The Board has voted unanimously to authorize staff to retain the law firm of Cohen Milstein Sellers & Toll to file an action in OCERS name. The identity of the defendants will not be disclosed and will remain confidential until the case has been filed.

E-3 CONFERENCE REGARDING LITIGATION THAT HAS BEEN INITIATED (GOVERNMENT CODE SECTION 54956.9(d)(1)) O.C. Department of Education v. OCERS, CA Superior Court, Orange County, (Case No. 30-2016-00836897)
Adjourn pursuant to Government Code Section 54956.9(d)(1).

Recommendation: Take appropriate action.

No reportable action taken.

ADJOURNMENT: (IN MEMORY OF THE ACTIVE MEMBERS, RETIRED MEMBERS, AND SURVIVING SPOUSES WHO PASSED AWAY THIS PAST MONTH)

Active Members
Gonzales, Cora
Ta, Grace
Whitehill, Joel

Retired Members
Brothwell, Bob
Chambers, Gregory
Cornett, Wayne
Criddle, Jack
Dickens, Jo Dell
Dorman, Mary
Drum, Stuart
Epstein, Florence
Fernandez, Fidel
Holverstott, Charles
Horgan, Karen
Nichols, Edward
Nordbak, Catherine
Olis, Cynthia
Puckett, Jacqueline
Smith, Juliann
Switzer, Barbara
Tolman, Dee
Wiest, Carlos
Wilkinson, Michelle
Wilson, James

Surviving Spouses
Boutet, Helen
Campbell, Shirley
Copeland, Charles
Haywood, Frances
Tallman, Virginia
Weisner, Arlene

There being no further business to bring before the Board, the meeting adjourned at 2:45p.m.

Submitted by: Approved by:

___________________________ ______________________________

Steve Delaney David Ball
Secretary to the Board Chairman

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

BOARD OF RETIREMENT

2223 WELLINGTON AVENUE, SUITE 100

SANTA ANA, CA 92701

AUDIT COMMITTEE MEETING
June 12, 2017
2:00 p.m. or upon adjournment of the meeting of
the Board of Retirement, whichever is later

MINUTES

The Chair called the meeting to order at 2:51 p.m. and read the opening statement for the record. Attendance was as follows:

Present: Charles Packard, Chair; Frank Eley, Vice Chair; Eric Gilbert; Shari Freidenrich

Staff: Steve Delaney, CEO; Brenda Shott, Assistant CEO; Internal Operations; Suzanne Jenike, Assistant CEO, External Operations; Gina Ratto, Chief Legal Officer; David James, Director of Internal Audit; Anthony Beltran, Audio/Visual Technician; Brenda Vazquez, Recording Secretary

OPEN SESSION

A. CALL TO ORDER

Recommendation: Take appropriate action.

The Chair called the meeting to order at 2:51 p.m.

The Committee and staff adjourned to closed session at 2:52 p.m.

****

CLOSED SESSION ITEM

B. PUBLIC EMPLOYEE PERFORMANCE EVALUATION (GOVERNMENT CODE §54957(b))
Title: Director of Internal Audit
Adjourn pursuant to Government Code section 54957(b) to evaluate the performance of the Director of Internal Audit

Recommendation: Take appropriate action

Ms. Freidenrich left from closed session at 3:20 p.m.

The Committee reconvened at 4:01 p.m.

The Chair reported **no reportable action.**

Meeting adjourned at 4:02 p.m.

PUBLIC COMMENTS:
None

COMMITTEE MEMBERS COMMENTS:
None

CHIEF EXECUTIVE OFFICER/STAFF COMMENTS:

Submitted by:	**Approved by:**
____________________________	____________________________
Steve Delaney	Charles Packard
Secretary to the Committee	Committee Chair

C-4

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **CEO FUTURE AGENDAS AND 2017 OCERS BOARD WORK PLAN**

Recommendation

Receive and file.

AGENDA TOPICS FOR THE OCERS BOARD OF RETIREMENT

AUGUST

Triennial Report of Assumptions
OCERS by the Numbers
Evolution of OCERS UAAL
Employer/Employee Contribution Matrix
Member Services Annual Report
Disability Program Annual Report
OCERS Vision and Values
Prepayment of Contributions for FY 18-19

SEPTEMBER

Strategic Planning Workshop & Investment Forum

OCTOBER

Strategic Planning Workshop & Investment Forum Notes
Approve 2018-20 Strategic Plan
Approve 2018 Business Plan
Public Records Act – A Refresher
PEPRA – An Overview and Update
Public Records Act – Informational Overview

Submitted by:

Steve Delaney
Chief Executive Officer

OCERS RETIREMENT BOARD - 2017 Work Plan

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep (Offsite)	Oct	Nov	Dec
System Oversight		STAR COLA Posting **(I)**	Approve 2017 STAR COLA **(A)**		Review Budget to Actuals Financial Report **(I)**	Mid-Year Review of 2017 Business Plan Progress **(I)**	Approve Early Payment Rates for Fiscal Year 2017-18 **(A)**	Review Budget to Actuals Financial Report **(I)**	Strategic Planning Workshop **(I)**	Overview of 2017 Administrative Budget and Investment (Workshop) **(I)**	Review Budget to Actuals Financial Report **(I)**	CEO Compensation **(A)**
		Approve 2017 COLA **(A)**	Quarterly 2016-2018 Strategic Plan Review **(A)**		Receive Preliminary December 31, 2016 Actuarial Valuation& Funded Status of OCERS **(A)**	Approve December 31, 2016 Actuarial Valuation & Funded Status of OCERS **(A)**	Actuarial Experience Study **(A)**	Receive OCERS by the Numbers **(I)**		Approve 2017-2019 Strategic Plan **(A)**	Approve 2018 Administrative (Operating) Budget **(A)**	
			Review 2017 Administrative (Operating) Budget **(A)**			Approve 2016 CAFR **(A)**		Receive Evolution of the UAAL **(I)**		Approve 2017 Business Plan **(A)**	Annual CEO Performance Review **(A)**	
						Quarterly 2016-2018 Strategic Plan Review **(A)**		Quarterly CEO Performance Review **(A)**				
						Approve Financial Statements **(A)**						
Board Governance	Board Self-Review Process 2017 **(I)**	Board Self-Review Delivered **(A)**		Brown Act Training **(I)**							Adopt 2017 Board Meeting Calendar **(A)**	Adopt Annual Work Plan for 2017 **(A)**
				Conflict of Interest Training **(I)**								Vice-Chair Election **(A)**
												Appointment of Committee Members & Committee Chairs / Vice Chairs **(A)**
Regulation / Policies			Quarterly CEO Performance Review **(I)**			Quarterly CEO Performance Review **(I)**	Membership Policy **(A)**	Review Staff Retention Program **(I)**		Membership Policy **(A)**		
Compliance		State of OCERS **(A)**		Form 700 and OCERS Annual Disclosure Due **(A)**		Receive Financial Audit **(I)**					Overview of 2017 Training Courses **(I)**	

(A) = Action | **(I) = Information**

C-5

ORANGE COUNTY
OCERS
EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Gina M. Ratto, General Counsel

SUBJECT: **GOVERNANCE COMMITTEE OUTCOMES FROM JUNE 8, 2017 MEETING**

Recommendation

The Governance Committee recommends that the Board of Retirement adopt:

(1) Budget Approval Policy, with revisions as approved by the Committee;
(2) Planning Policy, with revisions as approved by the Committee;
(3) Quiet Period Policy, with revisions as approved by the Committee; and
(4) Disability Retirement Policy, with non-substantive revisions as approved by the Committee.

Background/Discussion

Budget Approval Policy

At the request of the Board of Retirement, the Governance Committee reviewed the Budget Approval Policy on June 8, 2017, and approved revisions to the policy to exclude investment management related fees from the OCERS annual administrative budget. The Committee's action was based upon staff's recommendation that OCERS discontinue the practice of budgeting for investment management fees and related expenses as part of the annual administrative budget process and instead use the annual Investment Fee Report prepared in accordance with the Board's Investment Fee Policy as the method by which OCERS investment management costs are and will be tracked, reported and managed. A copy of the policy with revisions in underlined/strikeout text is attached.

Planning Policy

Pursuant to the three-year policy review cycle, staff presented and the Governance Committee approved revisions to the Planning Policy that will clarify the policy and OCERS' strategic and business planning processes. In addition, under the revised policy, the CEO's quarterly review of the Strategic Plan and semi-annual review of the Business Plan with the Board will include a focused review of recent activities and updates with respect to both plans, as opposed to a review of each initiative regardless of whether progress was made. A copy of the policy with revisions in underlined/strikeout text is attached.

Quiet Period Policy

The Quiet Period Policy was reviewed by the Governance Committee on June 8, 2017, pursuant to the three-year review cycle. Staff proposed and the Committee approved revisions to the policy to:

- Extend the application of the policy to all OCERS contracts for services, and not only to contracts with Named Service Providers. (Named Service Providers are defined by the Procurement and Contracting Policy to include the consulting actuary, the actuarial auditor, the general investment consultant, the alternative investment consultant, the real estate consultant, fiduciary counsel, the custodian, the securities lending manager and the financial auditor.)
- Extend the application of the quiet period to all parties financially interested in a contract with OCERS, and not only to actual bidders for OCERS' business. A financially interested party would include, for example, finders, placement agents, lobbyists and other agents acting on behalf of the bidder who may receive a fee if the contract is awarded to the bidder.
- Specify what communications are not prohibited by the policy.

The Committee further revised the policy to assign responsibility to the Chief Executive Officer to ensure that Board members and OCERS staff are informed of the initiation, continuation and conclusion of the quiet period for every solicitation in order to prevent unintentional violations of the policy.

A copy of the policy with revisions in underlined/strikeout text is attached.

Disability Retirement Reemployment Policy

The Disability Retirement Reemployment Policy was reviewed by the Governance Committee on June 8, 2017, pursuant to the three-year review cycle and was approved by the Committee with non-substantive revisions. A copy of the policy with revisions in underlined/strikeout text is attached.

Attachments

Submitted by:

Gina M. Ratto

Gina M. Ratto
General Counsel

OCERS Board Policy

Budget Approval Policy

Purpose and Background

1. The Board of Retirement annually adopts a budget covering the expenses of administering the retirement system. The administration expenses, as defined in Government Code Section 31580.2, incurred in any year will be charged against the earnings of the retirement fund and will not exceed 21 basis points of the actuarial accrued liability of the system.

2. The purpose of the Budget Approval Policy is to establish the process by which the OCERS annual budget is approved by the Board of Retirement.

Roles

3. The preparation and presentation of the budget is the responsibility of the Chief Executive Officer.

4. The adoption of an annual budget is the responsibility of the Board of Retirement.

Guidelines

General Provisions

5. The Chief Executive Officer will present to the Board of Retirement a proposed administrative budget for ~~-~~the next calendar year that supports the initiatives set out in the proposed Business Plan along with ongoing operations of the system. The Budget will be presented to the Board during the month of November.

6. The format of the proposed budget will organize expenditures by function within OCERS as follows:

   a. Executive;

   b. Investments;

   c. Communications;

   d. Member Services;

   e. Finance;

   f. Administrative Services;

   g. Disabilities;

   h. Board;

   i. Information Technology;

   j. Legal;

   k. Internal Audit; and / or

   l. Such other functions that may be adopted by OCERS in the future.

7. The budget shall be broken into three broad categories of expenditures:

   a. Salaries and Benefits;

The Salaries and Benefit category shall include salaries, overtime, fringe benefits , temporary help costs and any other costs directly related to employee and Board member compensation.

b. Services and Supplies

The Services and Supplies category for each department shall include items such as professional services, legal services, equipment expenses (other than those that are capitalized on OCERS' books as assets that will be depreciated over time and budgeted as a capital expenditure), maintenance costs, office expenses, training, and meetings & travel costs. Investment management fees (including directly billed fees, indirectly paid fees reported on investment manager statements, fees and costs for investment management that are netted in portfolio returns, foreign income tax and security lending fees) are not to be included in the annual administrative budget. These expenses are to be managed and reported in accordance with the Board of Retirement's Investment Fee Policy; and

~~a.~~c. Capital Projects.

The Capital Project budget category will include the current year costs for all capital asset purchases. Capital assets include items such as buildings, building improvements, vehicles, machinery, equipment, internally generated computer software, computer hardware and all other tangible or intangible assets that are used in operations, cost more than $25,000 per item, and have initial useful lives extending beyond a single reporting period.

The Chief Executive Officer, or the Assistant CEO, Finance & Internal Operations, is granted authority to transfer funds within a category. ~~to accomplish the goals set forth in the Business Plan~~. Funds may not be moved from one category to another without approval of the Board of Retirement.

8. The value of the actuarial accrued liability (AAL) at the beginning of the budget year will be used for purposes of calculating the 21 basis point test. That value will be calculated by the system's actuary using the prior year's beginning AAL and projecting to the beginning of the budget year.
9. The Chief Executive Officer may request that the Board amend the budget for the current fiscal year by presenting reasons for the budget amendment, its expected impact, and the cost of the amendment for the remainder of the budget year.

Policy Review

10. The Board shall review this policy at least every three years to ensure that it remains relevant and appropriate.

Policy History

11. This policy was adopted by the Board of Retirement on February 19, 2002.
12. The policy was revised on October 27, 2003, May 16, 2005, March 24, 2008, March 22, 2010, January 18, 2011, June 18, 2012, ~~and~~ July 20, 2015 and July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

~~7/20/15~~ 7/17/17

Steve Delaney
Secretary of the Board

Date

Budget Approval Policy

Purpose and Background

1. The Board of Retirement annually adopts a budget covering the expenses of administering the retirement system. The administration expenses, as defined in Government Code Section 31580.2, incurred in any year will be charged against the earnings of the retirement fund and will not exceed 21 basis points of the actuarial accrued liability of the system.
2. The purpose of the Budget Approval Policy is to establish the process by which the OCERS annual budget is approved by the Board of Retirement.

Roles

3. The preparation and presentation of the budget is the responsibility of the Chief Executive Officer.
4. The adoption of an annual budget is the responsibility of the Board of Retirement.

Guidelines

General Provisions

5. The Chief Executive Officer will present to the Board of Retirement a proposed administrative budget for the next calendar year that supports the initiatives set out in the proposed Business Plan along with ongoing operations of the system. The Budget will be presented to the Board during the month of November.
6. The format of the proposed budget will organize expenditures by function within OCERS as follows:
   a. Executive;
   b. Investments;
   c. Communications;
   d. Member Services;
   e. Finance;
   f. Administrative Services;
   g. Disabilities;
   h. Board;
   i. Information Technology;
   j. Legal;
   k. Internal Audit; and / or
   l. Such other functions that may be adopted by OCERS in the future.
7. The budget shall be broken into three broad categories of expenditures:
   a. Salaries and Benefits;

The Salaries and Benefit category shall include salaries, overtime, fringe benefits , temporary help costs and any other costs directly related to employee and Board member compensation.

b. Services and Supplies

The Services and Supplies category for each department shall include items such as professional services, legal services, equipment expenses (other than those that are capitalized on OCERS' books as assets that will be depreciated over time and budgeted as a capital expenditure), maintenance costs, office expenses, training, and meetings & travel costs. Investment management fees (including directly billed fees, indirectly paid fees reported on investment manager statements, fees and costs for investment management that are netted in portfolio returns, foreign income tax and security lending fees) are not to be included in the annual administrative budget. These expenses are to be managed and reported in accordance with the Board of Retirement's Investment Fee Policy; and

c. Capital Projects.

The Capital Project budget category will include the current year costs for all capital asset purchases. Capital assets include items such as buildings, building improvements, vehicles, machinery, equipment, internally generated computer software, computer hardware and all other tangible or intangible assets that are used in operations, cost more than $25,000 per item, and have initial useful lives extending beyond a single reporting period.

The Chief Executive Officer, or the Assistant CEO, Finance & Internal Operations, is granted authority to transfer funds within a category.. Funds may not be moved from one category to another without approval of the Board of Retirement.

8. The value of the actuarial accrued liability (AAL) at the beginning of the budget year will be used for purposes of calculating the 21 basis point test. That value will be calculated by the system's actuary using the prior year's beginning AAL and projecting to the beginning of the budget year.
9. The Chief Executive Officer may request that the Board amend the budget for the current fiscal year by presenting reasons for the budget amendment, its expected impact, and the cost of the amendment for the remainder of the budget year.

Policy Review

10. The Board shall review this policy at least every three years to ensure that it remains relevant and appropriate.

Policy History

11. This policy was adopted by the Board of Retirement on February 19, 2002.
12. The policy was revised on October 27, 2003, May 16, 2005, March 24, 2008, March 22, 2010, January 18, 2011, June 18, 2012,July 20, 2015 and July 17, 2017.

Secretary’s Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

7/17/17

Steve Delaney
Secretary of the Board

Date

Planning Policy

Purpose and Background

1. The purpose of the OCERS Planning Policy is to provide a framework for developing the strategic direction of OCERS and the creation of both a multi-year Strategic Plan and a one-year Business Plan that document the~~those~~ goals and objectives that underlie OCERS' strategic direction. In performing the planning process, the Board of Retirement recognizes its fiduciary responsibility to provide the prompt delivery of benefits to the OCERS~~its~~ membership while maintaining or reducing costs to plan sponsors and ~~the protection of taxpayers from~~ reducing the likelihood of unpredicted ~~unpredictable~~ and wide swings in expenses.

Policy Objectives

2. The objectives of the Planning Policy are to:
    a. Ensure that ~~the~~ OCERS actively and systematically plans for the future needs of the System;
    b. Facilitate discussion and agreement between~~among~~ the Board and management on the strategic direction and business priorities of OCERS; and
    c. Facilitate the communication of ~~the~~ OCERS' Strategic Plan~~strategic direction~~ and Business Plan throughout the organization and the public.

~~Principles~~

~~3. Planning is a continuous process; an organization's Strategic and Business Plans should be revisited at least annually.~~

~~4. A strategic planning and business planning process can be effective without consuming inordinate amounts of time and effort on the part of the Board and management.~~

~~5. Effective organizations are those that, through their planning efforts, focus the majority of their available resources and energy on those few business priorities that are most critical to the long- term success of the organizations.~~

~~Strategic planning and business planning is a dynamic process and should reflect the nature of OCERS' legal and political environments, and the impacts these may have on the System's workflow and resource availability.~~

Policy Guidelines

Roles and Responsibilities

~~6.~~3. The Board will be responsible for:
    a. Identifying strategic risks, opportunities to mitigate strategic risks, and future needs of the System;
    b. Establishing ~~the~~ OCERS' strategic direction and priorities;
    c. Approving the OCERS Strategic Plan and Business Plan~~s and priorities,~~ and ensuring adequate resources are in place to support them; and

d. Monitoring the implementation of the Strategic Plan~~s~~ and Business Plan.

~~7.~~4. Management will be responsible for:

a. Identifying business risks, opportunities to mitigate business risks and future needs of the System;

b. Identifying and prioritizing business initiatives and the processes and resources necessary to achieve these initiatives;

c. Drafting the~~a~~ Strategic Plan and ~~a~~ Business Plan for the Board's consideration and approval;

d. ~~Implementation of the Plans~~Implementing the Strategic Plan and Business Plan.

~~8.~~5. Service providers and experts, such as the actuary and investment consultants, may be called upon to provide input to the Board and management regarding the identification of strategic and business risks, opportunities for risk mitigation and future needs of the System.

Strategic Planning Workshop~~Session~~

~~9.~~6. The Chief Executive Officer will organize and participate in the Strategic Planning process. ~~The~~An annual Strategic p~~P~~lanning ~~Session~~workshop will be held as~~is~~ a forum to educate and elicit the Board's views on current issues and proposed ~~OCERS'~~ strategies.

~~10.~~7. The Chief Executive Officer will structure an agenda for the Strategic p~~P~~lanning workshop~~Session agenda~~ to include the following topics, at a minimum:

a. The progress made in implementing the current year's Business Plan;

b. The continued appropriateness of ~~the~~ OCERS' strategic direction as outlined in the Strategic Plan, which will include a consideration of the following issues:

i. The needs currently ~~being~~ served by ~~the~~ OCERS;

ii. The services ~~the~~ OCERS offers; and

iii. The level of excellence ~~the~~ OCERS strives to achieve.

c. Whether OCERS is well positioned and has the resources to fulfill its strategic direction as outlined in the Strategic Plan~~, including consideration of the following:~~

~~i. Investments;~~

~~ii. Asset allocation;~~

~~iii. Funding;~~

~~iv. Demographics;~~

~~v. Operations;~~

~~vi. Cash flows;~~

~~vii. Member benefit programs; and~~

~~Fiduciary standards~~.

d. Proposed initiatives to be undertaken in the coming 12-36 month period.

~~11.~~8. Upon the conclusion of the Strategic p~~P~~lanning workshop~~Session~~, the Chief Executive Officer will summarize the Board's discussion and views on current issues and proposed ~~OCERS'~~ strategies and agendize the written summary for Board approval at its next meeting.

~~The Chief Executive Officer will confer with the Chair and Vice Chair to review and confirm the Strategic Planning Session summary before distributing the summary.~~

Formulation of the Strategic Plan and Business Plan

~~12.~~9. Following the Strategic p~~P~~lanning workshop~~Session~~, the Chief Executive Officer will formulate a Strategic Plan which will include, at a minimum, recommended initiatives to be undertaken or continued, along with the necessary supporting information and planning parameters, such as:

a. Rationale for undertaking each~~the~~ initiative including financial and non-financial benefits, impact, and consequences of not undertaking the initiative;

b. Timelines for completion;

c. Assignment of responsibilities for implementation;

d. Budget impacts;

e. Criteria for assessing the success of each~~the~~ initiative; and

f. Provisions for reporting to the Board.

~~13.~~10. Additionally, OCERS management will formulate a Business Plan ~~will be formulated~~ to provide detail as to how the Strategic Plan will be advanced in the coming calendar year.

~~14.~~11. The Chief Executive Officer will present the proposed~~newly formulated~~ Strategic Plan and Business Plan~~s~~ to the Board for approval. In approving the Plans, the Board will satisfy itself that the Plans~~they~~ are reasonable and support the mission of OCERS.

~~15.~~12. In order to ensure adequate resources to implement ~~that~~ the initiatives within the Business Plan ~~have the necessary resources to be implemented~~, the~~y~~ resources needed to implement each Business Plan initiative will be reflected in ~~the~~ OCERS' budget. If~~Should~~ the budgeted funds associated with a particular initiative fail to receive approval by the Board, the Business Plan will be amended accordingly.

~~16.~~13. Approval of the Business Plan represents an immediate commitment by the Board ~~of Retirement~~ and management to accomplish the strategic goals and objectives set forth within approved parameters. Because of the long-term nature of a multi-year Strategic Plan, adjustments and corrections are more easily accommodated over time. Modification of the Business Plan should occur only when exceptional circumstances are present.

~~17.~~14. If~~Should~~ management determines that changing circumstances will not allow it to meet a particular parameter or require that a new initiative be undertaken, the Board will be informed in a timely manner and the Strategic Plan and Business Plan~~s~~ will be adjusted accordingly.

Review of Strategic Plan and Business Plan Initiatives

~~18.~~15. The Chief Executive Officer will provide the Board with a quarterly review and any recent activities or updates of ~~for the Board the status of~~ each initiative in the Strategic Plan ~~at the annual Strategic Planning Session, regardless of whether any progress was made~~.

~~*Review of Business Plan Initiatives*~~

~~19.~~16. On a semi-annual basis the Chief Executive Officer will provide ~~review for~~ the Board with a review and any recent activities or updates ~~the status~~ of each initiative in the Business Plan~~, regardless of whether any progress was made~~.

Communications

~~20.~~17. The Strategic Plan and Business Plan~~s~~ will be posted to OCERS' website and communicated~~made available~~ to all OCERS staff and employers and to the public ~~members of the OCERS~~ on a timely basis after Board approval.

Policy Review

~~21.~~18. The Board will review this policy at least every three years to ensure that it remains relevant and appropriate.

Policy History

~~22.~~19. The Board adopted this policy on February 19, 2002.

~~23.~~20. The policy was revised on May 16, 2005, April 16, 2007 and January 18, 2011, ~~. It was~~ reviewed without changes on March 17, 2014 and revised on July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

~~3/17/14~~7/17/17

Steve Delaney
Secretary of the Board

Date

Planning Policy

Purpose and Background

1. The purpose of the OCERS Planning Policy is to provide a framework for developing the strategic direction of OCERS and the creation of both a multi-year Strategic Plan and a one-year Business Plan that document the goals and objectives that underlie OCERS' strategic direction. In performing the planning process, the Board of Retirement recognizes its fiduciary responsibility to provide the prompt delivery of benefits to the OCERS membership while maintaining or reducing costs to plan sponsors and reducing the likelihood of unpredicted and wide swings in expenses.

Policy Objectives

2. The objectives of the Planning Policy are to:
    a. Ensure that OCERS actively and systematically plans for the future needs of the System;
    b. Facilitate discussion and agreement between the Board and management on the strategic direction and business priorities of OCERS; and
    c. Facilitate the communication of OCERS' Strategic Plan and Business Plan throughout the organization and the public.

Policy Guidelines

Roles and Responsibilities

3. The Board will be responsible for:
    a. Identifying strategic risks, opportunities to mitigate strategic risks, and future needs of the System;
    b. Establishing OCERS' strategic direction and priorities;
    c. Approving the OCERS Strategic Plan and Business Plan and ensuring adequate resources are in place to support them; and
    d. Monitoring the implementation of the Strategic Plan and Business Plan.
4. Management will be responsible for:
    a. Identifying business risks, opportunities to mitigate business risks and future needs of the System;
    b. Identifying and prioritizing business initiatives and the processes and resources necessary to achieve these initiatives;
    c. Drafting the Strategic Plan and Business Plan for the Board's consideration and approval;
    d. Implementing the Strategic Plan and Business Plan.

5. Service providers and experts, such as the actuary and investment consultants, may be called upon to provide input to the Board and management regarding the identification of strategic and business risks, opportunities for risk mitigation and future needs of the System.

Strategic Planning Workshop

6. The Chief Executive Officer will organize and participate in the Strategic Planning process. An annual Strategic planning workshop will be held as a forum to educate and elicit the Board's views on current issues and proposed strategies.
7. The Chief Executive Officer will structure an agenda for the Strategic planning workshop to include the following topics, at a minimum:
   a. The progress made in implementing the current year's Business Plan;
   b. The continued appropriateness of OCERS' strategic direction as outlined in the Strategic Plan, which will include a consideration of the following issues:
      i. The needs currently served by OCERS;
      ii. The services OCERS offers; and
      iii. The level of excellence OCERS strives to achieve.
   c. Whether OCERS is well positioned and has the resources to fulfill its strategic direction as outlined in the Strategic Plan
   d. Proposed initiatives to be undertaken in the coming 12-36 month period.
8. Upon the conclusion of the Strategic planning workshop, the Chief Executive Officer will summarize the Board's discussion and views on current issues and proposed strategies and agendize the written summary for Board approval at its next meeting.

Formulation of the Strategic Plan and Business Plan

9. Following the Strategic planning workshop, the Chief Executive Officer will formulate a Strategic Plan which will include, at a minimum, recommended initiatives to be undertaken or continued, along with the necessary supporting information and planning parameters, such as:
   a. Rationale for undertaking each initiative including financial and non-financial benefits, impact, and consequences of not undertaking the initiative;
   b. Timelines for completion;
   c. Assignment of responsibilities for implementation;
   d. Budget impacts;
   e. Criteria for assessing the success of each initiative; and
   f. Provisions for reporting to the Board.
10. Additionally, OCERS management will formulate a Business Plan to provide detail as to how the Strategic Plan will be advanced in the coming calendar year.

11. The Chief Executive Officer will present the proposed Strategic Plan and Business Plan to the Board for approval. In approving the Plans, the Board will satisfy itself that the Plans are reasonable and support the mission of OCERS.
12. In order to ensure adequate resources to implement the initiatives within the Business Plan, the resources needed to implement each Business Plan initiative will be reflected in OCERS' budget. If the budgeted funds associated with a particular initiative fail to receive approval by the Board, the Business Plan will be amended accordingly.
13. Approval of the Business Plan represents an immediate commitment by the Board and management to accomplish the strategic goals and objectives set forth within approved parameters. Because of the long-term nature of a multi-year Strategic Plan, adjustments and corrections are more easily accommodated over time. Modification of the Business Plan should occur only when exceptional circumstances are present.
14. If management determines that changing circumstances will not allow it to meet a particular parameter or require that a new initiative be undertaken, the Board will be informed in a timely manner and the Strategic Plan and Business Plan will be adjusted accordingly.

Review of Strategic Plan and Business Plan Initiatives

15. The Chief Executive Officer will provide the Board with a quarterly review and any recent activities or updates of each initiative in the Strategic Plan.
16. On a semi-annual basis the Chief Executive Officer will provide the Board with a review and any recent activities or updates of each initiative in the Business Plan.

Communications

17. The Strategic Plan and Business Plan will be posted to OCERS' website and communicated to all OCERS staff and employers and to the public on a timely basis after Board approval.

Policy Review

18. The Board will review this policy at least every three years to ensure that it remains relevant and appropriate.

Policy History

19. The Board adopted this policy on February 19, 2002.
20. The policy was revised on May 16, 2005, April 16, 2007 and January 18, 2011, reviewed without changes on March 17, 2014 and revised on July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

7/17/17

Steve Delaney
Secretary of the Board

Date

ORANGE COUNTY
OCERS
EMPLOYEES RETIREMENT SYSTEM

Quiet Period Policy

Purpose and Background

1. The Quiet Period Policy is intended to establish guidelines by which Board~~ and Investment Committee~~ Members and OCERS staff ~~will~~ are permitted to communicate, during the process leading to an award of any contract by OCERS, with any party financially interested in the contract~~Named Service Providers[1] during a selection process~~.

Policy Objectives

2. The objectives of the policy are to ensure that:

   a. Potential s~~S~~ervice p~~P~~roviders competing for a contract with OCERS (also referred to as candidates)~~to become a Named Service Provider~~ have equal access to information regarding the search parameters and selection and award processes;

   b. Communications related to the search, selection and award of the contract are consistent and accurate; and

   c. The search, selection and contract award processes ~~of selecting Named Service Providers is~~are efficient, diligent, and fair.

Policy Guidelines

3. The following guidelines will apply ~~be instituted~~ during the~~a search~~ process leading to an award of any contract by OCERS~~for a Named Service Provider~~:

   a. A quiet period will commence upon the release/publication of a solicitation for a contract with OCERS and~~latter of approval of: A) Board or Investment Committee Action; B) Committee approval of a profile; and C) Publication of the profile. The period~~ will end when~~once~~ a contract is~~has been~~ signed~~ with a Named Service Provider~~;

   b. To help prevent inadvertent violations of this policy, the CEO (or his or her designee) will ensure that for every solicitation, the i~~I~~nitiation, continuation and conclusion of the quiet period is~~shall be~~ (i) communicated to Board Members and OCERS staff, (ii) publicly communicated, and (iii) published on OCERS' website~~ to prevent inadvertent violations~~;

   c. Except as provided in section h., below, during the quiet period, ~~All~~ Board ~~and Investment Committee~~ Members~~,~~ and OCERS staff ~~not directly involved in the search process,~~ shall not knowingly communicate~~refrain from communicating~~ with any party financially interested in any prospective contract with OCERS~~Service Provider candidates~~ regarding the contract, the services to be provided under the contract or the selection process~~any product or service~~

~~[1] Named Service Providers, as defined in OCERS' Service Provider Selection Policy, include the consulting actuary, actuarial auditor, general investment consultant, alternative investments consultant, real estate investment consultant, fiduciary counsel, custodian, securities lending manager, financial auditor and investment managers.~~

~~related to the search offered by the candidate throughout the quiet period, unless authorized by the Board of Retirement or the Investment Committee~~;

d. During~~Throughout~~ the quiet period, if any Board ~~or Investment Committee~~ Member is contacted by a party financially interested in a prospective contract with OCERS~~candidate~~, the Board ~~or Committee~~ Member shall refer the party~~candidate~~ to the OCERS~~'~~ c~~C~~onsultant or staff member identified as the contact person(s) in the solicitation document~~directly involved in the search process~~;

e. Any~~All~~ authority related to a~~the~~ search ~~process~~ conducted by the Board shall be exercised solely by the Board ~~or Investment Committee~~ as a whole, and not by individual Board ~~or Committee~~ Members;

f. Any~~All~~ information related to a~~the~~ search ~~process~~conducted by the Board shall be communicated by ~~the~~ OCERS~~'~~ c~~C~~onsultants and staff to the Board ~~or Investment Committee~~ as a whole, and not to individual Board Members; ~~and~~

~~When the quiet period is in effect for any ongoing searches, it will be communicated on OCERS' website;~~

g. The quiet period does not prevent Board approved due diligence or client conference attendance; however discussions related to the pending solicitation~~selection~~ shall be avoided during those activities;

h. The quiet period does not apply to communications ~~prevent Board or Committee Members from contact with candidates~~ that are:

(i) part of the process expressly described in the solicitation;

(ii) part of a noticed Board meeting;

(iii) related to services currently provided by the candidate under an existing contract with OCERS;

(iv) incidental, exclusively social and that do not involve OCERS or its business; or

(v) within the scope of the Board or staff member's private business or public office wholly unrelated to OCERS and that do not involve OCERS or its business~~professional activities outside of OCERS, however discussions related to the pending selection shall be avoided during those activities~~;

~~h.~~i. The provisions of this policy will ~~apply to Named Service Provider candidates throughout the quiet period, and shall~~ be communicated to candidates in ~~conjunction with any~~ the solicitation document and ~~RFP or RFI requiring the~~ candidates will be required to acknowledge the receipt and requirements of the policy; and

~~i.~~j. Any~~Named Service Provider~~ candidate who knowingly violates this policy will~~shall~~ be disqualified from the~~a~~ search process ~~for a knowing violation of this policy~~.

Policy Review

4. The Board of Retirement will review this policy at least every three (3) years to ensure that it remains relevant and appropriate.

Policy History

5. The Board of Retirement adopted this policy on July 17, 2006.
6. The policy was revised on April 16, 2007, May 17, 2011 December 19, 2011, ~~and~~ October 20, 2014 and July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

~~10/20/14~~7/17/2017

Steve Delaney
Secretary of the Board

Date

OCERS Board Policy

Quiet Period Policy

Purpose and Background

1. The Quiet Period Policy is intended to establish guidelines by which Board Members and OCERS staff are permitted to communicate, during the process leading to an award of any contract by OCERS, with any party financially interested in the contract.

Policy Objectives

2. The objectives of the policy are to ensure that:

   a. Potential service providers competing for a contract with OCERS (also referred to as candidates) have equal access to information regarding the search parameters and selection and award processes;

   b. Communications related to the search, selection and award of the contract are consistent and accurate; and

   c. The search, selection and contract award processes are efficient, diligent, and fair.

Policy Guidelines

3. The following guidelines will apply during the process leading to an award of any contract by OCERS:

   a. A quiet period will commence upon the release/publication of a solicitation for a contract with OCERS and will end when a contract is signed;

   b. To help prevent inadvertent violations of this policy, the CEO (or his or her designee) will ensure that for every solicitation, the initiation, continuation and conclusion of the quiet period is (i) communicated to Board Members and OCERS staff, (ii) publicly communicated, and (iii) published on OCERS' website;

   c. Except as provided in section h., below, during the quiet period, Board Members and OCERS staff shall not knowingly communicate with any party financially interested in any prospective contract with OCERS regarding the contract, the services to be provided under the contract or the selection process;

   d. During the quiet period, if any Board Member is contacted by a party financially interested in a prospective contract with OCERS, the Board Member shall refer the party to the OCERS consultant or staff member identified as the contact person(s) in the solicitation document;

   e. Any authority related to a search conducted by the Board shall be exercised solely by the Board as a whole, and not by individual Board Members;

   f. Any information related to a search conducted by the Board shall be communicated by OCERS consultants and staff to the Board as a whole, and not to individual Board Members;

   g. The quiet period does not prevent Board approved due diligence or client conference attendance; however discussions related to the pending solicitation shall be avoided during those activities;

h. The quiet period does not apply to communications that are:
   (i) part of the process expressly described in the solicitation;
   (ii) part of a noticed Board meeting;
   (iii) related to services currently provided by the candidate under an existing contract with OCERS;
   (iv) incidental, exclusively social and that do not involve OCERS or its business; or
   (v) within the scope of the Board or staff member's private business or public office wholly unrelated to OCERS and that do not involve OCERS or its business;

i. The provisions of this policy will be communicated to candidates in the solicitation document and candidates will be required to acknowledge the receipt and requirements of the policy; and

j. Any candidate who knowingly violates this policy will be disqualified from the search process.

Policy Review

4. The Board of Retirement will review this policy at least every three (3) years to ensure that it remains relevant and appropriate.

Policy History

5. The Board of Retirement adopted this policy on July 17, 2006.

6. The policy was revised on April 16, 2007, May 17, 2011 December 19, 2011, October 20, 2014 and July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

Steve Delaney

7/17/2017

Steve Delaney
Secretary of the Board

Date

Disability Retirement Reemployment Policy

Purpose and Background

1. The purpose of this policy is to encourage the reemployment of disability retirement recipients in alternate positions under Sections 31725.5, 31725.6 and 31725.65 of the California Government Code and provide staff with a method for delivering benefits and related services to those members and their beneficiaries and for managing the assets of the system in a prudent manner.

Policy Objectives

2. The objectives of this policy are to:
   a. Provide a method by which the Board of Retirement can establish that a disabled member may be medically qualified to perform another position with an OCERS' plan sponsor;
   b. Facilitate communication between OCERS, disabled members and plan sponsors to identify those members who will engage in a reemployment plan and to identify available positions meeting the member's medical criteria;
   c. Provide guidance to OCERS' staff and the reemploying plan sponsor to ensure appropriate treatment during the reemployment period and upon subsequent retirement.

Policy Guidelines

3. The Board adopts the following approach for all disability retirement recipients who become reemployed under Sections 31725.5, 31725.6 or 31725.65 of the California Government Code:
   a. Reemployed members will be considered active members of the retirement system for all purposes except death benefit entitlement;
   b. Reemployed members will not be entitled to a second disability retirement;
   c. Reemployed members will receive a supplemental disability retirement allowance, which will be the difference between the disabled job salary and the alternate job salary. The supplemental disability allowance will not exceed the amount of the member's original disability retirement allowance, as adjusted by Cost of Living increases;
   d. Reemployed members will pay contributions to OCERS and earn service credit;
   e. Reemployed members will have their disability retirement allowances recalculated at the time of retirement from the alternate job.

Policy Review

4. The Board will review this policy at least every three years to ensure that it remains relevant and appropriate. In the event of legislative changes to the pertinent sections addressed in this policy, the Board will review the policy as appropriate.

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Disability Retirement Reemployment Policy

Policy History

5. The Board adopted this policy on April 17, 2006. The Board reviewed this policy on August 24, 2009~~, and on~~ November 19, 2012 and July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

Steve Delaney ~~11/19/12~~7/17/17

Steve Delaney
Secretary of the Board

Date

Disability Retirement Reemployment Policy

Purpose and Background

1. The purpose of this policy is to encourage the reemployment of disability retirement recipients in alternate positions under Sections 31725.5, 31725.6 and 31725.65 of the California Government Code and provide staff with a method for delivering benefits and related services to those members and their beneficiaries and for managing the assets of the system in a prudent manner.

Policy Objectives

2. The objectives of this policy are to:

   a. Provide a method by which the Board of Retirement can establish that a disabled member may be medically qualified to perform another position with an OCERS' plan sponsor;

   b. Facilitate communication between OCERS, disabled members and plan sponsors to identify those members who will engage in a reemployment plan and to identify available positions meeting the member's medical criteria;

   c. Provide guidance to OCERS' staff and the reemploying plan sponsor to ensure appropriate treatment during the reemployment period and upon subsequent retirement.

Policy Guidelines

3. The Board adopts the following approach for all disability retirement recipients who become reemployed under Sections 31725.5, 31725.6 or 31725.65 of the California Government Code:

   a. Reemployed members will be considered active members of the retirement system for all purposes except death benefit entitlement;

   b. Reemployed members will not be entitled to a second disability retirement;

   c. Reemployed members will receive a supplemental disability retirement allowance, which will be the difference between the disabled job salary and the alternate job salary. The supplemental disability allowance will not exceed the amount of the member's original disability retirement allowance, as adjusted by Cost of Living increases;

   d. Reemployed members will pay contributions to OCERS and earn service credit;

   e. Reemployed members will have their disability retirement allowances recalculated at the time of retirement from the alternate job.

Policy Review

4. The Board will review this policy at least every three years to ensure that it remains relevant and appropriate. In the event of legislative changes to the pertinent sections addressed in this policy, the Board will review the policy as appropriate.

Disability Retirement Reemployment Policy

Policy History

5. The Board adopted this policy on April 17, 2006. The Board reviewed this policy on August 24, 2009, November 19, 2012 and July 17, 2017.

Secretary's Certificate

I, the undersigned, the duly appointed Secretary of the Orange County Employees Retirement System, hereby certify the adoption of this policy.

	7/17/17
Steve Delaney Secretary of the Board	Date

C-6

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: July 3, 2017

TO: Members of the Board of Retirement

FROM: David James, CPA, Director of Internal Audit

SUBJECT: **AUDIT COMMITTEE OUTCOMES FROM JUNE 9, 2017 MEETING**

Recommendation

The Audit Committee recommends that the Board of Retirement approves:
(1) Receive and file the presentation of OCERS' Investment Fee Report
(2) Receive and file the review of OCERS' Investment Wire Transfer Process report
(3) Receive and file the presentation of New York State Retirement Fund's Scandal and OCERS' Policies
(4) Approve the selection of Cheiron as OCERS' Actuarial Auditor for the 2016 Actuarial Valuation

Background/Discussion

Item A. *2016 Audited Financial Statements and Comprehensive Annual Financial Reports* and Item B. *GASB 68 Valuation and Audit Report* were among the Individual Items presented to the Board at the Board meeting on June 12, 2017.

For Item A, the Board voted to accept the recommendations presented to the Audit Committee during the meeting held on June 9, 2017:

1. Approve OCERS' audited financial statements for the year ended December 31, 2016.
2. Direct staff to finalize OCERS' 2016 Comprehensive Annual Financial Report (CAFR).
3. Approve the Governmental Accounting Standards Board (GASB) Statement 67 Actuarial Valuation as of December 31, 2016.
4. Receive and file Macias, Gini & O'Connell LLP's (MGO) "OCERS' Report to the Audit Committee for the Year Ended December 31, 2016" and their "Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards."

For Item B, the Board voted to accept the recommendations presented to the Audit Committee during the meeting held on June 9, 2017:

1. Approve OCERS' audited Schedule of Allocated Pension Amounts by Employer as of and for the Year Ended December 31, 2016.
2. Approve the Governmental Accounting Standards Board (GASB) Statement 68 Actuarial Valuation as of December 31, 2016 for distribution to employers.

C. DIRECTIVE TO REVIEW OCERS INVESTMENT FEE REPORT

A presentation was made by CEO Steve Delaney, Investment Analyst Stina Walander-Sarkin, and Director of Investment Operations Shanta Chary. Further consideration of this item will be presented at a future Audit Committee meeting.

Memorandum

Recommendation: The Committee voted to receive and file the presentation.

D. REVIEW OF OCERS' INVESTMENT WIRE TRANSFER PROCESS

A presentation of the audit report was made by David James, Director of Internal Audit. The report concluded that internal controls over the wire transfer process are adequate, and had no findings or recommendations.

Recommendation: The Committee voted to receive and file the Review of OCERS' Investment Wire Transfer Process.

E. NEW YORK STATE COMMON RETIREMENT FUND'S SCANDAL AND OCERS' POLICIES

A presentation was made by David James, Director of Internal Audit, describing the fraud that occurred at the fund, the internal controls at the fund to address this type of risk, and the policies and procedures OCERS has to mitigate the risks of inappropriate gifts to staff and this type of fraud.

Recommendation: The Committee voted to receive and file the report New York State Common Retirement Fund's Scandal and OCERS' Policies.

I. ACTUARIAL AUDIT RFP FINALISTS' PRESENTATIONS

Separate presentations were made by Daniel Wade and Mark Olleman of Milliman and by Anne Harper and Graham Schmidt of Cheiron to the Committee. Both firms took questions from the Committee.

Recommendation: The Committee voted to recommend to the Board of Retirement at their regularly scheduled meeting on July 17, 2017 the hiring of Cheiron as OCERS' actuarial auditor for OCERS' 2016 actuarial valuation.

Because of time constraints, the Audit Committee voted to move consideration of the following three items to the next Audit Committee meeting, scheduled for July 6, 2017.

F. Hotline Update
G. Audit Committee Inquiry on Administrative Time in Internal Audit
H. Status of Internal Audits and Audit Projects.

Submitted by:

D.J. - Approved

David James, CPA
Director of Internal Audit

Memorandum

C-7

Memorandum

DATE: July 5, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **QUIET PERIOD – NON-INVESTMENT CONTRACTS**

Recommendation

Receive and file.

Background/Discussion – Options

1. Quiet Period Policy Guidelines – Named Service Providers

The following guidelines established by the Quiet Period Policy, section 3.c, will govern a search process for Named Service Providers:

"All Board and Investment Committee Members, and staff not directly involved in the search process, shall refrain from communicating with Service Provider candidates regarding any product or service related to the search offered by the candidate throughout the quiet period,…"

2. Quiet Period Guidelines – Non-Named Service Providers

There are no policy guidelines regarding a quiet period for non-Named Service Providers. However, the following language is included in all distributed RFP's:

"From the date of issuance of this RFP until the selection of one or more respondents is completed and announced, respondents are not permitted to communicate with any OCERS staff member or Board Members regarding this procurement, except through the Point of Contact named herein. Respondents violating the communications prohibition may be disqualified at OCERS' discretion. Respondents having current business with OCERS must limit their communications to the subject of such business."

Distributed RFP's

The RFP's noted below are currently outstanding and are subject to the quiet period until such time as a contract(s) is finalized.

- An RFP for Actuarial Auditor services was sent out March 1st. Pending Board of Retirement approval to go forward with recommended vendor.
- An RFP for Securities Litigation Monitoring services was distributed March 15th. Received 26 responses. Narrowed candidates to final seven (7). Currently evaluating follow up questions and finalist reference checks.
- Preparing to send out an RFP for Obituary and Demographic verification services in July.

Memorandum

- Preparing an RFP to be sent in July for property management services for the building located at 2223 E. Wellington Avenue, Santa Ana, CA 92701.

Submitted by:

Steve Delaney
Chief Executive Officer

C-8

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Gina M. Ratto, General Counsel

SUBJECT: **LEGISLATIVE UPDATE**

Recommendation

Receive and file.

Background/Discussion

The California Legislature reconvened on January 4, 2017 to commence the first year of the 2017-2018 legislative session. A comprehensive list and description of the bills that staff is monitoring is attached. Below is a brief summary of the bills that may be of greater interest to the Board. **Updates and new additions to the previous report are indicated in underlined, bold text.**

SACRS Support Bills

SACRS is currently supporting two bills:

- **SB 671 (Moorlach)** would make technical amendments to clarify the section of the CERL that permits a county and district to make an advance payment of all or part of the county's or district's estimated annual contributions to the retirement fund (including OCERS); **(STATUS: Enrolled June 30, 2017.)**
- **AB 526 (Cooper)** would make the Sacramento County Employees Retirement System a district under the CERL. **(STATUS: In committee; hearing postponed by committee.)**

Bills That Would Amend the CERL or Other Laws That Apply to OCERS

- **ACA 15 (Brough)** would prohibit a government employer from enhancing employee pension benefits, as defined, without approval by the voters of the jurisdiction, and would prohibit a government employer from enrolling a new government employee, as defined, in a defined benefit pension plan without approval by the voters of the jurisdiction. The measure also would prohibit a government employer from paying more than 1/2 of the total cost of retirement benefits, as defined, for new government employees without approval by the voters of the jurisdiction. The measure would prohibit retirement boards from imposing charges or other financial conditions on a government employer that proposes to close a defined benefit pension plan to new members unless the voters or the sponsoring government employer approve those charges or conditions. The measure would require challenges to the legality of actions taken by a government employer or a retirement board to comply with its provisions to be brought in state or federal courts. The measure would prohibit its provisions from being interpreted to modify or limit disability benefits provided for government employees or death benefits for families of government employees, even if provided as part of a retirement benefits system, or from requiring voter approval of disability or death benefits. The measure would prescribe various requirements and prohibitions regarding its interpretation and the effect of any other competing measures, among other things. **(STATUS: In Assembly, pending referral.)**

- **AB 283 (Cooper)** would amend the CERL to require, for purposes of determining permanent incapacity of certain peace officers, that those members be evaluated by the existing procedure established by the retirement system to determine if they can perform all of the usual and customary duties of a peace officer. **(STATUS: In committee; hearing postponed by committee.)**
- **SCA 8 (Moorlach)** would amend the State Constitution to permit a government employer to reduce retirement benefits that are based on work not yet performed by an employee regardless of the date that the employee was first hired. **(STATUS: Set for first hearing on June 26; hearing canceled at the author's request.)**
- **SCA 10 (Moorlach)** would prohibit a government employer from providing public employees any retirement benefit increase until that increase is approved by a $^{2}/_{3}$ vote of the electorate of the applicable jurisdiction and that vote is certified. **(STATUS: Set for first hearing on June 26; hearing canceled at the author's request.)**

Other Bills of Interest

- **AB 530 (Cooper)** would expand the jurisdiction of the Public Employment Relations Board to include resolving disputes and statutory duties and rights of persons who are peace officers, as defined. **(STATUS: In committee.)**
- **AB 551 (Levine)** would extend the prohibition of the Political Reform Act, which prevents elected and other local officials, for a period of one year after they leave their positions, from appearing before their former local government agencies for the purpose of influencing administrative or legislative action, to independent contractors of the local government agency. **(STATUS: In committee.)**
- **AB 1025 (Rubio)** would repeal Government Code section 1099 which currently prohibits a public officer, including an appointed or elected member of a governmental board, from simultaneously hold two public offices that are incompatible. **(STATUS: In committee.)**
- **AB 1479 (Bonta)** would require state and local agencies to designate a person or office to act as the agency's custodian of records who is responsible for responding to any request made pursuant to the California Public Records Act (CPRA) and any inquiry from the public about a decision by the agency to deny a request for records. It would also authorize a court to assess a civil penalty against the agency in an amount not less than $1,000, nor more than $5,000, for violations of the CPRA. **(STATUS: In committee.)**
- **SB 302 (Mendoza)** would clarify existing law to specifically require all property tax revenues of Orange County attributable to a rate imposed for fire protection purposes prior to June 6, 1978 (the effective date of Proposition 13) to be allocated by Orange County to the Orange County Fire Authority. **(STATUS: In committee.)**

Bills that apply to CalPERS and/or CalSTRS Only:

- **AB 679 (Cooley)** would require CalPERS to take a security interest in specific types of collateral of at least 102% to secure CalPERS' securities lending agreements. **(STATUS: In committee.)**
- **SB 32 (Moorlach)** would create the Citizens' Pension Oversight Committee to serve in an advisory role to the CalPERS and CalSTRS Boards of Administration, and would require the committee to annually review and report to the public the actual pension costs and obligations of CalPERS and CalSTRS. **(STATUS: Failed passage in committee; reconsideration granted.)**
- **SB 525 (Pan)** would redefine the terms "disability" and "incapacity for performance of duty" as used in the Public Employees Retirement Law to specify that the duration of the disability or incapacity must be expected to last at least 12 consecutive months or result in death. **(STATUS: In committee.)**
- **SB 560 (Allen)** would require CalPERS and CalSTRS to consider financial climate risk, as defined, in their management of any funds they administer, and to include in their CAFRs the financial climate risks of their investments. **(STATUS: In committee.)**

Divestment Proposals (CalPERS and CalSTRS Only)

- **AB 20 (Kalra)** would prohibit CalPERS and CalSTRS from investing in companies constructing or funding the construction of the Dakota Access Pipeline. **(STATUS: In committee.)**
- **AB 946 (Ting)** would prohibit new investments and require liquidation of existing investments of CalPERS and CalSTRS in border wall construction companies. **(STATUS: In committee.)**
- **AB 1597 (Nazarian)** would prohibit new investments and require liquidation of existing investments of CalPERS and CalSTRS in investment vehicles issued, owned, controlled or managed by the government of Turkey. **(STATUS: In committee.)**

Attachment

Submitted by:

Gina M. Ratto

Gina M. Ratto
General Counsel

2017-2018 LEGISLATIVE SESSION BILLS OF INTEREST
LEGISLATIVE UPDATE (JULY 17, 2017) – ATTACHMENT

ACA 15 (Brough) would prohibit a government employer from enhancing employee pension benefits, as defined, without approval by the voters of the jurisdiction, and would prohibit a government employer from enrolling a new government employee, as defined, in a defined benefit pension plan without approval by the voters of the jurisdiction. The measure also would prohibit a government employer from paying more than 1/2 of the total cost of retirement benefits, as defined, for new government employees without approval by the voters of the jurisdiction. The measure would prohibit retirement boards from imposing charges or other financial conditions on a government employer that proposes to close a defined benefit pension plan to new members unless the voters or the sponsoring government employer approve those charges or conditions. The measure would require challenges to the legality of actions taken by a government employer or a retirement board to comply with its provisions to be brought in state or federal courts. The measure would prohibit its provisions from being interpreted to modify or limit disability benefits provided for government employees or death benefits for families of government employees, even if provided as part of a retirement benefits system, or from requiring voter approval of disability or death benefits. The measure would prescribe various requirements and prohibitions regarding its interpretation and the effect of any other competing measures, among other things.

AB 20 (Kalra): *This bill applies only to CalPERS and CalSTRS*. This bill would prohibit the boards of administration of CalPERS and CalSTRS on or after January 1, 2018, from making additional investments or renewing investments in a company constructing or funding the construction of the Dakota Access Pipeline, and would require the boards to liquidate their investments in these companies on or before July 1, 2018.

AB 168 (Eggman): Existing law imposes various restrictions on employers with respect to applicants for employment. This bill would prohibit an employer, including state and local government employers, from seeking salary history information about an applicant for employment, except as otherwise provided.

AB 241 (Dababneh): Existing law requires a person or business conducting business in California and any state or local agency, as defined, that owns or licenses computerized data that includes personal information, as defined, to disclose a breach in the security of the data to a resident of California whose unencrypted personal information was, or is reasonably believed to have been, acquired by an unauthorized person in the most expedient time possible and without unreasonable delay, as specified. Existing law requires a person or business, if it was the source of the breach, to offer to provide appropriate identity theft prevention and mitigation services at no cost to the person whose information was or may have been breached if the breach exposed or may have exposed the person's social security number, driver's license number, or California identification card number. This bill would require a state or local agency, if it was the source of the breach, to also offer to provide appropriate identity theft prevention and mitigation services at no cost to a person whose information was or may have been breached if the breach exposed or may have exposed the person's social security number, driver's license number, or California identification card number.

AB 283 (Cooper): The CERL currently provides that a member who is permanently incapacitated shall be retired for disability despite age if, among other conditions, the member's incapacity is a result of injury or disease arising out of and in the course of the member's appointment, and that employment contributes substantially to that incapacity or the member has completed five years of service and not waived retirement in respect to the particular incapacity or aggravation thereof, as specified. The bill would amend the CERL to require, for purposes of determining permanent incapacity of certain peace officers, that those members be evaluated by the existing procedure established by the retirement system to determine if they can perform all of the usual and customary duties of a peace officer.

AB 512 (Rodriguez): *This bill applies only to CalPERS*. Existing law, until January 1, 2018, provides a state safety member of CalPERS who retires for industrial disability a retirement benefit equal to the greatest amount resulting from three possible calculations. In this regard, the benefit amount is based on an actuarially reduced service retirement, a service retirement allowance, if the member is qualified, or 50% of his or her final compensation, plus an annuity purchased with his or her accumulated contributions, if any. This bill would delete the repeal of these provisions and make them indefinite.

AB 526 (Cooper). This bill would make the Sacramento County Employees Retirement System a district under the CERL.

AB 530 (Cooper): Current law requires the Public Employment Relations Board (PERB) to enforce and apply rules adopted by a public agency concerning unit determinations, representation, recognition, and elections. It also requires specified complaints to be processed as an unfair practice charge by the PERB. Current law does not apply these provisions to persons who are peace officers, as defined. AB 530 would expand the jurisdiction of the PERB to include resolving disputes and statutory duties and rights of persons who are peace officers, as defined.

AB 551 (Levine). The Political Reform Act of 1974 prohibits, for a period of one year after an official leaves his or her position, elected and other local officials who held positions with a local government agency from acting as agents or attorneys for, or otherwise representing, for compensation, any other person, by appearing before, or communicating with, that local government agency, or any committee, subcommittee, or present member of that local government agency, or any officer or employee of the local government agency, if the appearance or communication is made for the purpose of influencing administrative or legislative action or influencing any action or proceeding involving the issuance, amendment, awarding, or revocation of a permit, license, grant, or contract, or the sale or purchase of goods or property. This bill would specify that the one-year prohibition also applies to independent contractors of a local government agency or a public agency who are appearing or communicating on behalf of that agency.

AB 679 (Cooley). *This bill applies only to CalPERS*. Existing law authorizes CalPERS to enter into securities loan agreements whereby a legal owner (lender) agrees to lend specific marketable corporate or government securities for no more than one year, and the lender retains the right to collect from the borrower all dividends, interest, premiums, rights and other distributions. This bill would require a borrower with respect to any security loan agreement to provide CalPERS with collateral in the form of cash, US government debt securities, or other specified forms of collateral, and would require that the amount of the collateral be at least 102% of the market value of the loaned securities.

AB 946 (Ting). *This bill applies only to CalPERS and CalSTRS*. This bill would prohibit the boards of administration of CalPERS and CalSTRS from making new investments or renewing existing investments in a border wall construction company, defined as any company that contracts or subcontracts to build, maintain, or provide material for President Trump's Border Wall. The bill would require the boards to liquidate investments in a border wall construction company within 12 months of the company contracting or subcontracting to provide work or material for a border wall, as defined.

AB 1025 (Rubio). This bill would repeal Government Code section 1099. Government Code section 1099 prohibits a public officer, including an appointed or elected member of a governmental board, from simultaneously holding two public offices that are incompatible, and prescribes certain circumstances that result in offices being incompatible, unless the simultaneous holding of the particular offices is compelled or expressly authorized by law.

AB 1479 (Bonta). This bill would require state and local agencies to designate a person or office to act as the agency's custodian of records who is responsible for responding to any request made pursuant to the California Public Records Act and any inquiry from the public about a decision by the agency to deny a request for records. The bill would also authorize a court that finds that an agency or the custodian improperly withheld from the public, public records which were clearly subject to public disclosure, unreasonably delayed providing the contents of a record subject to disclosure in whole or in part, assessed an unreasonable or unauthorized fee upon a requester, or otherwise did not act in good faith to comply with these provisions, to assess a civil penalty against the agency in an amount not less than $1,000, nor more than $5,000.

AB 1597 (Nazarian). *This bill applies only to CalPERS and CalSTRS*. This bill would prohibit the boards of administration of CalPERS and CalSTRS from making additional or new investments, or renewing existing investments, in an investment vehicle in Turkey that is issued by the government of Turkey or that is owned, controlled, or managed by the government of Turkey. The bill would also require the boards to liquidate existing investments in Turkey in these types of investment vehicles within six months of the passage of a federal law imposing sanctions on Turkey.

SB 24 (Portantino). The Political Reform of Act of 1974 requires persons holding specified public offices to file disclosures of economic interests, including investments, real property interests, and income within specified periods of assuming or leaving office and annually while holding office. The act requires the disclosures to include a statement indicating, within a specified value range, the fair market value of investments or interests in real property and the aggregate value of income received from each reportable source. This bill would revise the dollar amounts associated with these ranges to provide for eight total ranges of fair market value of investments and real property interests and ten total ranges of aggregate value of income.

SB 32 (Moorlach): *This bill applies only to CalPERS and CalSTRS*. The bill would create the Citizens' Pension Oversight Committee to serve in an advisory role to the boards of administration of CalPERS and CalSTRS. It would require the committee, on or before January 1, 2019 and annually thereafter to review the actual pension costs and obligations of CalPERS and CalSTRS and report on these costs and obligation to the public.

SB 302 (Mendoza): This bill would clarify existing law to specifically require all property tax revenues of Orange County attributable to a rate imposed for fire protection purposes prior to June 6, 1978 (the effective date of Proposition 13) to be allocated by Orange County to the Orange County Fire Authority (as the agency formed for the purpose of providing fire protection in Orange County). These funds are also known as structural fire fund property taxes, and the bill would appear to codify the holding of the court in *Orange County Fire Authority v. County of Orange*, which stated that any use of structural fire finds for any purpose other than fire protection is prohibited. The bill is supported by the Orange County Professional Firefighters Association, Local 3631.

SB 371 (Moorlach): The Meyers-Milias-Brown Act requires the governing body of a local public agency to meet and confer in good faith regarding wages, hours, and other terms and conditions of employment with representatives of a recognized employee organization. This bill would prohibit an individual who will be directly or indirectly affected by an MOU between a local public agency and a recognized public employee organization from representing the public agency in negotiations with the recognized public employee organization.

SB 525 (Pan): *This bill applies only to CalPERS*. Under existing law applicable CalPERS (the PERL), a member who is incapacitated is required to be retired for disability in accordance with certain provisions if that member meets specified requirements concerning service. Under the PERL, the terms "disability" and "incapacity for performance of duty" are defined, as a basis of retirement, to mean disability of permanent or extended and uncertain duration, as determined by the board, except with respect to certain local safety members. This bill would redefine those terms to specify that the duration of the disability or incapacity must be expected to last at least 12 consecutive months or result in death.

SB 560 (Allen): *This bill applies only to CalPERS and CalSTRS*. This bill would require the boards of administration of CalPERS and CalSTRS to consider financial climate risk in their management of any funds they administer and to include in their comprehensive annual financial reports, starting on January 1, 2020, the financial climate risks of their investments, including alignment of their portfolios with a specified climate agreement and California climate policy goals, the value at risk if these goals are achieved, and the exposure of the portfolios to long-term risks. "Financial climate risk" is defined by the bill to mean material financial risk posed to an investment by the effects of the changing climate including but not limited to intense storms, rising sea levels, higher global temperatures, economic damages from carbon emissions, and other financial risks due to public policies to address climate change, shifting consumer attitudes, changing economics of traditional carbon-intense industries, and other transition risks.

SB 571 (Pan). Existing federal law prescribes requirements for different types of tax-qualified retirement plans that permit employees to contribute portions of their pretax wages to individual retirement accounts or that provide for deferred compensation. This bill would authorize a state or local public employer participating in an employee supplemental retirement savings plan, defined to include specified deferred compensation plans and payroll deduction individual retirement account plans, to make a deduction from the wages or compensation of an employee for contributions attributable to automatic enrollment and automatic escalation in the employee retirement plan. The bill would require an employer that provides for automatic enrollment in a supplemental retirement savings plan to provide a default investment option and default investment plan that meets a variety of specified criteria, including providing employees an opportunity to opt out or withdraw. The bill would place other requirements and restrictions on these plans.

SB 657 (Bates). The California Public Records Act (CPRA) requires state and local agencies to make public records available for inspection, subject to certain exceptions. Under existing law, a person may seek injunctive or declaratory relief or a writ of mandate to enforce his or her right to inspect or receive a copy of a public record, as specified. In addition, an agency's decision to release a public record pursuant to the CPRA is reviewable by a petition for a writ of mandate on the basis that the public record was confidential, which is known as a reverse public records action. This bill would require a court in a reverse public records action to apply the provisions of the CPRA as if the action had been initiated by a person requesting disclosure of a public record; would require the requestor to be named as a real party of interest; and would require a court to allow the requestor to be heard on the merits of the action. This bill would provide that, if a court orders the public agency to disclose the records, the court shall order the person who initiated the action to pay the court costs and reasonable attorney's fees of the requestor; and would prohibit a court from requiring the requestor to pay court costs and attorney's fees to the person who initiated the reverse public records action or to the public agency if the court orders the public agency to not disclose the record.

SB 671 (Moorlach). SB 671 would clarify the section of the CERL that permits a county and district to make an advance payment of all or part of the county's or district's estimated annual contributions to the retirement fund. The bill would specify that the authority to make advance payments does not prevent the board of supervisors or governing body of a district from making advance payments for contributions for an additional year or years if certain requirements are satisfied, and would make the prepayment option available to all districts that are members of any county retirement systems.

SCA 8 (Moorlach): This measure would amend the State Constitution to permit a government employer to reduce retirement benefits that are based on work not yet performed by an employee regardless of the date that the employee was first hired, notwithstanding other provisions of the California Constitution or any other law. The measure would prohibit it from being interpreted to permit the reduction of retirement benefits that a public employee has earned based on work that has been performed, as specified. The measure would define government employer and retirement benefits for the purposes of its provisions.

SCA 10 (Moorlach). This measure would prohibit a government employer from providing public employees any retirement benefit increase until that increase is approved by a $^{2}/_{3}$ vote of the electorate of the applicable jurisdiction and that vote is certified. The measure would define retirement benefit to mean any postemployment benefit and would define benefit increase as any change that increases the value of an employee's retirement benefit. The measure would define a government employer to include, among others, the state and any of its subdivisions, cities, counties, school districts, special districts, the Regents of the University of California, and the California State University.

C-9

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: June 30, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **CEM GLOBAL PENSION ADMINISTRATION CONFERENCE**

Recommendation

Receive and file.

Background/Discussion

From May 8 – 11, 2017, I attended the CEM Global Pension Administration conference held in Chicago, Illinois. While OCERS is an active participant with CEM Benchmarking, and as such we are allowed to send a single representative (at no additional cost) to the annual global conference, the conference is not a pre-approved conference per the Board's travel policy. For that reason I requested approval to attend, which was granted at the Board's meeting of March 20, 2017. The cost for attendance was $1,175 ($736 lodging, and $439 airfare).

Because the conference was not pre-approved, Section 19 of the Board's travel policy requires *"Board members and staff who travel to conferences or seminars that are not automatically authorized in paragraphs 8, 9, 10 and 12 shall file with the Chief Executive Officer a report that briefly summarizes the information and knowledge gained that may be relevant to other Board members or staff, provides an evaluation of the conference or seminar, and provides a recommendation concerning future participation."*

The CEM Global Pension Administration conference brings together representatives from public pension systems across the continents. Just as SACRS conferences allows participants to focus on County specific issues, while CALAPRS conferences allow a broader California focus, and NASRA conferences in turns provide a spotlight on nationwide pension issues, CEM brought together representatives from nearly 100 systems from North America, Europe, Africa, Asia and Australia. Here the focus became the broadest approach of all, a high level view of pension issues from an almost theoretical viewpoint, as one encounters so many different approaches to the same goal – financial security in old age. The conference appears geared to spark critical thinking on issues such as funding, communications, data security by sharing challenges faced by other systems and how they approached and resolved such.

Some highlights:

Under the title <u>Neuromarketing: a scientific exploration of pension and the brain</u>, the speaker made the case for there being two types of pension plan members – (1) confused avoiders, and (2) conscientious planners. His argument was that the focus of system communications should be on that first group. Another suggestion was to use words indicating personal ownership when communicating with members to assist them in seeing how intimately connected they are to this benefit. Referring to the pension as "your pension", for instance, or "We are happy to have had you visit your web portal" as a closing comment when a member signs off from their web account.

An interesting session hosted by Los Angeles County Employees Retirement Association entitled <u>Because that's how we've always done it</u>, focused on how to gain productivity improvements from system staff. While dealing with a program to encourage members to make early buyback arrangements for sick leave incurred without pay, the team discovered that they were wasting time and resources by pulling into their outreach net those members who actually had received pay via donated leave. That had not been anticipated, and one lesson learned was having the team sit down as a unit and walk through an outreach process from beginning to end, allowing for critical feedback to determine likely successes.

Teachers Retirement of Texas hosted a session on Financial awareness through animation. That system recently completed a new financial awareness video series aimed at helping members learn even more about retirement self-sufficiency, a theme that ran across many of the presentations. The series of short animated whiteboard videos were shared with the audience and featured diverse cast of characters in various job positions and career stages. I have always felt there is no need to recreate the wheel if others have already put in the effort, so I have directed our own Robert Kinsler to investigate whether there is any way we could share the same or similar videos with our membership.

As far as my evaluation, the conference is very well organized, professionally run, and provides an excellent opportunity to network with representatives from systems outside of our normal circle.

I would strongly recommend continued participation in this conference, more so for staff members than Board members, as much of the discussion is aimed at getting pension plan practitioners to challenge one another in how any given issue has been tackled by their own system.

Submitted by:

Steve Delaney
Chief Executive Officer

C-10

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **TRAVEL REPORT – PUBLIC RISK MANAGEMENT ASSOCIATION (PRIMA) ANNUAL CONFERENCE**

Recommendation

Receive and file.

Background/Discussion

From June 4th to June 7th, 2017, Jim Doezie, Contracts, Risk and Performance Administrator, attended the 2017 Public Risk Management Association (PRIMA) annual Conference in Phoenix, Arizona.

The total cost is included in the following:

Conference Fee	Hotel	Transportation	Meals	Total
$690	**$489**	**$255**	**$14**	**$1,448**

As it is not presently pre-approved, OCERS' Travel Policy, Section 19, states:

"Board Members and staff who travel to conference or seminars that are not automatically authorized in paragraphs 8 and 12 shall file with the Chief Executive Officer a report that briefly summarizes the information and knowledge gained that may be relevant to other Board members, provides an evaluation of the conference or seminar, and provides a recommendation concerning future participation. Reports by a Board Member or staff will be made on the Conference / Seminar Report form shown in the appendix. The Chief Executive Officer shall cause a copy of the report to be distributed to each Board Member and to the Chief Investment Officer."

A report summarizing the conference is attached.

Submitted by:

Steve Delaney
Chief Executive Officer

Form

Report of Attendance at Conference or Seminar

Name of Staff Attending: Jim Doezie - Contracts, Risk and Performance Administrator

Name of Conference/Seminar: 2017 Public Risk Management Association (PRIMA) annual conference

Location of Conference/Seminar: Downtown, Phoenix, Arizona

Conference/Seminar Sponsor: PRIMA Association

Dates of Attendance: June 4^{th} through June 7^{th}, 2018

Total Cost of Attendance: $1,448

Brief Summary of Information and Knowledge Gained:
The theme of the 2017 Public Risk Management Association (PRIMA) annual conference was to explore and discuss how to mitigate increasing risks to public and governmental agencies throughout the United States. Included within this theme were numerous sessions which provided knowledge and discussions from experts in the risk field. This included networking with other agency individuals from around the nation. Sessions attended by OCERS staff covered these topics:

- The Challenge of Change
- Business Interruption for Public Entities
- Developing a Municipal Threat Assessment Program/Plan & Lessons Learned
- Emerging Trends – Public Risk manager Panel Discussion
- How ERM (Enterprise Risk Management) Enables Successful Execution of Strategy
- Lessons From Black Swans and Other Odd Ducks
- Risk Informed Decision Making For You and Your Entity
- Successfully Implementing Change as New Risk Manager
- Contractual Risk Transfer – The Phoenix Effect

Evaluation of the Conference or Seminar:
The PRIMA Conference affords OCERS staff an excellent opportunity to network with like-minded risk leaders from sister agencies to discuss issues and solutions. Also discussed are current initiatives underway at other agencies, whose representatives are always willing to share what is going well and what could have been done better.

Recommendation Concerning Future Attendance:
I highly recommend that we continue to attend the PRIMA Conference on an annual basis. It is likely the single best Risk conference we can attend due to the specific focus of both the conference and the attendees on a subject that affects public agencies throughout the nation.

Form

Report of Attendance at Conference or Seminar

Submitted By:

Jim Doezie - Contracts, Risk and Performance Administrator

Return to: Executive Assistant

Copies to: Board Members, Chief Executive Officer & Assistant Chief Executive Officers

C-11

Memorandum

DATE: July 5, 2017

TO: Members of the Board of Retirement

FROM: Tracy Bowman, Director of Finance

SUBJECT: **SECOND QUARTER 2017 EDUCATION AND TRAVEL EXPENSE REPORT**

Recommendation

Receive and file.

Background/Discussion

In accordance with OCERS' Travel Policy, the Chief Executive Officer is required to submit a quarterly report to the Board of Retirement on conference attendance and related expenditures incurred by OCERS' Board Members and staff. Attached is the Second Quarter 2017 Education and Travel Expense Report that includes all expenses submitted through June 30, 2017.

Submitted by:

OCERS T.B. - Approved

Tracy Bowman
Director of Finance

EDUCATION AND TRAVEL EXPENSE REPORT
SECOND QUARTER 2017
Submitted Through June 30, 2017**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2017 YTD Total	2016 Total*
BALDWIN	1/25-1/26/17	Institutional Real Estate Conference	Carlsbad, CA	Conference	-	-	21.42	-	-	74.36	-	95.78	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	120.00	67.00	521.95	1,048.82	91.02	-	1,848.79	
	6/2/17	CALAPRS Trustee Roundtable	Burbank, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	245.00	88.42	521.95	1,048.82	165.38	-	2,069.57	-
BALL	3/29-3/31/17	CALAPRS Principles of Pension Management	Los Angeles, CA	Conference	-	3,100.00	-	-	-	-	-	3,100.00	
	9/24-9/28/17	IFEBP Advanced Investments Management	Philadelphia, PA	Conference	-	5,530.00	-	-	-	-	-	5,530.00	
Sub Total					-	8,630.00	-	-	-	-	-	8,630.00	1,137.26
DEWANE	8/28-8/31/17	CALAPRS Pension Management for Trustees	Malibu, CA	Conference	-	2,500.00	-	-	-	-	-	2,500.00	
Sub Total					-	2,500.00	-	-	-	-	-	2,500.00	-
ELEY	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	120.00	51.76	521.95	1,048.82	181.02	-	1,923.55	
	5/21/5/24/17	NCPERS Annual Conference	Hollywood, FL	Conference	-	1,000.00	169.07	691.60	567.27	329.83	-	2,757.77	
Sub Total					-	1,120.00	220.83	1,213.55	1,616.09	510.85	-	4,681.32	120.00
FREIDENRICH	1/25-1/26/17	Institutional Real Estate Conference	Carlsbad, CA	Conference	-	-	-	-	250.23	25.00	-	275.23	
Sub Total					-	-	-	-	250.23	25.00	-	275.23	2,497.18
GILBERT					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	180.88
HILTON	1/29-1/31/17	NCPERS (1)	Washington, D.C.	Conference	26.75	-	40.86	-	-	110.59	10.00	188.20	
	3/4-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	42.59	-	17.03	97.88	898.78	60.00	-	1,116.28	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	120.00	38.78	209.96	1,382.58	353.17	-	2,104.49	
	6/13-6/14/17	Legislative Outreach Program	Sacramento, CA	Meeting	-	-	-	-	-	74.98	5.00	79.98	
	6/25-6/27/17	Pension and Investments Global Future of Retirement	New York, NY	Conference	-	-	42.81	677.85	867.86	97.13	-	1,685.65	
	8/5-8/9/17	NASRA 2017 Annual Conference	Baltimore, MD	Conference	-	1,050.00	-	-	-	-	-	1,050.00	
Sub Total					69.34	1,170.00	139.48	985.69	3,149.22	695.87	15.00	6,224.60	11,552.53
LINDHOLM					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	120.00
PACKARD	2/3/17	CALAPRS Trustee Roundtable	San Jose, CA	Conference	-	-	-	255.90	-	27.28	-	283.18	
	3/5-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	394.83	-	-	-	657.29	50.00	-	1,102.12	
	8/5-8/9/17	NASRA Annual Conference	Baltimore, MD	Conference	-	1,050.00	-	-	-	-	-	1,050.00	
	9/25-9/28/17	IFEBP Advanced Investments Management	Philadelphia, PA	Conference	-	5,095.00	-	-	-	-	-	5,095.00	
Sub Total					394.83	6,145.00	-	255.90	657.29	77.28	-	7,530.30	120.00
PREVATT	2/25-2/28/17	NASRA/NIRS Winter Conference	Washington, D.C.	Conference	-	600.00	41.30	382.40	555.53	372.86	15.00	1,967.09	
	3/4-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	-	-	129.36	237.40	883.78	200.63	5.00	1,456.17	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	120.00	-	-	1,240.39	593.29	15.00	1,968.68	
	6/2/17	CALAPRS Trustee Roundtable	Burbank, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	9/24-9/28/17	IFEBP Advanced Investments Management	Philadelphia, PA	Conference	-	5,530.00	-	-	-	-	-	5,530.00	
Sub Total					-	6,375.00	170.66	619.80	2,679.70	1,166.78	35.00	11,046.94	6,651.00
BOARD Total					464.17	26,185.00	619.39	3,596.89	9,401.35	2,641.16	50.00	42,957.96	22,378.85
DANCIU					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	1,618.74
DELANEY	2/25-2/28/17	NASRA	Washington, D.C.	Conference	44.62	600.00	57.34	315.20	580.53	87.12	-	1,684.81	
	3/4-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	44.62	-	23.98	285.60	712.86	86.96	-	1,154.02	
	3/30/17	CALAPRS Advanced Course	Los Angeles, CA	Training	54.25	-	-	-	-	15.00	-	69.25	
	5/5-5/11/17	CEM Benchmarking Conference	Chicago, IL	Conference	44.62	-	-	439.40	736.99	42.00	-	1,263.01	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	120.00	-	237.20	609.57	190.48	-	1,157.25	
	6/13-6/14/17	Legislative Outreach Program	Sacramento, CA	Meeting	17.40	-	156.15	447.96	252.30	40.00	-	913.81	
	6/23/17	CALAPRS Administrators Roundtable	Glendale, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	8/5-8/9/17	NASRA Annual Conference	Baltimore, MD	Conference	-	1,050.00	-	-	-	-	-	1,050.00	
	9/15-9/19/17	LAPERS Visit	New Orleans, LA	Meeting	-	-	-	349.40	193.66	-	-	543.06	
	9/27-9/29/17	CALAPRS Administration Institute	Carmel-By-The-Sea, CA	Conference	-	-	-	184.40	-	-	-	184.40	
	11/14-11/20/17	SACRS Fall Conference	San Francisco, CA	Conference	-	-	-	197.40	-	-	-	197.40	
Sub Total					205.51	1,895.00	237.47	2,456.56	3,085.91	461.56	-	8,342.01	10,045.11
JENIKE	3/4-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	-	-	52.89	141.40	706.86	353.63	-	1,254.78	
	4/20/17	CALSTA	Irvine, CA	Conference	7.65	100.00	-	-	-	22.00	-	129.65	
	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	52.27	125.00	-	-	-	16.00	-	193.27	
	5/1-5/04/17	IFEBP Portfolio and Management	Philadelphia, PA	Conference	-	5,095.00	76.18	843.88	1,149.25	123.54	-	7,287.85	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	-	-	-	278.41	-	-	-	278.41	
	6/1/17	CALAPRS Communications Round Table	Burbank, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	6/2/17	CALAPRS Trustee Roundtable	Burbank, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					59.92	5,570.00	129.07	1,263.69	1,856.11	515.17	-	9,393.96	7,982.39

EDUCATION AND TRAVEL EXPENSE REPORT
SECOND QUARTER 2017
Submitted Through June 30, 2017**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2017 YTD Total	2016 Total*
SHOTT	3/5-3/7/17	CALAPRS General Assembly	Monterey, CA	Conference	8.83	-	96.37	127.40	526.50	156.00	-	915.10	
	3/8-3/10/17	Liebert Cassidy Whitmore Annual Conference	Anaheim, CA	Conference	26.00	500.00	-	-	-	24.00	-	550.00	
	5/5/17	CALAPRS Overview Course in Retirement	Burbank, CA	Conference	46.76	-	-	-	-	-	-	46.76	
	5/21-5/24/17	GFOA CORBA 111th Annual Conference	Denver, CO	Conference	7.17	-	180.81	409.96	642.78	108.41	-	1,349.13	
	11/30-12/1/17	Nossaman Fiduciaries' Forum	San Francisco, CA	Conference	-	375.00	-	-	-	-	-	375.00	
Sub Total					88.76	875.00	277.18	537.36	1,169.28	288.41	-	3,235.99	7,148.53
VAZQUEZ					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	1,720.06
EXECUTIVE Total					354.19	8,340.00	643.72	4,257.61	6,111.30	1,265.14	-	20,971.96	28,514.83
BEESON	1/30/17	GMO Investment Presentation	Beverly Hills, CA	Training	27.34	-	-	-	-	10.00	-	37.34	
	4/27-4/28/17	Institutional Investor Public Funds Roundtable	Beverly Hills, CA	Conference	51.25	-	-	-	242.64	42.00	-	335.89	
	5/4-5/12/17	Pharo, Caspian, Gotham, DE Shaw, Angelo Gordon, Highfields, AE	New York, NY & Boston, MA	Due Diligence	-	-	45.05	438.00	1,209.32	158.78	-	1,851.15	
Sub Total					78.59	-	45.05	438.00	1,451.96	210.78	-	2,224.38	4,826.14
CHARY	4/21/17	Dodge & Cox, Pantheon	San Francisco, CA	Due Diligence	-	-	5.05	127.98	-	60.55	-	193.58	
Sub Total					-	-	5.05	127.98	-	60.55	-	193.58	571.46
CHENG	1/10-1/12/17	Argo, Blackrock, and JPMorgan	New York, NY	Due Diligence	-	-	129.39	573.20	352.96	198.30	-	1,253.85	
	5/1-5/3/17	Milken Investment Conference	Beverly Hills, CA	Conference	42.80	-	-	-	-	63.62	-	106.42	
Sub Total					42.80	-	129.39	573.20	352.96	261.92	-	1,360.27	1,486.50
WALANDER-SARKIN	1/19/17	IMN Real Estate Opportunity & Private Fund Investing	Laguna Beach, CA	Conference	22.26	-	-	-	-	-	-	22.26	
	1/20/17	CALAPRS Investment Roundtable	San Jose, CA	Conference	-	-	-	349.88	-	20.00	-	369.88	
	1/30/17	GMO Investment Presentation	Beverly Hills, CA	Training	27.34	-	-	-	-	10.00	-	37.34	
Sub Total					49.60	-	-	349.88	-	30.00	-	429.48	204.30
Educational Forum					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	6,616.90
INVESTMENTS Total					170.99	-	179.49	1,489.06	1,804.92	563.25	-	4,207.71	13,705.30
KINSLER	6/1/17	CALAPRS Communications Round Table	Burbank, CA	Conference	-	125.00	29.56	-	199.15	54.00	-	407.71	
Sub Total					-	125.00	29.56	-	199.15	54.00	-	407.71	4,430.33
RITCHEY	6/1/17	CALAPRS Communications Round Table	Burbank, CA	Conference	-	125.00	29.01	-	199.15	54.00	-	407.16	
Sub Total					-	125.00	29.01	-	199.15	54.00	-	407.16	953.25
COMMUNICATIONS Total					-	250.00	58.57	-	398.30	108.00	-	814.87	5,383.58
FINK	5/16-5/19/17	SACRS Spring Conference (2)	Napa, CA	Conference	-	120.00	-	-	455.86	-	-	575.86	
	6/2/17	CALAPRS Attorney Roundtable	Burbank, CA	Conference	51.36	-	-	-	-	21.00	-	72.36	
	6/27-6/30/17	NAPPA Legal Education Conference	Monterey, CA	Conference	-	895.00	-	-	-	-	-	895.00	
Sub Total					51.36	1,015.00	-	-	455.86	21.00	-	1,543.22	-
MATSUO	2/21-2/24/17	NAPPA	Tempe, AZ	Conference	-	535.00	59.40	127.90	715.23	-	-	1,437.53	
	3/8-3/10/17	Liebert Cassidy Whitmore Annual Conference	Anaheim, CA	Conference	-	500.00	-	-	-	-	-	500.00	
Sub Total					-	1,035.00	59.40	127.90	715.23	-	-	1,937.53	5,098.02
RATTO	2/21-2/24/17	NAPPA	Tempe, AZ	Conference	-	535.00	-	281.90	735.78	-	-	1,552.68	
	5/16-5/19/17	SACRS Spring Conference	Napa, CA	Conference	10.00	130.00	87.92	262.40	1,367.58	280.91	-	2,138.81	
	6/27-6/30/17	NAPPA Legal Education Conference	Monterey, CA	Conference	-	895.00	-	184.40	-	-	-	1,079.40	
Sub Total					10.00	1,560.00	87.92	728.70	2,103.36	280.91	-	4,770.89	808.87
SINGLETON					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	1,121.21
WEISSBURG					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	200.00
LEGAL Total					61.36	3,610.00	147.32	856.60	3,274.45	301.91	-	8,251.64	7,228.10
BERCARU	4/3/17	CALAPRS Leadership Academy	Pasadena, CA	Training	52.50	3,000.00	-	-	195.08	22.00	-	3,269.58	
	6/12-6/15/17	CALAPRS Management Academy	Pasadena, CA	Conference	52.50	-	24.27	-	385.16	39.00	-	500.93	
Sub Total					105.00	3,000.00	24.27	-	580.24	61.00	-	3,770.51	1,209.18
HALBUR					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	6,666.58
MERIDA	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	125.00	-	-	-	-	-	125.00	693.49
PANAMENO	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	125.00	-	-	-	-	-	125.00	120.00
PERSI	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	125.00	-	-	-	-	-	125.00	-
TALLASE	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	125.00	-	-	-	-	-	125.00	-
MEMBER SERVICES Total					105.00	3,500.00	24.27	-	580.24	61.00	-	4,270.51	8,689.25

EDUCATION AND TRAVEL EXPENSE REPORT
SECOND QUARTER 2017
Submitted Through June 30, 2017**

Name	Trip OR Class Dates	Trip Name	Destination	Trip Type	Mileage	Reg. Fee	Meals	Airfare	Hotel	Trans.	Misc.	2017 YTD Total	2016 Total*
BOWMAN	10/22-10/25/17	Public Pension Financial Forum Annual Conference	Albuquerque, NM	Conference	-	400.00	-	-	-	-	-	400.00	
Sub Total					-	400.00	-	-	-	-	-	400.00	1,719.43
DILLARD					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	161.84
HUYNH					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	4,309.40
REYES					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	550.30
FINANCE Total					-	400.00	-	-	-	-	-	400.00	6,740.97
CORTEZ					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	890.71
G. GARCIA					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	50.62
GROSS					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	120.00
SANDOVAL					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	144.00
DISABILITY Total					-	-	-	-	-	-	-	0.00	1,205.33
DOEZIE	6/4-6/7/17	PRIMA Annual Conference	Phoenix, AZ	Conference	-	690.00	14.39	215.95	489.68	39.00	-	1,449.02	
Sub Total					-	690.00	14.39	215.95	489.68	39.00	-	1,449.02	-
E. GARCIA					-	-	-	-	-	-	-	0.00	
Sub Total					-	-	-	-	-	-	-	0.00	45.00
HOCKLESS	3/8-3/10/17	Liebert Cassidy Whitmore Annual Conference	Anaheim, CA	Conference	-	500.00	-	-	-	24.00	-	524.00	
	5/5/17	CALAPRS Overview Course in Retirement	Burbank, CA	Conference	-	250.00	-	-	133.43	23.52	-	406.95	
	5/7-5/10/17	SALGBA 2017 Conference	Anaheim, CA	Conference	-	400.00	-	-	-	16.00	-	416.00	
Sub Total					-	1,150.00	-	-	133.43	63.52	-	1,346.95	4,517.44
MORALES	5/7-5/10/17	SALGBA 2017 Conference	Anaheim, CA	Conference	-	400.00	-	-	-	-	-	400.00	
Sub Total					-	400.00	-	-	-	-	-	400.00	851.10
ADMINISTRATION Total					-	2,240.00	14.39	215.95	623.11	102.52	-	3,195.97	5,413.54
GOSSARD	4/9/17	PRISM Association Conference	Nashville.TN	Conference	-	550.00	30.98	794.48	779.69	-	-	2,155.15	
	4/28/17	CALAPRS IT Round Table	Glendale, CA	Conference	-	125.00	-	-	-	-	-	125.00	
	5/17-5/18/17	SANS Security West	San Diego, CA	Conference	-	2,360.00	104.81	-	552.63	84.00	-	3,101.44	
	7/10-7/15/17	SANS Security Leadership Essentials	Long Beach, CA	Conference	-	5,819.00	-	-	-	-	-	5,819.00	
Sub Total					-	8,854.00	135.79	794.48	1,332.32	84.00	-	11,200.59	7,494.17
LARA	4/9/17	PRISM Association Conference	Nashville.TN	Conference	-	550.00	-	477.40	773.13	-	-	1,800.53	
	4/28/17	CALAPRS IT Round Table	Glendale, CA	Conference	-	125.00	-	-	-	-	-	125.00	
Sub Total					-	675.00	-	477.40	773.13	-	-	1,925.53	4,651.97
IT Total					-	9,529.00	135.79	1,271.88	2,105.45	84.00	-	13,126.12	12,146.14
ADVIENTO	4/26/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	49.06	125.00	-	-	-	12.00	-	186.06	
	6/7-6/9/17	IIA 2017 Western Regional Conference	Anaheim, CA	Conference	22.74	795.00	-	-	-	42.00	-	859.74	
Sub Total					71.80	920.00	-	-	-	54.00	-	1,045.80	483.54
JAMES	3/17/2017	LACERA Roundtable	Pasadena, CA	Conference	40.56	-	-	-	-	-	-	40.56	
	4/10-4/12/17	AMA: Leading with Emotional Intelligence	San Francisco, CA	Training	23.64	2,645.00	180.83	272.40	706.49	241.43	-	4,069.79	
	4/25/17	CALAPRS Reciprocity Roundtable	Pasadena, CA	Conference	26.00	125.00	-	-	-	12.00	-	163.00	
	5/7-5/10/17	APPFA 2017 Spring Conference	Little Rock, AR	Conference	10.96	375.00	58.98	643.60	320.88	98.25	-	1,507.67	
Sub Total					101.16	3,145.00	239.81	916.00	1,027.37	351.68	-	5,781.02	5,495.21
INTERNAL AUDIT Total					172.96	4,065.00	239.81	916.00	1,027.37	405.68	-	6,826.82	5,978.75
Total					1,328.67	58,119.00	2,062.75	12,603.99	25,326.49	5,532.66	50.00	105,023.56	117,384.64

Footnotes:
* Prior year totals only presented for 2017 active staff & Board members.
** Excludes expenses for non-travel related training conferences including: misc. lunches, meetings, mileage, strategic planning, and tuition reimbursement.
1 Registration, Airfare, and Hotel charges were paid in 2016.
2 Expense does not qualify for refund due to trip cancelled late outside policy period

C-12

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: July 7, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **SEPTEMBER 2017 STRATEGIC PLANNING WORKSHOP INVESTMENT FORUM AGENDA**

Recommendation

Approve the agenda for September 13-14, 2017 Regular Meeting and Strategic Planning Workshop & Investment Forum.

Background/Discussion

Each September the OCERS Board of trustees meets off-site to discuss various planning issues that will guide staff and agency through the coming years.

The theme of this year's session is "Visioning the Future" allowing us to look ahead to issues that will best situate the system in the coming years. With a new pension administration system (V3) in place and the management team fully staffed, we look forward to informative discussions with the Board as to OCERS future vision and direction.

The attached agenda unlike prior session is laid out as both a regular board meeting and a series of information discussions. This is to allow the Board to take action on a number of items which has not been common in the past.

Be aware that some topics and presenters may yet change as we near the September date, noting for instance that the Thursday afternoon discussion on cyber security has not yet been finalized as regards to the speaker.

Submitted by:

Steve Delaney

Chief Executive Officer

OCERS BOARD OF RETIREMENT

Regular Meeting and

2017 Strategic Planning Workshop

Visioning the Future

DoubleTree Club by Hilton-Orange County Airport
7 Hutton Centre Drive
Santa Ana, CA 92707

AGENDA
Wednesday morning, September 13, 2017

BREAKFAST ***7:15 - 8:00***

WELCOME & INTRODUCTORY COMMENTS ***8:00 - 8:15***
Steve Delaney, CEO, OCERS

A. **STAKEHOLDER VIEWS ON OCERS PENSIONS** ***8:15 - 9:15***
Presentation by Michelle Aguirre, County of Orange; Mark McDorman, Orange County Managers Association, and Luz Napoles, Orange County In-Home Supportive Services Public Authority.

B. **TRIENNIAL REVIEW OF ACTUARIAL ASSUMPTIONS** ***9:15 - 10:30***
Presentation by Paul Angelo, Segal Consulting

Recommendation: Approve the demographic and economic assumptions.

REFRESHMENT BREAK ***10:30 - 10:45***

NOTE: All times are approximate and for reference only.
The Board of Retirement may consider an item at a different time than set forth herein.
The Board may take action on any items.

C. **OCFA ACCELERATED PENSION PAYDOWN PLAN** ***10:45 - 11:45***
Presentation by Lori Zeller, Orange County Fire Authority

D. **OPERATIONAL RISK MANAGEMENT** ***11:45 - 12:15***
Presentation by Brenda Shott, Assistant CEO of Internal Operations, OCERS and Jim Doezie, Contracts Administrator, OCERS

LUNCH ***12:15 - 1:15***

Wednesday afternoon, September 13, 2017
INVESTMENT FORUM

INTRODUCTORY COMMENTS ***1:15 - 1:30***
Molly Murphy, CIO, OCERS

A. **OREGON STATE PENSION FUNDS – AN OVERVIEW** ***1:30 - 2:45***
Discussion led by John Skjervem, CIO, Oregon State Treasury

REFRESHMENT BREAK ***2:45 - 3:00***

B. **INVESTMENT FEES, DISCERNING EXPENSES FROM FEES, AND WHERE DOES ONE DRAW THE LINE** ***3:00 - 4:00***
Discussion led by Thomas A. Hickey, III, Partner & Chair of the Fund Formation & Investment Management Group, Foley & Lardner LLP; Stephen McCourt Managing Principal/Co-Chief Executive Officer, Meketa Investment Group, Inc.; Allan Emkin, Managing Director, Pension Consulting Alliance, LLC

C. **ASSET CLASS POLICY – RISK MITIGATION** ***4:00 - 5:00***
Discussion led by Stephen McCourt Managing Principal/Co-Chief Executive Officer, Meketa Investment Group, Inc.

NOTE: All times are approximate and for reference only.
The Board of Retirement may consider an item at a different time than set forth herein.
The Board may take action on any items.

Recommendation: Approve proposed transfer of assets and transitioning of managers consistent with the Board's previously-approved asset allocation plan.

OCERS BOARD OF RETIREMENT

Regular Meeting and

2017 STRATEGIC PLANNING WORKSHOP

Visioning the Future

DoubleTree Club by Hilton-Orange County Airport
7 Hutton Centre Drive
Santa Ana, CA 92707

AGENDA

Thursday morning, September 14, 2017
INVESTMENT FORUM

BREAKFAST	***7:15 - 8:00***
A. **OCERS INVESTMENT PORTFOLIO – A LOOK INTO THE FUTURE** *Discussion led by Molly Murphy, CIO, OCERS*	***8:00 - 8:15***
B. **VIEW OF THE WORLD** *Discussion led by Bridgewater Investment Group*	***8:15 - 9:15***
C. **INVESTMENT RISK MANAGEMENT** *Discussion led by* ______________________________	***9:15 - 10:15***
REFRESHMENT BREAK	***10:15 - 10:30***

NOTE: All times are approximate and for reference only.
The Board of Retirement may consider an item at a different time than set forth herein.
The Board may take action on any items.

D. **OPPORTUNISTIC INVESTING AND BEST PRACTICES: AN INVESTMENT CASE STUDY** ***10:30 - 12:00***

Discussion led by Molly Murphy, CIO, OCERS

LUNCH ***12:00 - 1:00***

NOTE: All times are approximate and for reference only.
The Board of Retirement may consider an item at a different time than set forth herein.
The Board may take action on any items.

Thursday afternoon, September 14, 2017

OCERS ADMINISTRATION

A. CYBER SECURITY – OUR WORLD TODAY ***1:00 - 2:00***
Presentation by ______________________

B.* 2018-2020 PRELIMINARY STRATEGIC PLAN** ***2:00 - 2:30
Presentation by Steve Delaney, CEO, OCERS

REFRESHMENT BREAK ***2:30 - 2:45***

C. 2018 PRELIMINARY BUSINESS PLAN ***2:45 - 4:30***
Presentation by Steve Delaney, CEO and OCERS Management Team

NOTE: All times are approximate and for reference only.
The Board of Retirement may consider an item at a different time than set forth herein.
The Board may take action on any items.

C-13

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Suzanne Jenike, Assistant CEO, External Operations

SUBJECT: **TCA EXCLUDED WORKERS - Update**

Recommendation

Receive and file.

Background/Discussion

In 2016 OCERS staff had many discussions regarding OCERS membership and an employer's options when hiring employees who they believe should be excluded from OCERS covered membership. Staff worked with the Plan Sponsors and labor groups to develop the *Membership Eligibility Requirements Policy* giving employers a guide for determining the category of employee who should be OCERS members as well as criteria for when one is to be excluded from OCERS membership. One plan sponsor, Transportation Corridor Agencies (TCA), encountered a challenging situation when their private labor supplier ended their contract unexpectedly. The labor supplier managed and paid the individuals responsible for TCA's Call Center and Violation Processing Unit and these individuals were historically excluded from OCERS membership. When the labor contract terminated TCA brought these contract employees onto the TCA payroll until a new contractor could be procured. TCA considered these employees as excluded workers. Given the length of time they were on TCA payroll however there was concern that the employees should eventually qualify for OCERS membership.

On October 17, 2016 the OCERS Board of Retirement notified TCA that they had until June 30, 2017 to transition the excluded workers from TCA payroll back to a private labor supplier. In the event TCA was unable to procure a contractor and make the transition by June 30, 2017 these individual would become OCERS members retroactive to July 1, 2016 (or later based on hire date) and TCA would be responsible for all of the employee and employer retirement contributions plus interest at the OCERS actuarial assumed rate of investment return as of June 30, 2017.

Ms. Amy Potter, TCA CFO was present at the October 17, 2016 meeting and she confirmed that TCA would resolve the issue by the deadline and would have these excluded workers correctly employed by a third party contractor before July 1, 2017.

In a conversation with OCERS staff on May 25, 2017 Ms. Potter confirmed that the TCA Board approved the Customer Service contract on March 9, 2017 and the TCA temporary customer service employees were transitioned to the contractor on April 29, 2017.

Submitted by:

S. J. – APPROVED
Suzanne Jenike
Assistant CEO, External Operations

C-14

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

DATE: July 17, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **BOARD COMMUNICATIONS**

Recommendation

Receive and file.

Background/Discussion

To ensure that the public has free and open access to those items that could have bearing on the decisions of the Trustees of the Board of Retirement, the OCERS Board has directed that all written communications to the entire Board during the interim between regular Board meetings be included in a monthly communications summary.

News Links

The various news and informational articles that have been shared with the full Board are being provided to you here by web link address. By providing the links in this publicly available report, we comply with both the Brown Act public meeting requirements, as well as avoid any copyright issues.

The following news and informational links were received by OCERS staff for distribution to the entire Board:

From David Ball

- **JOHN MAULDIN: The next recession may be a complete reset of all asset valuations**
  http://www.businessinsider.com/mauldin-says-next-recession-may-be-complete-reset-of-asset-valuations-2017-6

- **The next asset bubble is so big that even the Fed is starting to take note**
  http://www.businessinsider.com/commercial-real-estate-boom-bust-bubble-2017-6

June 27, 2017 email from Chair Ball to the Members of the Board in reply to Senator Moorlach's article entitled: "MOORLACH UPDATE — Addressing Pension Mess — June 24, 2017":

https://johnmoorlach.wordpress.com/2017/06/24/moorlach-update-addressing-pension-mess-june-24-2017/

In case you did not see this press release from John. As I understand the history, John was the driver behind the current practice of offering a discount to plan sponsors for early payments of the required annual pension obligation.

John is again expressing his view that incentives for early payments are appropriate by pushing CalPERS to offer the State an incentive for early payments of the UAAL. In my mind, John is conflating funding policy with budgeting. The State wants to alter its funding policy to accelerate the reduction of the UAAL. Adding the discussion of discount incentives muddies the issue by injecting the sponsor's budgeting process and the investment practices of the pension system into the process. The incentive forces the CIO of the system to address how to invest to avoid a loss on the lump sum payment and the discount incentive offered or to simply ignore the potential short term mismatch between the timing of the receipt of the discounted payment and the investment returns over the same period. Investment policy is based broadly on the concept of dollar cost averaging achieved by investing sponsor contributions as they are received over time and is the most rational approach to allow the investment pool to be invested over the complete breadth of its asset allocation and to mitigate short term market anomalies. The discounting incentive exposes the fund to exactly the same type of short term investment risk as floating a POB to pay the UAAL. Albeit, the annual incentive discount is a smaller risk due to the amount of money involved. However, it is the same investment timing risk amplified by discounting of the contribution. It is probably possible to construct a hedge to insulate against this risk to allow a prepayment discount with little risk. However, one must consider the time and effort required compared to the relative benefits to OCERS. Once that analysis is complete it is appropriate to ask, is that an appropriate function of the fund? Perhaps, if the benefits to the fund were substantial. However, the sponsor being offered a prepayment discount simply to aid in the short-term budgeting process would not seem to be an issue that OCERS should address by taking risk. In our current application of prepayment discounting, the sponsor is using the discount to construct a payment hedge on the other side by receiving a guaranteed discount from OCERS, thereby transferring components of risk to OCERS, and the sponsor is receiving all the benefits of the interest rate arbitrage between the borrowing costs of the sponsor versus the discount provided by OCERS. In other words, the sponsor is creating a perfect hedge so that the benefits of prepaying are certain while OCERS is accepting an uncertain outcome. As the situation stands today, the bond underwriter makes money, the sponsor makes money and OCERS has an uncertain investment outcome.

If one was really focused on solving the pension funding shortfall, negotiating for accelerated payment discounts seems counter intuitive. Any discount simply reduces the possible positive impact of accelerated payment. One must decide, should the pension plan be involved in the aiding the sponsor to achieve a short-term budgeting surplus if there is additional risk and an uncertain earnings benefit to OCERS? Is there a win-win scenario? Discounting early payments provides an immediate benefit to the sponsor's budget, but the discount and lump sum payment also shifts short term investment risk to the fund. Any shortfall in the actual results compared to the discount will be added to or subtracted from the UAAL and the benefit or loss will be shared by all plan sponsors. Sure, the fund may occasionally have fortunate investment timing, but it is just as likely the short-term performance will cut against the fund thereby wiping out any benefit achieved by early payment or even exacerbating the UAAL. The current discounting process just seems like investment roulette. Taking risk is part of making investments. However, risk adjusted returns is the measure. Take risk, but get paid for taking risk. What is the investment thesis behind the discounting process? Comparing the OCERS long term return assumptions against the short term discounted payment is just a gamble. Investing requires a matching of term and risk. If there was such a matching of investment returns with the term and risk of the accelerated payment with the discount such that OCERS made a return on the discount, then the process would be beneficial to OCERS. However, if such an approach was adopted, it is doubtful the sponsor would achieve enough benefit to go through the bond issuance process to facilitate the accelerated payment.

The real issue is, why should OCERS take investment risk to provide a discount on the sponsor's payment of the required pension contribution that OCERS will receive anyway? If the discounted payment provided receipt of cash that was at risk for collection or if the fund needed the discounted payment to invest in an immediate opportunity, then perhaps discounting makes sense. One would weigh the risk of collection or the return on the opportunity against the discount. But that is not the case. The fund will receive all of the pension contribution irrespective of any discount incentive and the fund has more cash than investment opportunities. The current discounting practice is simply a budgeting exercise to achieve a short-term funding surplus benefitting the sponsor without regard to the impact on OCERS' investment outcome or impact on the UAAL. Perhaps our new CIO will have a suggestion on how to best balance the prepayment discounting of the sponsor's required pension contributions with the return objectives of OCERS.

David Ball

From Chuck Packard

- **There are 'cracks emerging' in the calmest market in years**
  http://www.businessinsider.com/cracks-emerging-in-the-calmest-low-volatility-overcrowded-market-in-years-2017-6

From Russell Baldwin

- **How Middle-Class America Got Fleeced**
  https://www.bloomberg.com/view/articles/2017-04-07/how-middle-class-america-got-fleeced

From Gina Ratto

Email from Gina Ratto, General Counsel, OCERS - When it is appropriate to take action by motion; when it is appropriate to give direction

Good afternoon.

At the Board's meeting on June 12, 2017, questions arose during Segal's discussion with the Board regarding alternative assumption models to be used by Segal in connection with the actuarial experience study. After Segal's remarks, there was an interchange between the Board Chair and counsel with respect to whether the

Board could properly take action (by motion) – or give direction after polling the Board members – to select the four alternative assumptions to be used by Segal. Counsel recommended that the Board ***not*** take action or be polled, but rather that the Board Chair give direction to Segal to prepare the analysis based on four alternative assumptions determined by the Chair, based on the discussion that had taken place.

After the meeting, the Board Chair inquired why counsel advised that taking action by motion or giving direction after polling was not appropriate.

Attached is a memo Harvey provided to the Board in 2014. The memo explains when it is permissible under the Brown Act for the Board to take action on a matter. In a nutshell, the Board should not take action (by motion or by a collective decision like polling) on any item that has not been duly and timely placed on the Board's agenda. Harvey's memo also explains that the Brown Act does permit a member of the Board to provide a reference to staff or other resources (for example, OCERS' actuary) for factual information and to request staff to report back to the Board at a subsequent meeting concerning any matter. Only formal direction to staff to agendize a matter for a future meeting would require the Board to take formal action.

With respect, specifically, to the actuarial sensitivity analysis and the selection of the alternative assumptions, this matter had not been included on the agenda for the Board meeting. The discussion took place after the conclusion of the 2016 actuarial valuation agenda item, and Segal sought the Board's direction on the alternative assumptions Segal should use in connection with the actuarial experience study that will be presented by Segal in August and September. Counsel was comfortable that such a discussion was permissible (as a discussion related to the preceding discussion on the actuarial valuation), however counsel advised at the meeting that because this matter had not been noticed on the Board's agenda for the meeting, only direction from the Board chair, as opposed to the Board taking action – by motion or by giving direction after polling the Board members -- was advisable.

I hope this helps clarify how the matter proceeded at this month's meeting. Operating in the public forum is often cumbersome and counter-intuitive, but the rules exist for the greater good of public transparency and fair access to the government's decision-making. As your counsel, Harvey and I appreciate your understanding and patience.

Gina M. Ratto | General Counsel | Orange County Employees Retirement System

From Steve Delaney

- **Did Buffett stack the deck?**

  http://www.pionline.com/article/20170612/PRINT/306129999/did-buffett-stack-the-deck

An email exchange between Stephen Wontrobski and CEO Delaney:

June 12, 2017

Subject: OCERS Social Responsibility Mandate

Dear Mr. Delaney,

Attached please find my June 12, 2017 letter that addresses "OCERS Social Responsibility Mandate".

Can you please forward the letter for requested Board discussion.

Sincerely,
Stephen Wontrobski

June 15, 2017

Good afternoon Mr. Wontrobski,

Thank you for your letter of June 12.

First, in response to your question - no, OCERS does not have a "socially responsible" investment policy. We really do rely on the "prudent person" rule to guide our investment decisions.

As to agendizing the topic for discussion, we do have a policy that grants to the Chair of the Investment Committee the authority to approve all requests for items to be placed on the committee agenda.

I spoke to Chair Chris Prevatt, and he has a request of you.

Before agendizing the general topic of socially responsible investing, he'd like to hear more detail from you as to why you believe that approach will produce greater investment returns than our current asset allocation.

Further, he has requested that once I receive that input from you, I share it with our incoming CIO, Ms. Molly Murphy, and allow her time to become comfortable with the current asset allocation of the portfolio, after which she could make a recommendation to Mr. Prevatt on the advisability of adding this topic to a future agenda.

As an aside, we want to acknowledge that you can always come forward at any of our investment committee meetings at the time of public comment, and make the request to the full Board if you so choose.

Thank you for your understanding,
Steve Delaney

June 15, 2017

Mr. Delaney,

This response is for all of the OCERS directors

I never have maintained that the socially responsible approach will produce greater investment returns than our current asset allocation. However, it is a guarantee that fewer people will die in this case from lung disease.

Next, the real issue is: Should OCERS have a socially responsible investment policy.

I believe it should, and I maintain that the OCERS Directors should discuss the issue and vote on establishing one.

Sincerely,

Stephen Wontrobski

June 16, 2017

Good afternoon Mr. Wontrobski,

You have most likely noticed in the Board's regular monthly packet, the last item in every consent agenda is an item entitled "Board Communications". This contains general correspondence or news articles that we wish to share with all Trustees, while also providing a location where you and other members of the public can locate the same.

At Investment Committee Chair Prevatt's direction, I will place your original June 12 e-mail, my June 15 response, as well as your June 15 follow-up as below, in the Board Communications document that will be part of the July 17, 2017 OCERS Board packet.

We can certainly discuss this further when you and I next meet at some upcoming OCERS Board or committee meeting.

Steve Delaney

June 16, 2017

Mr. Delaney,

Thank you for the information.

I also informed the OC Board of Supervisors of my concern.

I really do not have anything further to add in this matter.

My responsibility to the public was to bring this matter to the attention of the full OCERS Board and the County Board of Supervisors.

I have fulfilled that responsibility.

Sincerely,

Stephen Wontrobski

June 27, 2017 – Email from CEO Steve Delaney to Members of the Board:

To the members of the OCERS Board's Investment Committee,

As you arrive for tomorrow's Investment Committee meeting, you will note a change in personnel for PCA.

Allan Emkin is still with us, but Mr. John Linder has departed PCA.

In a June 19 press release announcing a number of new hires, PCA stated the following regarding Mr. Linder's departure:

> "PCA is also announcing the departure of John Linder, CFA, CPA, as of June 16, 2017. John served as a senior consultant at PCA on its general consulting team since 2009. In the interim, John's responsibilities have been transitioned internally."

I have also attached our contract with PCA. Mr. Emkin is named as our primary contact, and his departure would put to question the entire PCA arrangement. John is mentioned in the contract, but he is not required to be part of the team. That being said, we will work with our investment counsel to update the PCA contract.

In Mr. Linder's place, we will now have Mr. Colin Bebee joining the PCA presentation team. In a telephone call to introduce Mr. Bebee to the OCERS Investment team, we learned that he has been with PCA for seven years, and he has been the creative force behind all PCA's risk models for OCERS, as well as having been the preparer of the OCERS quarterly risk reports.

So wishing Mr. Linder all the best in his new endeavors, I want to at the same time welcome Mr. Bebee to the OCERS team.

Steve Delaney
CEO, Orange County Employees Retirement System

Other Items: (See Attached)

1. Monthly summary of OCERS staff activity, starting with an overview of key customer service as well as highlights and updates for the month of May.
2. PCA Contract

Submitted by:

Steve Delaney
Chief Executive Officer

2.2. **CONSULTANT – Responsibilities.**

2.2.2. **Representatives**. CONSULTANT's representatives for this contract will be:

Primary: Allan Emkin

Secondary: John Linder

PENSION CONSULTING ALLIANCE, LLC

Pension Consulting Alliance, LLC
411 NW Park Avenue, Suite 401
Portland, OR 97209
Tel: (503) 226-1050
Fax: (503) 226-7702

CONSULTANT represents that CONSULTANT's primary representative hereinafter referred to as "Primary Consultant" is a full-time employee of CONSULTANT who will be responsible for CONSULTANT's day-to-day activities under this Agreement. Primary Consultant will be CONSULTANT's representative with respect to the administration of this Agreement, and CONSULTANT will, on a regular basis, interface with and report to OCERS' representative so as to keep such representative fully apprised and up to date on the status of the Consulting Services. Primary Consultant may only be replaced with prior written approval of the BOARD; provided that in the event an individual is being replaced due to the termination of all of such person's affiliations with CONSULTANT or its affiliates, then such approval will not be unreasonably withheld or delayed. CONSULTANT will notify OCERS within three (3) business days of discovery or determination of any intention on its part to replace Primary Consultant, or any known intentions by Primary Consultant to terminate his or her affiliation(s) with CONSULTANT or its affiliates, and of any request by Primary Consultant that he or she be replaced. John Linder may from time to time back up Primary Consultant when Primary Consultant is not available and may be designated as the customary point of contact for routine coordination.

2.2.3. **Authority of Primary Consultant**. Primary Consultant is fully authorized to act on behalf of and to receive communications on the part of CONSULTANT.

2.2.4. **Consultant Personnel**. Upon the BOARD's written request, CONSULTANT will immediately take commercially reasonable efforts

Memorandum

DATE: June 29, 2017

TO: Members of the Board of Retirement

FROM: Steve Delaney, Chief Executive Officer

SUBJECT: **OCERS ACTIVITIES AND UPDATES – MAY 2017**

The following is my regular monthly summary of OCERS staff activity, starting with an overview of key customer service statistics as well as activity highlights followed by updates for the month of MAY 2017.

CUSTOMER SERVICE

The top three questions in the month of May as received by OCERS' counseling staff:

How do I register for the online member portal?

V3 implementation created a new Member Self Service (MSS) portal which requires users to register even if they had an online account with our previous system, the Member Information Center. Users are directed to the OCERS website, www.ocers.org, and are able to access registration instructions, user guides and link updates. Registered users receive an email confirmation as well as hard copy letter to contact OCERS if account is not valid. Callers are guided through the instructions from Member Services staff that walks them through the process. As of today we have 16,801 accounts registered in MSS.

How do I start the retirement process? (A repeat from last month)

Most members start with a phone call to the retirement specialist that handles their agency. The OCERS website has a list of agencies and the associated retirement specialist assigned to assist them in the retirement process. Comprehensive retirement counseling is conducted over the phone and continues with an appointment where we provide final average salary (FAS) information. Members are encouraged to submit their retirement applications online. During the retirement appointment, members provide original birth and marriage certificates, and the application and additional forms

MEMBER SERVICE STATS FOR MAY 2017

Member Approval 94%

Unplanned Recalcs 6

Retirement Apps Received

May 2017	**60**
April 2017	**47**
Mar 2017	**79**
Feb 2017	**107**
Jan 2017	**151**
Dec 2016	**62**
Nov 2016	**64**
Oct 2016	**53**
Sept 2016	**45**
Aug 2016	***61***
July 2016	***62***
June 2016	***65***
May 2016	***51***
April 2016	***61***

of tax withholding and direct deposit are reviewed. The benefit options are explained thoroughly to ensure complete understanding.

What is the withdrawal process? And what is the turnaround time?

Upon separation of employment, OCERS requires a written notice of termination from the employer. OCERS mails the member a letter notifying members of their options.   If members wish to withdraw their contributions and interest from their OCERS account, we direct them to the OCERS web site and instruct them to obtain the form *Member Request to Withdraw Contributions/Elect Rollover* which starts the process. Once the completed form is received at OCERS, we process the request within 8 to 10 weeks to allow for final salary records to post from their employer. When members withdraw their balance, they forfeit retirement, disability and survivor benefits.

ACTIVITIES

CIO SEARCH

In March we had conducted over 20 Skype interviews with possible candidates out of our pool of 160+ applications. In April we met with eight of the primary candidates for in-person interviews at OCERS headquarters. My special thanks to both Allan Emkin of PCA, who was able to join us in half of those interviews, and to Ms. Colleen Clark, formerly of the County of Orange Finance Office, who kindly came out of retirement to assist us in the first round interview process. From those eight interviews I narrowed the field to three finalists who were interviewed on May 2 the Board's ad hoc search committee (Mr. Ball, Mr. Hilton, and Mr. Prevatt), together with the assistance of our two consultants, Steve McCourt of Meketa, and once again Allan Emkin of PCA. We gathered to sit down and discuss the candidates immediately after, and there was near unanimous concurrence from the start that Ms. Molly Murphy of Mercy Health was the candidate we were searching for.

OCERS YEAR IN REVIEW MEETINGS

OCERS annual "YEAR IN REVIEW" meetings with our primary stakeholder groups continued through the month of May:

On **May 24** Mr. Ball, Mr. Prevatt and I met with Supervisor Bartlett and her staff. A very long discussion ensued regarding the Orange County Fire Authority and the challenges it faces should the City of Irvine choose to withdraw from the Joint Power Authority (JPA).

On **May 26** Mr. Ball, Mr. Prevatt and I met with a staff member for Supervisor Do who had been pulled away at the last minute. The aide is assigned OCERS oversight responsibilities by the Supervisor, so we took the opportunity to bring him fully up to speed on the pension issues that should be drawing his attention.

On **May 30**, due to scheduling conflicts, Ms. Jenike and Ms. Shott met with the executive team of the Children & Family Commission of Orange County without me. Aside from the usual review of OCERS highlights coming out of 2016, they report that the CFCOC team was very interested in learning more about what would be required for them to pay off their full unfunded actuarial liability as have a number of other plan sponsors of late.

In the morning of **May 31** I gave Ms. Jenike and Ms. Shott the day off of OCERS Year In Review duties to make up for my having had to leave them on May 30, and I went to meet with the executive team of In-home Supportive Services (IHSS) by myself. Good detailed meeting on how to properly report salaries, with questions about how to make a contribution prepayment, as well as a discussion of the upcoming Board Strategic Planning Workshop, as Ms. Napoles, Director of IHSS, has agreed to come be one of our morning speakers on September 13.

Finally, in the afternoon of **May 31**, Ms. Jenike and I went to meet with the executive team of the Association of Orange County Deputy Sheriffs. We spent some time reviewing the final outcome of the POST Mandatory overtime issue, and expressed our appreciation for the strong understanding and assistance provided by AOCDS through this entire process.

UPDATES

SECOVA HEALTH INSURANCE CONVERSION

Ms. Catherine Fairley, Director of Member Services reports that "OCERS staff continues to work with Secova and the County to clarify the correction process. Secova is in the process of coding automated error reports for the intent file, a weekly file submitted to report new retirement applications and deaths. While call volume to Member Services staff has decreased a communication challenge for OCERS staff exists with OCERS payees who were overcharged high medical premiums, or enrolled in healthcare in error. The County has sent many of them refunds directly, issued by the County and not passed through the OCERS payment system. (When the County normally corrects an error, they usually send an adjustment to OCERS the next month.) In this case, the errors were so prevalent and inappropriate the County paid the members so they didn't have to wait another month to issue it through the OCERS payment process. However that leaves OCERS out of the informational loop - OCERS staff does not know who received direct refunds, so our member records only show the original erroneous transaction, not that they were reimbursed by the County, outside of their OCERS payment. That limits our ability to assist in member calls pertaining to this health insurance issue."

INVESTMENT DEPARTMENT UPDATE

Ms. Chary, OCERS Director of Investment Operations, provides a report on May activities:
The Investment Committee adopted the revised implementation and redeployment plan for Global Equity. The Committee also discussed effective Board governance and the role of a policy focused (strategy and planning, risk management, oversight and monitoring and organizational infrastructure)

Board. The Committee also heard from Meketa on the role of private equity in an institutional portfolio and the best practices surrounding private equity.

MAY STAFFING SUMMARY

OCERS finalized the job offer to Ms. Molly Murphy for the Chief Investments Officer position. Ms. Murphy will join the agency on June 23. The Member Services department on-boarded two Retirement Program Specialists. One of the employees selected for this position was a transfer from the County who previously worked at OCERS, left the agency for a promotion with the County and returned to OCERS to accept a promotion as Retirement Program Specialist. The Administrative Services department received notification that Staff Specialist, Mary Morales, was resigning from her position in June. Mary accepted a position with the City of Oakland as a Human Resources Analyst. The department opened an internal/agency promotional recruitment and Melissa Wozniuk was selected to promote into the position. The Staff Assistant position vacated by Melissa's promotion will be opened to the public in June.

As of May 31, a total of four employees have left OCERS employment (two voluntary resignations, one transfer to the County and one probationary release) in calendar year 2017. The current annual turnover rate is just over 5%. This is calculated by dividing the number of employees that left the agency by the number of employees on payroll. OCERS has a total of five vacancies. Of the 80 budgeted positions (28 OCERS Direct and 52 County positions), 75 positions are filled.

Position Type	Position Title	Department	Comments
OCERS	Chief Investment Officer	Investments	Tentative start date: June 23, 2017
OCERS	Member Services Business Analyst	Member Services	New position (pending open date)
County	(2) Sr. Retirement Program Specialist	Member Services	New positions (pending open date)
County	IT Business Analyst	Information Technology	New position (pending open date)

As a reminder you will see this memo included with the BOARD COMMUNICATIONS document as part of the consent agenda for the July 17 meeting of the OCERS Board of Retirement.

I-2

Memorandum

DATE: July 6, 2017

TO: Members, Board of Retirement

FROM: Brenda Shott, Assistant CEO-Finance and Internal Operations

SUBJECT: **ILLUSTRATIONS OF RETIREMENT COSTS, UNFUNDED ACTUARIAL ACCRUED LIABILITY AND FUNDED RATIO UNDER ALTERNATIVE ECONOMIC SCENARIOS**

Recommendation

Receive and file.

Background/Discussion

Segal Consulting annually prepares an Illustration of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Economic Scenarios. The illustrations cover a 20 year period to reflect the current 20 year amortization period. The information contained in the letter are not a guarantee of what rates will actually be in the future as rates are impacted by experience and changes in assumptions and funding policy. Mr. Paul Angelo will present this information to the Board at the July 17 meeting and staff will distribute the letter to plan sponsors.

Submitted by:

OCERS B.M.S - Approved

Brenda Shott

Assistant CEO, Finance and Internal Operations

Segal Consulting

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8283 www.segalco.com

Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary
ayeung@segalco.com

VIA E-MAIL AND USPS

July 7, 2017

Mr. Steve Delaney
Chief Executive Officer
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

Re: Illustrations of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Investment Return Scenarios

Dear Steve:

As requested, we have developed 20-year illustrations of the employer contribution rates for OCERS under three sets of market investment return "scenarios" after December 31, 2016. In this letter, we have also provided the Unfunded Actuarial Accrued Liability (UAAL) in dollars and the funded ratio associated with those projected employer contribution rates. These results have been prepared using the results from the December 31, 2016 valuation approved by the Board at its meeting on June 12, 2017.

Please note that at the Board meeting on June 12, 2017, the Chair provided direction to Segal on alternative inflation and investment return assumptions for use in studying how sensitive the projection results under Scenario #2 below are to changes in economic assumptions. Those sensitivity illustrations (done for the OCERS plan as a whole and not by Rate Group) will be provided under a separate cover.

The three market rate of return scenarios are as follows:

- Scenario #1: 0.00% for 2017 and 7.25% thereafter.
- Scenario #2: 7.25% for all years.
- Scenario #3: 14.50% for 2017 and 7.25% thereafter.

Even though the financial impact is shown under only three hypothetical market investment return scenarios for 2017, the financial impact under other possible short-term market investment return scenarios may be approximated by interpolating or extrapolating using the results from the three scenarios shown.[1]

The various projections included are as follows:

- The projected contribution rates for the aggregate plan are provided in Attachment A.
- The projected contribution rates for the eleven Rate Groups are provided in Attachment B.
- The projected UAAL and funded ratio for the aggregate plan are provided in Attachment C.
- The projected UAAL and funded ratio for the eleven Rate Groups are provided in Attachments D through N.
- Also, we have included in Attachment O the projected contribution rates for the different plans within the eleven Rate Groups.

This projection also reflects the potential employer savings as current members leave employment and are replaced by new members covered under the tiers required by the California Public Employees' Pension Reform Act of 2013 (CalPEPRA) starting at January 1, 2013 (or January 1, 2015 for Rate Group #5). Please note that some of the changes made by CalPEPRA, such as the sharing of the total Normal Cost on a 50:50 basis, may result in employer savings for current members under the legacy plans. As those changes have not been implemented by the employers and the bargaining parties at OCERS, we have not reflected them in this illustration.

METHODS AND ASSUMPTIONS

The methods and actuarial assumptions we used to prepare the employer contribution rates, the UAAL and the funded ratio are as summarized below:

- The illustrations are based on the actuarial assumptions and census data used in our December 31, 2016 valuation report for the Retirement Plan. With the exception of the market rates of return specified above, it is assumed that all actuarial assumptions would be met in the future and that there would be no change in the future for any of the actuarial assumptions adopted by the Board for the December 31, 2016 valuation.
- The detailed amortization schedule for OCERS' UAAL as of December 31, 2016 is provided in the valuation report. Any subsequent changes in the UAAL due to actuarial gains or losses (e.g., from investment returns on valuation value of assets greater or less than the assumed 7.25%) are amortized over separate 20-year periods.

[1] For example, a hypothetical market investment return of 3.625% (i.e., one-half of 7.25%) is expected to result in a change in employer's contribution of about one-half of the difference between those shown for Scenarios #1 and #2, starting with the December 31, 2016 valuation.

- CalPEPRA prescribes new benefit formulas for members with a membership date on and after January 1, 2013 (or January 1, 2015 for Rate Group #5). For Rate Groups #1, #3, #5, #9, #10, #11 and #12, we have estimated the Normal Cost savings[2] associated with the enrollment of those members under the new 2.5% at 67 formula. The method we have applied this year to estimate the Normal Cost savings should be more robust than the simplified method we applied in the past.[3]

  For new members within Rate Group #2, only the County's attorneys, San Juan Capistrano members[4] and OCERS Management members will receive the 2.5% at 67 formula while all other new members in Rate Group #2 will receive the "new" 1.62% at 65 formulas.[5] We assumed that the proportion of the payrolls for members who will receive the 2.5% at 67 formula, the Plan T "new" 1.62% at 65 formula and the Plan W "new" 1.62% at 65 formula in the future would remain unchanged from that observed at the December 31, 2016 valuation. As of December 31, 2016, payroll for active members in Rate Group #2 under these three formulas represented about 7.4%, 92.6% and 0.0% of the combined payroll for members under the 2.5% at 67 formula, the Plan T "new" 1.62% at 65 formula and the Plan W "new" 1.62% at 65 formula, respectively. We have estimated the Normal Cost savings[2] associated with the enrollment of new members under the three new formulas.[6]

  For Rate Group #6, #7 and #8 members with a membership date on and after January 1, 2013, we have estimated the Normal Cost savings[2] associated with the enrollment of those members under the new 2.7% at 57 formula.

- We understand that, with the exception of new members who would be covered under the "new" 1.62% at 65 formulas, in the determination of pension benefits under the CalPEPRA formulas the maximum compensation that can be taken into account for new members on and after January 1, 2017 is equal to $142,530 in 2017. To the extent this provision will limit compensation of the new members, our assumption that the total payroll will increase by 3.50% each year over the projection period (for use in determining the contribution rate for

---

[2] We have estimated the potential employer Normal Cost savings assuming that the payroll for new members who would be covered after the December 31, 2016 valuation under the CalPEPRA tiers could be modeled by: (1) projecting the total December 31, 2016 payroll within each Rate Group using the 3.50% assumption used in the valuation to predict annual wage growth for amortizing the UAAL and (2) subtracting the projected closed group payroll from the current members in the December 31, 2016 valuation using the assumptions applied in the valuation to anticipate salary increases as well as termination, retirement (both service and disability) and other exits from active employment.

[3] In the past, we estimated the savings by making a simplifying assumption that there would be a shift in the proportion of payroll such that active members would be replaced over 20 years (starting in 2013 or 2015 for Rate Group #5) by new CalPEPRA members on a prorated basis.

[4] For San Juan Capistrano members with membership dates on or after January 1, 2016, they will be allowed to elect Plan W (1.62% at 65) in lieu of Plan U (2.5% at 67 formula). As of December 31, 2016, there were no members enrolled in Plan W.

[5] The "new" 1.62% at 65 formula is the CalPEPRA Plan T for non-City of San Juan Capistrano members and the CalPEPRA Plan W for City of San Juan Capistrano members.

[6] The payroll for new members is split between the 2.5% at 67 formula, the Plan T 1.62% at 65 formula and the Plan W 1.62% at 65 formula based on the proportion of payrolls under those formulas as of December 31, 2016.

the UAAL) may be overstated somewhat. Under that scenario, there would be an increase in the UAAL contribution rate as the amount required to amortize the UAAL will have to be spread over a somewhat smaller total payroll base.

- Other than the above adjustments to the Normal Costs from the new CalPEPRA formulas, we have not included any other adjustments for the pre-CalPEPRA members such as the anticipated reduction in proportion (and hence in the associated Normal Cost) of existing Tier 1 active members (with pension benefits based on final one year average formula) relative to the increase in proportion of existing Tier 2 active members (with pension benefits based on final three year average formula) for members in any Rate Group.

OTHER CONSIDERATIONS

Projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

This study was prepared under the supervision of Andy Yeung, ASA, MAAA. I am a member of the American Academy of Actuaries and meet the qualification requirements to provide the opinion contained herein.

Please let us know if you have any questions.

Sincerely,

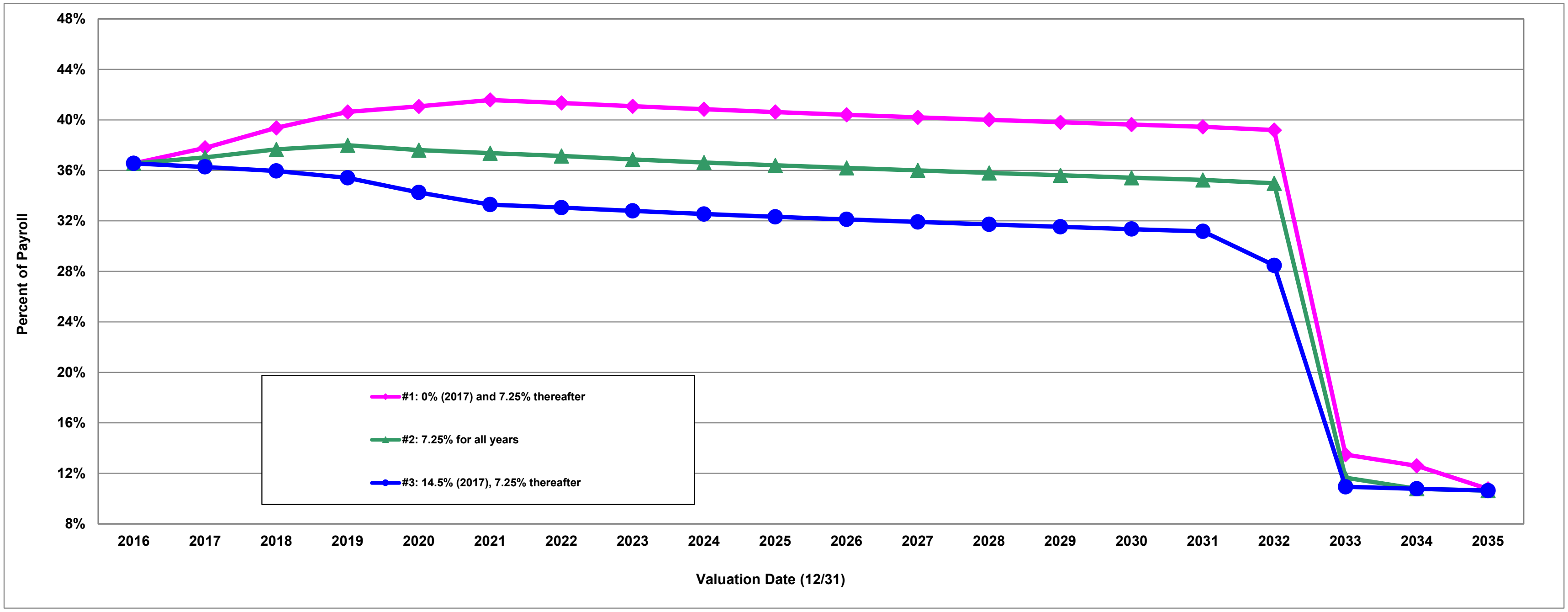
Andy Yeung

Andy Yeung

MYM/gxk
Enclosures

cc: Suzanne Jenike
Brenda Shott

Attachment A
Projected Employer Rates
Aggregate Plan



Valuation Date (12/31)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	36.6%	37.8%	39.4%	40.6%	41.1%	41.6%	41.4%	41.1%	40.8%	40.6%	40.4%	40.2%	40.0%	39.8%	39.6%	39.5%	39.2%	13.5%	12.6%	10.8%
#2: 7.25% for all years	36.6%	37.0%	37.7%	38.0%	37.6%	37.4%	37.1%	36.9%	36.6%	36.4%	36.2%	36.0%	35.8%	35.6%	35.4%	35.2%	35.0%	11.7%	10.8%	10.6%
#3: 14.5% (2017), 7.25% thereafter	36.6%	36.3%	36.0%	35.4%	34.3%	33.3%	33.1%	32.8%	32.5%	32.3%	32.1%	31.9%	31.7%	31.5%	31.4%	31.2%	28.5%	10.9%	10.8%	10.6%

There is an increase in the rates towards the end of the projection period in this letter compared to the rates towards the end of the projection period in our letter dated January 4, 2017 (which was based on the December 31, 2015 valuation). That increase is due to the change in methodology used to estimate the Normal Cost savings as described on page 3 of this letter.

Attachment B
Projected Employer Rates by Rate Group
Scenario 1: 0% for 2017 and 7.25% thereafter

	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	17.3%	18.4%	19.3%	19.6%	20.0%	20.0%	19.9%	19.9%	19.9%	19.9%	19.9%	19.9%	19.8%	19.8%	19.8%	19.8%	8.9%	10.3%	8.8%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	34.7%	36.1%	37.2%	37.6%	38.0%	37.7%	37.5%	37.2%	37.0%	36.8%	36.6%	36.4%	36.2%	36.0%	35.8%	35.5%	8.7%	8.0%	7.8%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	12.9%	13.6%	14.3%	14.2%	14.1%	14.0%	13.8%	13.7%	13.6%	13.5%	13.5%	13.4%	13.3%	13.3%	13.2%	13.2%	13.1%
RG #5 - Plans A, B and U (OCTA)	25.5%	26.7%	28.3%	29.5%	30.0%	30.6%	30.6%	30.5%	30.5%	30.5%	30.4%	30.4%	30.4%	30.4%	30.4%	30.3%	30.2%	11.9%	13.1%	10.3%
RG #9 - Plans M, N and U (TCA)	23.8%	24.6%	25.6%	26.4%	26.7%	27.1%	27.0%	26.8%	26.7%	26.6%	26.5%	26.5%	26.4%	26.3%	26.3%	26.2%	26.1%	11.8%	12.3%	10.7%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	31.5%	32.8%	33.7%	34.1%	34.5%	34.3%	34.1%	34.0%	33.8%	33.7%	33.5%	33.4%	33.2%	33.1%	33.0%	32.8%	10.0%	9.7%	9.6%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	12.1%	13.3%	13.9%	14.5%	14.4%	14.3%	14.2%	14.2%	14.1%	14.1%	14.0%	13.9%	13.9%	13.8%	13.7%	13.7%	13.6%	13.5%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	22.1%	23.2%	24.2%	24.5%	24.8%	24.5%	24.2%	23.9%	23.7%	23.5%	23.4%	23.2%	23.0%	23.0%	22.8%	22.6%	10.9%	10.8%	10.7%
Safety																				
RG #6 - Plans E, F and V (Probation)	47.8%	49.6%	51.6%	53.2%	53.9%	54.6%	54.4%	54.2%	54.0%	53.7%	53.5%	53.2%	52.9%	52.5%	52.2%	51.8%	51.4%	27.1%	22.3%	16.8%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	65.2%	67.8%	69.8%	70.6%	71.5%	71.2%	70.9%	70.6%	70.4%	70.2%	70.0%	69.7%	69.5%	69.3%	69.1%	68.8%	31.5%	28.6%	20.4%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	49.3%	51.4%	53.0%	53.5%	54.0%	53.6%	52.7%	52.1%	51.6%	51.2%	50.8%	50.4%	50.0%	49.7%	49.2%	48.7%	21.2%	20.7%	16.8%

In the December 31, 2033 valuation, Rate Group #1 would be projected to have a small UAAL rate, which would be entirely offset by the favorable 18-month delay adjustment due to the significant decrease in the UAAL rate in the December 31, 2033 valuation. However, in the following year, the UAAL rate would no longer be offset by the 18-month delay adjustment so the employer rate increases in that year. By the December 31, 2035 valuation, there would no longer be a UAAL rate.

In addition, under this scenario, Rate Group #3 would be expected to use up the <u>entire</u> amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of $34,067,000 as of December 31, 2016) by the December 31, 2019 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of $117,723,000 as of December 31, 2016) in these projections.

Attachment B
Projected Employer Rates by Rate Group
Scenario 2: 7.25% for all years

	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	16.9%	17.4%	17.7%	17.6%	17.6%	17.6%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.4%	17.4%	17.4%	17.4%	8.8%	8.8%	8.8%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	34.0%	34.5%	34.8%	34.4%	34.1%	33.9%	33.6%	33.4%	33.2%	33.0%	32.7%	32.5%	32.3%	32.2%	32.0%	31.7%	8.1%	8.0%	7.8%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	11.1%	11.0%	10.9%	10.7%	10.6%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%	9.7%	9.6%
RG #5 - Plans A, B and U (OCTA)	25.5%	26.0%	26.8%	27.3%	27.1%	27.1%	27.0%	27.0%	27.0%	27.0%	26.9%	26.9%	26.9%	26.9%	26.8%	26.8%	26.7%	10.3%	10.3%	10.3%
RG #9 - Plans M, N and U (TCA)	23.8%	24.1%	24.5%	24.8%	24.5%	24.4%	24.3%	24.2%	24.1%	24.0%	23.9%	23.8%	23.7%	23.7%	23.6%	23.5%	23.4%	10.7%	10.7%	10.7%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	30.9%	31.4%	31.7%	31.5%	31.3%	31.1%	30.9%	30.7%	30.6%	30.4%	30.3%	30.1%	30.0%	29.9%	29.8%	29.6%	9.7%	9.7%	9.6%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	10.8%	11.0%	10.8%	10.7%	10.6%	10.6%	10.5%	10.5%	10.5%	10.4%	10.4%	10.4%	10.3%	10.3%	10.3%	10.3%	10.2%	10.2%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	21.3%	21.5%	21.6%	21.1%	20.7%	20.4%	20.1%	19.8%	19.6%	19.5%	19.3%	19.2%	19.0%	19.0%	18.9%	18.7%	8.2%	8.1%	8.0%
Safety																				
RG #6 - Plans E, F and V (Probation)	47.8%	48.7%	49.6%	50.2%	49.9%	49.7%	49.5%	49.3%	49.1%	48.8%	48.6%	48.3%	48.0%	47.7%	47.3%	47.0%	46.5%	22.2%	17.1%	16.8%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	64.0%	65.1%	65.7%	65.2%	65.0%	64.7%	64.4%	64.1%	63.9%	63.7%	63.4%	63.2%	63.0%	62.8%	62.6%	62.3%	25.0%	20.5%	20.4%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	48.3%	49.1%	49.4%	48.8%	48.4%	47.9%	47.0%	46.4%	45.9%	45.5%	45.1%	44.8%	44.4%	44.0%	43.6%	43.1%	17.5%	17.2%	16.8%

Under this scenario, Rate Group #3 would be expected to use up only some of the amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of $34,067,000 as of December 31, 2016) by the December 31, 2035 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of $117,723,000 as of December 31, 2016) in these projections.

Attachment B
Projected Employer Rates by Rate Group
Scenario 3: 14.5% for 2017 and 7.25% thereafter

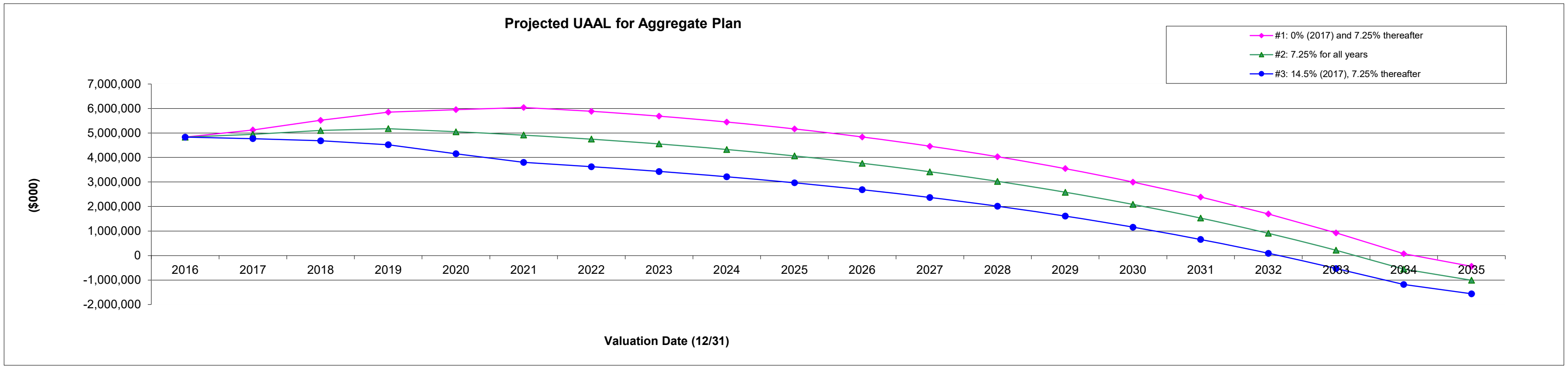
	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	16.4%	16.4%	16.2%	15.6%	15.2%	15.1%	15.1%	15.1%	15.1%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	33.3%	32.9%	32.4%	31.3%	30.3%	30.1%	29.8%	29.6%	29.4%	29.1%	28.9%	28.7%	28.5%	28.3%	28.2%	27.9%	8.1%	8.0%	7.8%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	11.1%	11.0%	10.9%	10.7%	10.6%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%	9.7%	9.6%
RG #5 - Plans A, B and U (OCTA)	25.5%	25.4%	25.3%	25.0%	24.2%	23.6%	23.5%	23.5%	23.5%	23.4%	23.4%	23.4%	23.4%	23.3%	23.3%	23.3%	10.3%	10.3%	10.3%	10.3%
RG #9 - Plans M, N and U (TCA)	23.8%	23.6%	23.5%	23.1%	22.4%	21.8%	21.7%	21.6%	21.5%	21.4%	21.3%	21.2%	21.2%	21.1%	21.0%	21.0%	10.8%	10.7%	10.7%	10.7%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	30.3%	30.1%	29.7%	28.8%	28.1%	27.9%	27.7%	27.5%	27.4%	27.2%	27.1%	26.9%	26.8%	26.7%	26.6%	26.4%	9.7%	9.7%	9.6%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	10.8%	10.8%	10.7%	10.6%	10.6%	10.5%	10.5%	10.4%	10.4%	10.4%	10.4%	10.3%	10.3%	10.3%	10.2%	10.2%	10.2%	10.2%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	20.7%	20.0%	19.3%	18.1%	17.1%	16.9%	16.6%	16.4%	16.3%	16.2%	16.1%	16.0%	15.9%	8.5%	8.4%	8.2%	8.2%	8.1%	8.0%
Safety																				
RG #6 - Plans E, F and V (Probation)	47.8%	47.9%	47.7%	47.2%	45.9%	44.8%	44.6%	44.4%	44.2%	43.9%	43.7%	43.4%	43.1%	42.8%	42.4%	42.1%	41.6%	17.5%	17.1%	16.8%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	62.8%	62.4%	61.7%	59.9%	58.5%	58.2%	57.9%	57.6%	57.4%	57.2%	56.9%	56.7%	56.5%	56.3%	56.1%	55.8%	20.7%	20.5%	20.4%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	47.2%	46.7%	45.9%	44.1%	42.7%	42.3%	41.3%	40.7%	40.2%	39.8%	39.5%	39.1%	38.7%	38.3%	37.9%	18.0%	17.5%	17.2%	16.8%

Under this scenario, Rate Group #3 would be expected to use up none of the amount in the O.C. Sanitation District UAAL Deferred Account (that account has a balance of $34,067,000 as of December 31, 2016) by the December 31, 2035 valuation.

Rates shown throughout these projections for Rate Group #12 have been adjusted for the future service only benefit enhancement.

Similar to prior projections, we have not taken into account the County Investment Account (that account has a balance of $117,723,000 as of December 31, 2016) in these projections.

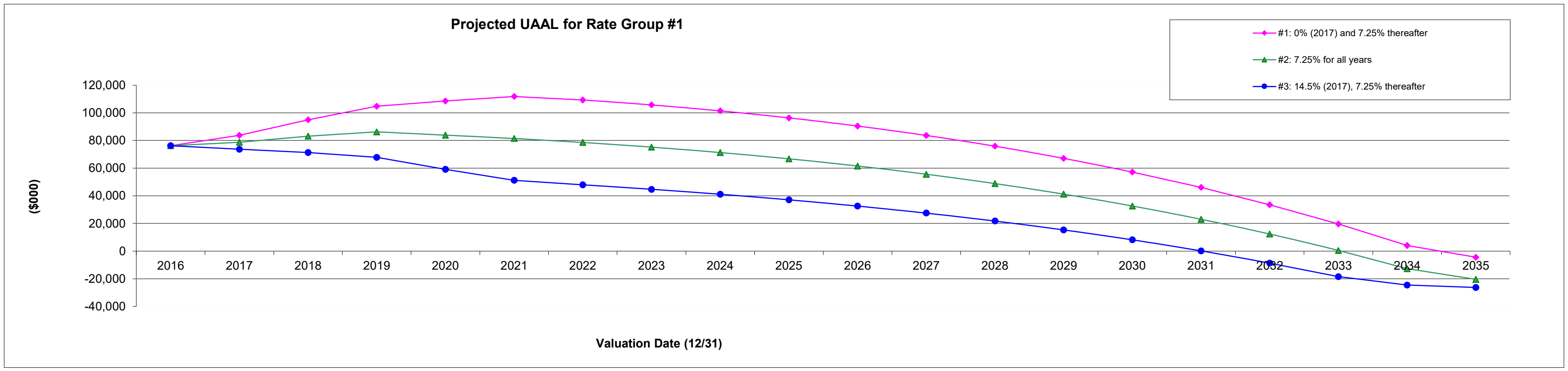
Attachment C
Projected UAAL and Funded Ratio for Aggregate Plan



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	4,830,483	5,121,791	5,516,203	5,847,338	5,953,036	6,037,231	5,886,591	5,688,481	5,445,557	5,162,196	4,834,711	4,459,087	4,031,060	3,545,950	2,998,658	2,383,717	1,695,311	927,134	73,827	-439,315
#2: 7.25% for all years	4,830,483	4,946,070	5,100,809	5,178,645	5,049,336	4,915,483	4,749,615	4,555,092	4,327,797	4,064,644	3,762,358	3,417,411	3,026,071	2,584,142	2,087,169	1,530,374	908,598	216,348	-550,933	-1,007,251
#3: 14.5% (2017), 7.25% thereafter	4,830,483	4,766,627	4,680,831	4,518,027	4,154,912	3,803,453	3,621,297	3,428,374	3,214,010	2,968,111	2,687,754	2,369,858	2,011,096	1,607,893	1,156,389	652,414	91,559	-531,001	-1,179,180	-1,558,756

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	73.1%	72.9%	72.4%	72.2%	73.1%	74.0%	75.9%	77.8%	79.7%	81.6%	83.6%	85.5%	87.4%	89.4%	91.4%	93.4%	95.5%	97.6%	99.8%	101.1%
#2: 7.25% for all years	73.1%	73.9%	74.4%	75.4%	77.2%	78.9%	80.6%	82.2%	83.9%	85.5%	87.2%	88.9%	90.6%	92.3%	94.0%	95.8%	97.6%	99.4%	101.4%	102.4%
#3: 14.5% (2017), 7.25% thereafter	73.1%	74.8%	76.6%	78.5%	81.2%	83.6%	85.2%	86.6%	88.0%	89.4%	90.9%	92.3%	93.7%	95.2%	96.7%	98.2%	99.8%	101.4%	102.9%	103.7%

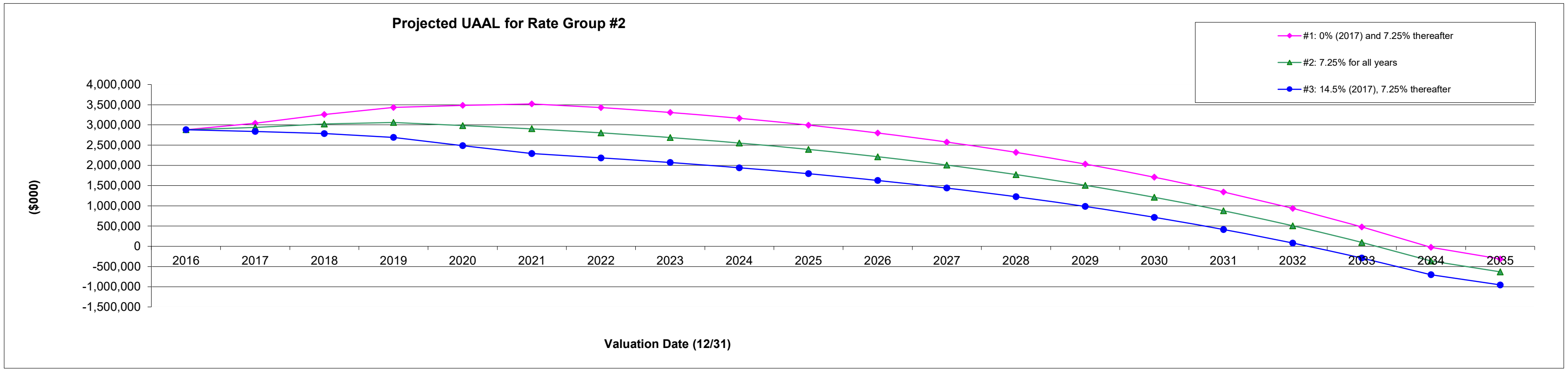
Attachment D
Projected UAAL and Funded Ratio for Rate Group #1
Plans A, B and U (non-OCTA, non-OCSD)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	76,266	83,733	94,961	104,716	108,505	111,837	109,309	105,811	101,441	96,339	90,430	83,642	75,895	67,109	57,193	46,040	33,544	19,587	4,076	-4,415
#2: 7.25% for all years	76,266	78,685	83,114	86,231	83,830	81,516	78,612	75,232	71,290	66,738	61,516	55,563	48,814	41,198	32,641	23,065	12,385	498	-12,675	-20,418
#3: 14.5% (2017), 7.25% thereafter	76,266	73,636	71,264	67,747	59,157	51,184	47,899	44,641	41,135	37,140	32,616	27,511	21,776	15,354	8,186	208	-8,640	-18,433	-24,513	-26,290

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	82.6%	81.8%	80.3%	79.3%	79.5%	79.8%	81.2%	82.5%	83.9%	85.4%	86.8%	88.2%	89.7%	91.2%	92.8%	94.4%	96.0%	97.7%	99.5%	100.5%
#2: 7.25% for all years	82.6%	82.9%	82.8%	83.0%	84.2%	85.3%	86.4%	87.6%	88.7%	89.9%	91.0%	92.2%	93.4%	94.6%	95.9%	97.2%	98.5%	99.9%	101.4%	102.2%
#3: 14.5% (2017), 7.25% thereafter	82.6%	84.0%	85.2%	86.6%	88.8%	90.8%	91.7%	92.6%	93.5%	94.4%	95.2%	96.1%	97.0%	98.0%	99.0%	100.0%	101.0%	102.1%	102.8%	102.9%

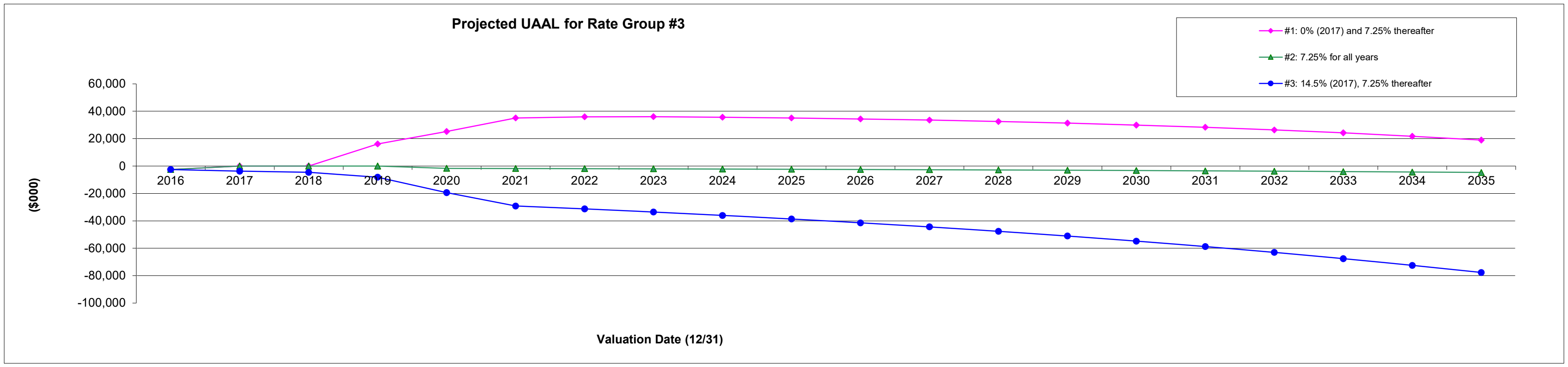
Attachment E
Projected UAAL and Funded Ratio for Rate Group #2
Plans I, J, O, P, S, T, U and W (County et al.)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	2,882,742	3,039,325	3,258,178	3,432,587	3,482,596	3,518,486	3,426,877	3,307,949	3,162,979	2,994,103	2,799,123	2,575,663	2,321,240	2,033,096	1,708,174	1,343,252	934,951	479,542	-26,109	-312,995
#2: 7.25% for all years	2,882,742	2,939,099	3,021,766	3,061,998	2,985,698	2,905,093	2,805,497	2,688,771	2,552,519	2,394,869	2,213,871	2,007,415	1,773,310	1,509,027	1,211,921	879,135	507,592	94,070	-364,107	-630,628
#3: 14.5% (2017), 7.25% thereafter	2,882,742	2,838,873	2,785,345	2,691,423	2,488,871	2,291,735	2,184,220	2,069,705	1,942,107	1,795,687	1,628,673	1,439,227	1,225,363	984,940	715,648	414,998	80,303	-291,328	-702,024	-954,014

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	71.2%	71.2%	70.6%	70.4%	71.3%	72.3%	74.2%	76.1%	78.1%	80.1%	82.1%	84.1%	86.2%	88.3%	90.5%	92.7%	95.1%	97.5%	100.1%	101.5%
#2: 7.25% for all years	71.2%	72.1%	72.7%	73.6%	75.4%	77.1%	78.9%	80.6%	82.3%	84.0%	85.8%	87.6%	89.4%	91.3%	93.2%	95.2%	97.3%	99.5%	101.8%	103.1%
#3: 14.5% (2017), 7.25% thereafter	71.2%	73.1%	74.8%	76.8%	79.5%	82.0%	83.5%	85.1%	86.5%	88.0%	89.6%	91.1%	92.7%	94.3%	96.0%	97.7%	99.6%	101.5%	103.5%	104.7%

Attachment F
Projected UAAL and Funded Ratio for Rate Group #3
Plans B, G, H and U (OCSD)

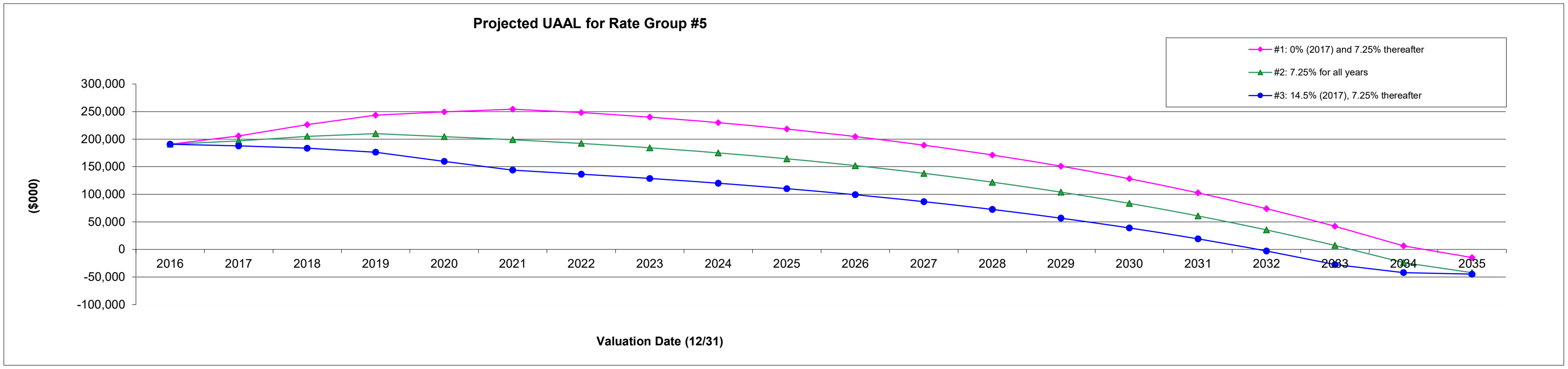


UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	-2,522	0	0	16,149	25,235	35,137	35,943	36,026	35,634	35,104	34,427	33,588	32,572	31,366	29,953	28,309	26,412	24,239	21,766	18,965
#2: 7.25% for all years	-2,522	0	0	0	-1,623	-1,740	-1,867	-2,002	-2,147	-2,303	-2,470	-2,649	-2,841	-3,047	-3,267	-3,504	-3,758	-4,031	-4,323	-4,637
#3: 14.5% (2017), 7.25% thereafter	-2,522	-3,722	-4,590	-8,150	-19,420	-29,196	-31,313	-33,583	-36,017	-38,629	-41,429	-44,433	-47,654	-51,109	-54,815	-58,789	-63,051	-67,622	-72,525	-77,783

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	100.4%	100.0%	100.0%	97.7%	96.6%	95.5%	95.7%	95.9%	96.1%	96.3%	96.6%	96.8%	97.0%	97.2%	97.5%	97.7%	97.9%	98.2%	98.4%	98.7%
#2: 7.25% for all years	100.4%	100.0%	100.0%	100.0%	100.2%	100.2%	100.2%	100.2%	100.2%	100.2%	100.2%	100.3%	100.3%	100.3%	100.3%	100.3%	100.3%	100.3%	100.3%	100.3%
#3: 14.5% (2017), 7.25% thereafter	100.4%	100.6%	100.7%	101.1%	102.6%	103.7%	103.8%	103.9%	104.0%	104.0%	104.2%	104.3%	104.4%	104.5%	104.6%	104.8%	104.9%	105.1%	105.2%	105.4%

Unlike most of the other Rate Groups, Rate Group #3 has a UAAL under Scenario #1 due to the reemergence of their UAAL amortization layers starting with the December 31, 2019 valuation. While Rate Group #3 is overfunded as of the December 31, 2016 valuation, they are anticipated to have a restart amortization layer starting with the 2019 valuation under Scenario #1, which will not drop off until 20 years after that restart amortization layer is established.

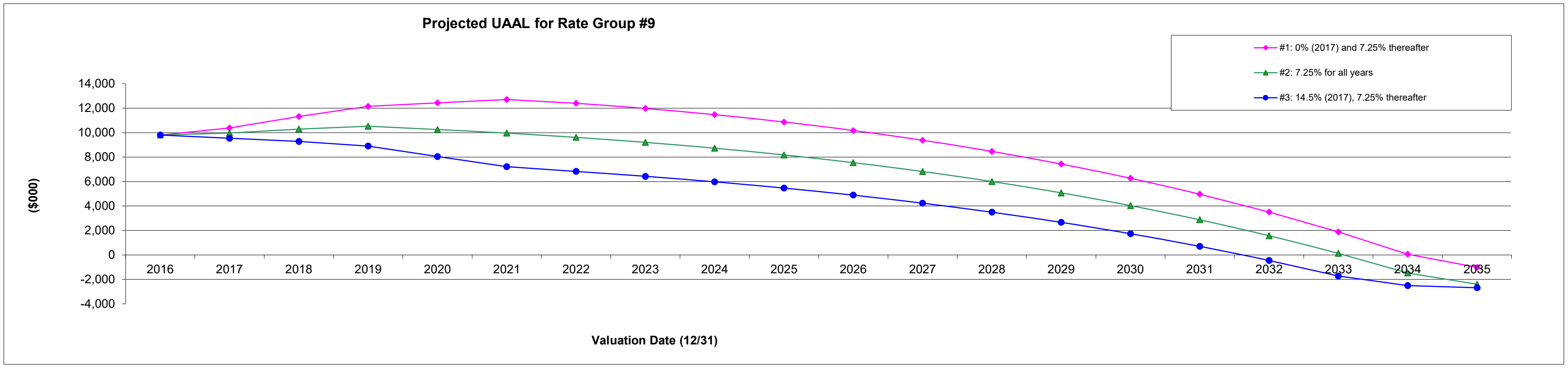
Attachment G
Projected UAAL and Funded Ratio for Rate Group #5
Plans A, B and U (OCTA)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	190,783	205,829	226,481	243,363	249,310	254,281	248,192	240,040	229,970	218,209	204,607	188,997	171,197	151,013	128,233	102,629	73,957	41,942	6,376	-14,705
#2: 7.25% for all years	190,783	196,732	205,082	209,895	204,523	199,072	192,280	184,331	175,040	164,290	151,948	137,869	121,899	103,871	83,595	60,885	35,531	7,296	-23,996	-42,168
#3: 14.5% (2017), 7.25% thereafter	190,783	187,634	183,680	176,413	159,702	143,810	136,297	128,547	120,044	110,307	99,226	86,682	72,538	56,661	38,902	19,090	-2,951	-27,400	-41,923	-44,962

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	77.3%	76.7%	75.6%	75.1%	75.7%	76.4%	78.0%	79.7%	81.4%	83.1%	84.9%	86.6%	88.4%	90.2%	92.0%	93.8%	95.7%	97.7%	99.7%	100.8%
#2: 7.25% for all years	77.3%	77.8%	77.9%	78.5%	80.1%	81.5%	83.0%	84.4%	85.8%	87.3%	88.8%	90.2%	91.7%	93.2%	94.8%	96.3%	97.9%	99.6%	101.3%	102.2%
#3: 14.5% (2017), 7.25% thereafter	77.3%	78.8%	80.2%	81.9%	84.4%	86.6%	87.9%	89.1%	90.3%	91.5%	92.7%	93.9%	95.1%	96.3%	97.6%	98.9%	100.2%	101.5%	102.3%	102.3%

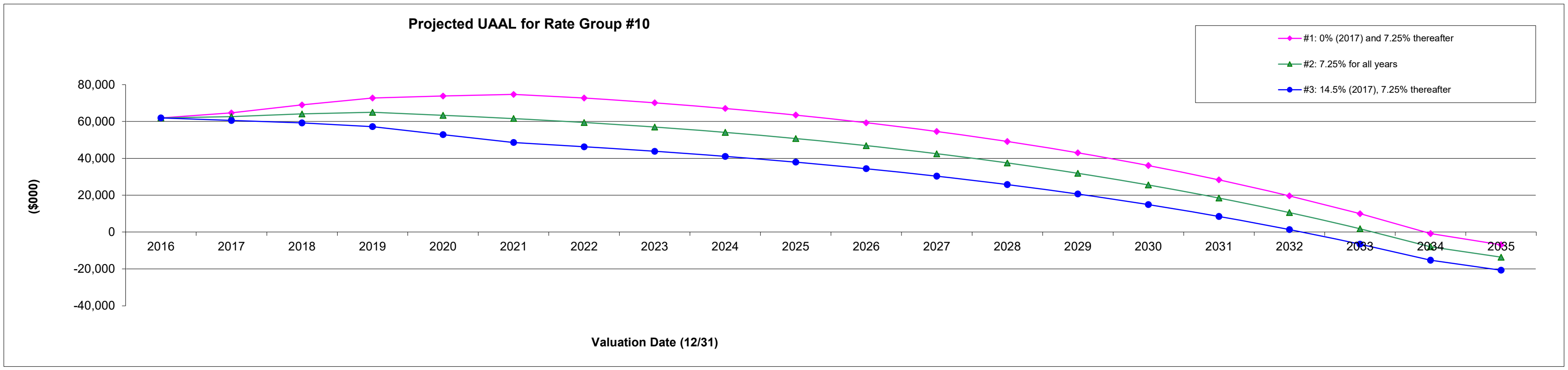
Attachment H
Projected UAAL and Funded Ratio for Rate Group #9
Plans M, N and U (TCA)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	9,816	10,400	11,325	12,154	12,453	12,721	12,409	11,991	11,474	10,871	10,177	9,380	8,472	7,442	6,279	4,972	3,508	1,873	57	-1,015
#2: 7.25% for all years	9,816	9,974	10,303	10,532	10,251	9,969	9,619	9,210	8,732	8,180	7,545	6,822	6,003	5,078	4,038	2,875	1,576	129	-1,473	-2,411
#3: 14.5% (2017), 7.25% thereafter	9,816	9,547	9,282	8,911	8,052	7,223	6,832	6,427	5,983	5,473	4,893	4,236	3,496	2,664	1,734	698	-456	-1,736	-2,508	-2,689

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	75.3%	75.7%	75.3%	75.4%	76.5%	77.6%	79.5%	81.5%	83.5%	85.3%	87.1%	88.9%	90.6%	92.2%	93.8%	95.4%	97.0%	98.5%	100.0%	100.7%
#2: 7.25% for all years	75.3%	76.7%	77.6%	78.6%	80.6%	82.4%	84.1%	85.8%	87.4%	89.0%	90.5%	91.9%	93.3%	94.7%	96.0%	97.4%	98.6%	99.9%	101.1%	101.7%
#3: 14.5% (2017), 7.25% thereafter	75.3%	77.7%	79.8%	81.9%	84.8%	87.3%	88.7%	90.1%	91.4%	92.6%	93.8%	95.0%	96.1%	97.2%	98.3%	99.4%	100.4%	101.4%	101.9%	101.9%

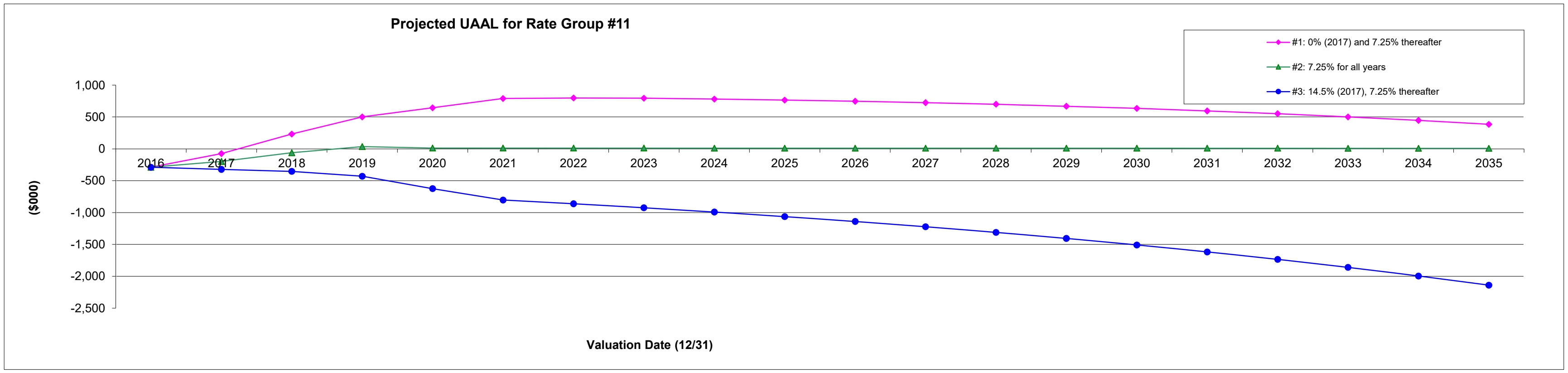
Attachment I
Projected UAAL and Funded Ratio for Rate Group #10
Plans I, J, M, N and U (OCFA)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	61,930	64,683	69,033	72,732	73,819	74,652	72,701	70,164	67,070	63,468	59,312	54,552	49,133	42,992	36,070	28,303	19,611	9,915	-848	-6,904
#2: 7.25% for all years	61,930	62,619	64,115	64,960	63,323	61,603	59,478	56,989	54,087	50,730	46,877	42,482	37,499	31,874	25,554	18,475	10,573	1,777	-7,968	-13,645
#3: 14.5% (2017), 7.25% thereafter	61,930	60,554	59,198	57,191	52,832	48,559	46,256	43,809	41,085	37,959	34,393	30,349	25,785	20,653	14,907	8,495	1,360	-6,561	-15,316	-20,701

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	70.2%	70.7%	70.5%	70.7%	71.9%	73.2%	75.3%	77.4%	79.6%	81.7%	83.7%	85.8%	87.8%	89.9%	91.9%	93.9%	96.0%	98.1%	100.2%	101.2%
#2: 7.25% for all years	70.2%	71.6%	72.6%	73.8%	75.9%	77.9%	79.8%	81.7%	83.5%	85.3%	87.1%	88.9%	90.7%	92.5%	94.3%	96.0%	97.8%	99.7%	101.5%	102.4%
#3: 14.5% (2017), 7.25% thereafter	70.2%	72.5%	74.7%	77.0%	79.9%	82.6%	84.3%	85.9%	87.5%	89.0%	90.6%	92.1%	93.6%	95.1%	96.7%	98.2%	99.7%	101.3%	102.9%	103.7%

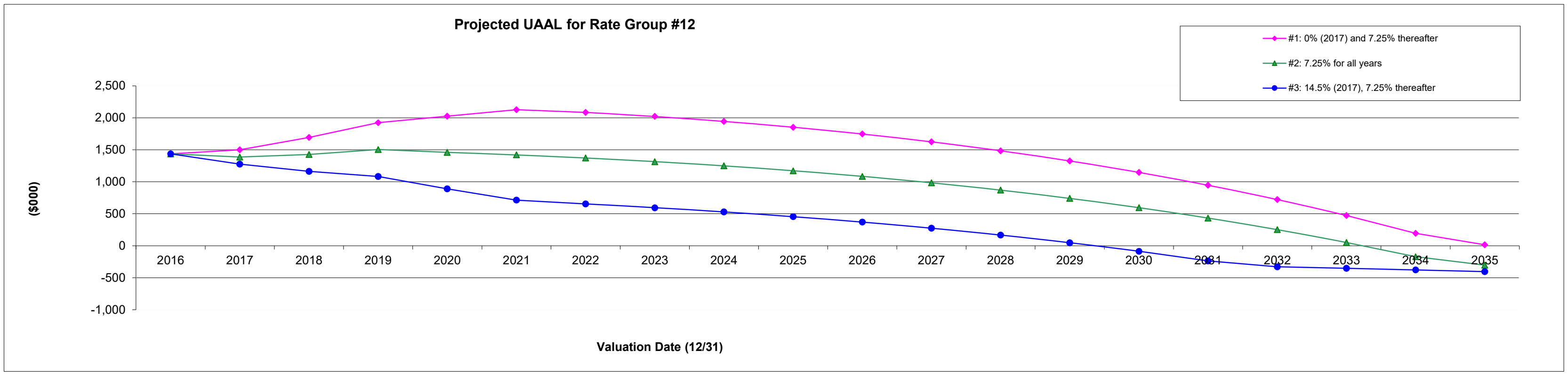
Attachment J
Projected UAAL and Funded Ratio for Rate Group #11
Plans M and N, future service, and U (Cemetery)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	-289	-73	232	501	644	790	798	794	782	766	747	725	699	669	635	596	552	502	447	386
#2: 7.25% for all years	-289	-197	-61	36	14	14	13	12	12	12	12	12	11	11	11	10	10	10	9	9
#3: 14.5% (2017), 7.25% thereafter	-289	-321	-354	-428	-625	-803	-861	-924	-991	-1,062	-1,139	-1,222	-1,311	-1,406	-1,508	-1,617	-1,734	-1,860	-1,995	-2,139
Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	103.4%	100.8%	97.7%	95.3%	94.4%	93.5%	93.9%	94.3%	94.8%	95.2%	95.7%	96.1%	96.4%	96.8%	97.2%	97.5%	97.8%	98.1%	98.5%	98.7%
#2: 7.25% for all years	103.4%	102.1%	100.6%	99.7%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
#3: 14.5% (2017), 7.25% thereafter	103.4%	103.5%	103.6%	104.0%	105.5%	106.6%	106.6%	106.6%	106.6%	106.6%	106.6%	106.7%	106.7%	106.7%	106.7%	106.8%	106.8%	106.9%	106.9%	107.0%

Unlike most of the other Rate Groups, Rate Group #11 has a UAAL under Scenario #1 due to the reemergence of their UAAL amortization layers starting with the December 31, 2018 valuation. While Rate Group #11 is overfunded as of the December 31, 2016 valuation, they are anticipated to have a restart amortization layer starting with the 2018 valuation under Scenario #1, which will not drop off until 20 years after that restart amortization layer is established.

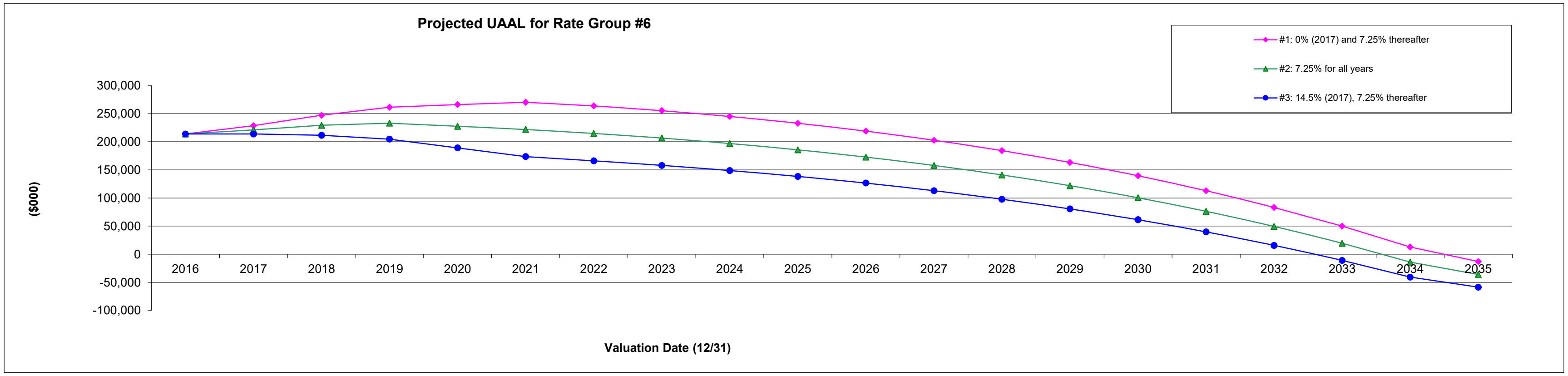
Attachment K
Projected UAAL and Funded Ratio for Rate Group #12
Plans G, H and U (Law Library)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	1,438	1,499	1,694	1,923	2,026	2,125	2,085	2,023	1,945	1,852	1,746	1,624	1,485	1,326	1,147	947	723	472	194	15
#2: 7.25% for all years	1,438	1,388	1,428	1,503	1,460	1,422	1,372	1,315	1,249	1,172	1,084	984	870	741	596	434	253	52	-172	-302
#3: 14.5% (2017), 7.25% thereafter	1,438	1,277	1,163	1,083	892	715	653	593	528	454	371	276	168	48	-87	-236	-328	-352	-377	-405

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	84.4%	84.9%	84.1%	83.1%	83.4%	83.6%	84.9%	86.3%	87.6%	88.9%	90.1%	91.3%	92.5%	93.7%	94.9%	96.0%	97.1%	98.2%	99.3%	99.9%
#2: 7.25% for all years	84.4%	86.0%	86.6%	86.8%	88.0%	89.1%	90.1%	91.1%	92.0%	93.0%	93.9%	94.8%	95.6%	96.5%	97.3%	98.2%	99.0%	99.8%	100.6%	101.0%
#3: 14.5% (2017), 7.25% thereafter	84.4%	87.1%	89.1%	90.5%	92.7%	94.5%	95.3%	96.0%	96.6%	97.3%	97.9%	98.5%	99.2%	99.8%	100.4%	101.0%	101.3%	101.3%	101.4%	101.4%

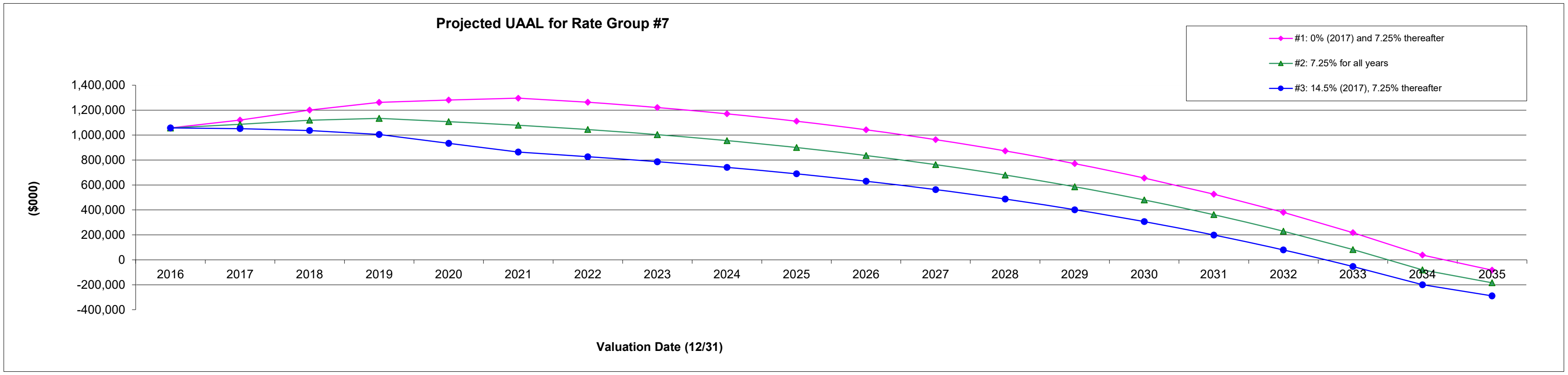
Attachment L
Projected UAAL and Funded Ratio for Rate Group #6
Plans E, F and V (Probation)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	213,650	228,461	246,900	261,187	265,968	270,094	263,755	255,339	244,963	232,829	218,777	202,634	184,204	163,285	139,660	113,092	83,319	50,064	13,084	-12,954
#2: 7.25% for all years	213,650	221,064	229,157	232,933	227,498	221,863	214,832	206,558	196,858	185,599	172,635	157,812	140,962	121,905	100,447	76,379	49,479	19,500	-13,773	-35,627
#3: 14.5% (2017), 7.25% thereafter	213,650	213,667	211,421	204,705	189,093	173,764	166,052	157,925	148,898	138,508	126,629	113,126	97,855	80,660	61,374	39,815	15,788	-10,922	-40,489	-58,287

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	70.8%	71.1%	71.0%	71.4%	72.9%	74.4%	76.7%	79.0%	81.2%	83.3%	85.3%	87.3%	89.2%	91.0%	92.8%	94.5%	96.2%	97.9%	99.5%	100.5%
#2: 7.25% for all years	70.8%	72.0%	73.0%	74.5%	76.8%	79.0%	81.0%	83.0%	84.9%	86.7%	88.4%	90.1%	91.7%	93.3%	94.8%	96.3%	97.8%	99.2%	100.6%	101.3%
#3: 14.5% (2017), 7.25% thereafter	70.8%	72.9%	75.1%	77.6%	80.8%	83.5%	85.3%	87.0%	88.5%	90.0%	91.5%	92.9%	94.2%	95.6%	96.8%	98.1%	99.3%	100.5%	101.6%	102.2%

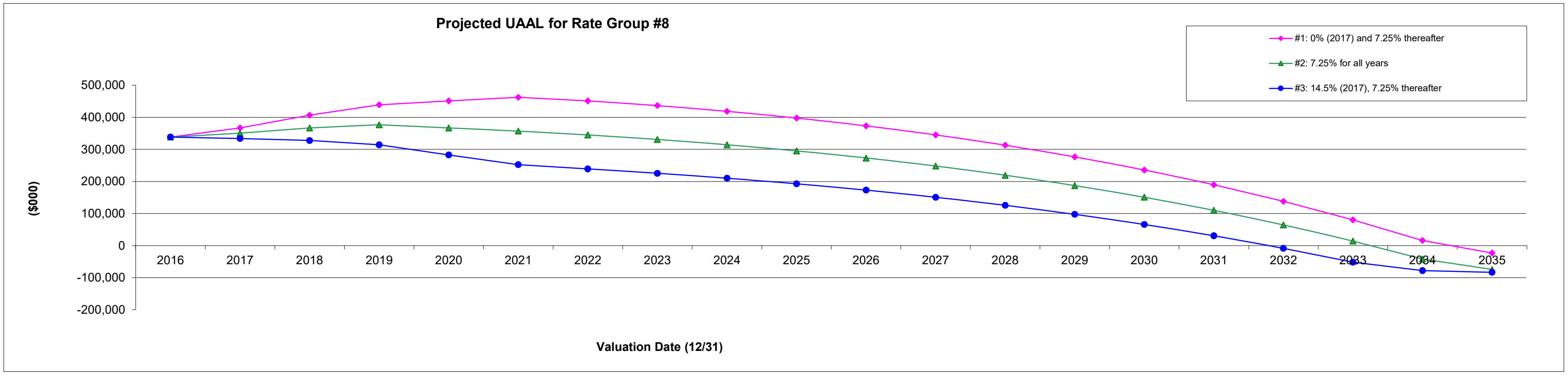
Attachment M
Projected UAAL and Funded Ratio for Rate Group #7
Plans E, F, Q, R and V (Law Enforcement)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	1,058,165	1,120,952	1,200,837	1,262,961	1,281,327	1,295,190	1,263,335	1,221,707	1,170,734	1,111,212	1,042,367	963,349	873,242	771,038	655,685	526,030	380,811	218,706	38,534	-82,742
#2: 7.25% for all years	1,058,165	1,086,352	1,118,867	1,133,884	1,107,439	1,079,458	1,044,713	1,003,816	955,901	900,317	836,363	763,298	680,306	586,490	480,898	362,504	230,199	82,792	-80,739	-183,242
#3: 14.5% (2017), 7.25% thereafter	1,058,165	1,051,753	1,036,903	1,004,834	933,624	863,871	826,247	786,092	741,231	689,583	630,533	563,417	487,519	402,067	306,228	199,102	79,721	-52,959	-199,798	-288,138

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	69.9%	69.8%	69.4%	69.6%	70.8%	72.0%	74.1%	76.2%	78.3%	80.4%	82.5%	84.6%	86.7%	88.8%	90.9%	93.1%	95.2%	97.4%	99.6%	100.9%
#2: 7.25% for all years	69.9%	70.8%	71.5%	72.7%	74.7%	76.6%	78.6%	80.4%	82.3%	84.2%	86.0%	87.8%	89.7%	91.5%	93.4%	95.2%	97.1%	99.0%	100.9%	102.0%
#3: 14.5% (2017), 7.25% thereafter	69.9%	71.7%	73.6%	75.8%	78.7%	81.3%	83.0%	84.7%	86.3%	87.9%	89.4%	91.0%	92.6%	94.2%	95.8%	97.4%	99.0%	100.6%	102.3%	103.2%

Attachment N
Projected UAAL and Funded Ratio for Rate Group #8
Plans E, F, Q, R and V (Fire Authority)



UAAL ($000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
#1: 0% (2017) and 7.25% thereafter	338,504	366,982	406,561	439,066	451,153	461,916	451,188	436,637	418,565	397,443	372,997	344,932	312,922	276,614	235,630	189,547	137,924	80,292	16,251	-22,952
#2: 7.25% for all years	338,504	350,355	367,037	376,674	366,924	357,214	345,065	330,859	314,257	295,040	272,977	247,802	219,238	186,993	150,735	110,116	64,758	14,255	-41,716	-74,182
#3: 14.5% (2017), 7.25% thereafter	338,504	333,728	327,519	314,300	282,736	252,593	239,014	225,142	210,007	192,691	172,989	150,689	125,562	97,362	65,820	30,652	-8,454	-51,831	-77,713	-83,347

Funded Ratio																				
#1: 0% (2017) and 7.25% thereafter	77.6%	77.3%	76.5%	76.2%	77.0%	77.9%	79.7%	81.5%	83.3%	85.1%	86.8%	88.5%	90.1%	91.7%	93.3%	94.9%	96.5%	98.1%	99.6%	100.5%
#2: 7.25% for all years	77.6%	78.4%	78.8%	79.6%	81.3%	82.9%	84.5%	86.0%	87.5%	88.9%	90.3%	91.7%	93.1%	94.4%	95.7%	97.0%	98.4%	99.7%	101.0%	101.6%
#3: 14.5% (2017), 7.25% thereafter	77.6%	79.4%	81.1%	83.0%	85.6%	87.9%	89.3%	90.5%	91.6%	92.8%	93.9%	95.0%	96.0%	97.1%	98.1%	99.2%	100.2%	101.3%	101.8%	101.8%

Attachment O
Projected Employer Rates by Plans within each Rate Group
Scenario 1: 0% for 2017 and 7.25% thereafter

	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A and B	16.8%	17.7%	18.8%	19.7%	20.1%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.4%	9.6%	11.0%	9.5%
RG #1 - Plan U	15.9%	16.9%	18.0%	18.8%	19.2%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	19.6%	8.7%	10.1%	8.6%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	17.3%	18.4%	19.3%	19.6%	20.0%	20.0%	19.9%	19.9%	19.9%	19.9%	19.9%	19.9%	19.8%	19.8%	19.8%	19.8%	8.9%	10.3%	8.8%
RG #2 - Plans I and J	34.9%	36.3%	38.0%	39.4%	40.0%	40.6%	40.6%	40.6%	40.6%	40.6%	40.6%	40.6%	40.6%	40.6%	40.6%	40.5%	40.4%	13.8%	13.2%	13.2%
RG #2 - Plans O and P	27.3%	28.6%	30.3%	31.7%	32.3%	33.0%	33.0%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.9%	32.8%	6.1%	5.5%	5.5%
RG #2 - Plan S	32.1%	33.4%	35.2%	36.5%	37.1%	37.8%	37.8%	37.8%	37.8%	37.8%	37.7%	37.7%	37.7%	37.7%	37.7%	37.7%	37.6%	10.9%	10.4%	10.4%
RG #2 - Plan T	28.3%	29.7%	31.4%	32.7%	33.4%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%	34.0%	33.9%	33.9%	33.8%	7.2%	6.6%	6.6%
RG #2 - Plan U	30.0%	31.4%	33.1%	34.4%	35.1%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.6%	35.6%	35.5%	8.9%	8.3%	8.3%
RG #2 - Plan W	28.4%	29.8%	31.5%	32.8%	33.5%	34.1%	34.1%	34.1%	34.1%	34.1%	34.1%	34.1%	34.1%	34.1%	34.0%	34.0%	33.9%	7.3%	6.7%	6.7%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	34.7%	36.1%	37.2%	37.6%	38.0%	37.7%	37.5%	37.2%	37.0%	36.8%	36.6%	36.4%	36.2%	36.0%	35.8%	35.5%	8.7%	8.0%	7.8%
RG #3 - Plans G and H	12.3%	12.3%	12.3%	14.0%	14.9%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
RG #3 - Plan B	10.2%	10.2%	10.2%	12.0%	12.8%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%	13.7%
RG #3 - Plan U	9.3%	9.3%	9.3%	11.0%	11.9%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%	12.8%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	12.9%	13.6%	14.3%	14.2%	14.1%	14.0%	13.8%	13.7%	13.6%	13.5%	13.5%	13.4%	13.3%	13.3%	13.2%	13.2%	13.1%
RG #5 - Plans A and B	25.5%	26.8%	28.4%	29.6%	30.2%	30.8%	30.8%	30.8%	30.8%	30.8%	30.8%	30.8%	30.8%	30.7%	30.7%	30.7%	30.7%	12.4%	13.5%	10.8%
RG #5 - Plan U	25.0%	26.3%	27.9%	29.1%	29.7%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	11.9%	13.0%	10.3%
RG #5 - Plans A, B and U (OCTA)	25.5%	26.7%	28.3%	29.5%	30.0%	30.6%	30.6%	30.5%	30.5%	30.5%	30.4%	30.4%	30.4%	30.4%	30.4%	30.3%	30.2%	11.9%	13.1%	10.3%
RG #9 - Plans M and N	24.8%	25.6%	26.8%	27.7%	28.2%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.7%	28.6%	14.3%	14.9%	13.3%
RG #9 - Plan U	21.9%	22.7%	23.9%	24.8%	25.3%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.8%	25.7%	11.4%	12.0%	10.4%
RG #9 - Plans M, N and U (TCA)	23.8%	24.6%	25.6%	26.4%	26.7%	27.1%	27.0%	26.8%	26.7%	26.6%	26.5%	26.5%	26.4%	26.3%	26.3%	26.2%	26.1%	11.8%	12.3%	10.7%
RG #10 - Plans I and J	32.0%	33.1%	34.5%	35.6%	36.2%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.7%	36.6%	13.9%	13.6%	13.6%
RG #10 - Plans M and N	31.0%	32.1%	33.5%	34.7%	35.2%	35.8%	35.8%	35.8%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.7%	35.6%	12.9%	12.6%	12.6%
RG #10 - Plan U	27.3%	28.4%	29.9%	31.0%	31.6%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%	32.1%	32.0%	32.0%	9.2%	9.0%	9.0%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	31.5%	32.8%	33.7%	34.1%	34.5%	34.3%	34.1%	34.0%	33.8%	33.7%	33.5%	33.4%	33.2%	33.1%	33.0%	32.8%	10.0%	9.7%	9.6%
RG #11 - Plans M and N, future service	11.1%	11.1%	12.4%	13.6%	14.3%	14.9%	14.9%	14.9%	14.8%	14.8%	14.8%	14.8%	14.7%	14.7%	14.7%	14.6%	14.6%	14.6%	14.5%	14.5%
RG #11 - Plan U	10.0%	10.0%	11.2%	12.5%	13.1%	13.8%	13.8%	13.8%	13.7%	13.7%	13.7%	13.7%	13.6%	13.6%	13.6%	13.5%	13.5%	13.4%	13.4%	13.4%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	12.1%	13.3%	13.9%	14.5%	14.4%	14.3%	14.2%	14.2%	14.1%	14.1%	14.0%	13.9%	13.9%	13.8%	13.7%	13.7%	13.6%	13.5%
RG #12 - Plans G and H, future service	23.0%	23.3%	25.0%	26.5%	27.3%	28.0%	28.0%	28.0%	27.9%	27.9%	27.9%	27.9%	27.9%	27.8%	27.8%	27.8%	27.7%	16.1%	16.1%	16.0%
RG #12 - Plan U	17.3%	17.6%	19.3%	20.8%	21.6%	22.3%	22.3%	22.2%	22.2%	22.2%	22.2%	22.2%	22.1%	22.1%	22.1%	22.0%	22.0%	10.4%	10.3%	10.3%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	22.1%	23.2%	24.2%	24.5%	24.8%	24.5%	24.2%	23.9%	23.7%	23.5%	23.4%	23.2%	23.0%	23.0%	22.8%	22.6%	10.9%	10.8%	10.7%
Safety																				
RG #6 - Plans E and F	47.9%	49.9%	52.1%	53.8%	54.6%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%	55.5%	55.4%	55.4%	31.4%	27.0%	21.9%
RG #6 - Plan V	41.3%	43.3%	45.4%	47.2%	48.0%	48.9%	48.9%	48.9%	48.9%	48.9%	48.9%	48.8%	48.8%	48.8%	48.8%	48.8%	48.7%	24.8%	20.4%	15.2%
RG #6 - Plans E, F and V (Probation)	47.8%	49.6%	51.6%	53.2%	53.9%	54.6%	54.4%	54.2%	54.0%	53.7%	53.5%	53.2%	52.9%	52.5%	52.2%	51.8%	51.4%	27.1%	22.3%	16.8%
RG #7 - Plans E and F	63.8%	66.4%	69.4%	71.7%	72.7%	73.9%	73.9%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.7%	73.7%	73.6%	36.4%	33.7%	25.6%
RG #7 - Plans Q and R	61.2%	63.8%	66.7%	69.0%	70.1%	71.2%	71.2%	71.2%	71.2%	71.2%	71.2%	71.2%	71.1%	71.1%	71.1%	71.1%	71.0%	33.8%	31.1%	23.0%
RG #7 - Plan V	57.6%	60.2%	63.1%	65.4%	66.5%	67.6%	67.6%	67.6%	67.6%	67.6%	67.6%	67.5%	67.5%	67.5%	67.5%	67.5%	67.3%	30.2%	27.5%	19.4%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	65.2%	67.8%	69.8%	70.6%	71.5%	71.2%	70.9%	70.6%	70.4%	70.2%	70.0%	69.7%	69.5%	69.3%	69.1%	68.8%	31.5%	28.6%	20.4%
RG #8 - Plans E and F	49.1%	51.3%	53.9%	55.9%	56.8%	57.8%	57.8%	57.8%	57.8%	57.8%	57.8%	57.8%	57.8%	57.8%	57.7%	57.7%	57.6%	30.5%	30.4%	26.8%
RG #8 - Plans Q and R	44.1%	46.3%	48.9%	50.9%	51.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.6%	25.5%	25.4%	21.9%
RG #8 - Plan V	37.1%	39.3%	41.9%	43.9%	44.8%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%	45.8%	45.7%	45.7%	45.6%	18.5%	18.4%	14.8%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	49.3%	51.4%	53.0%	53.5%	54.0%	53.6%	52.7%	52.1%	51.6%	51.2%	50.8%	50.4%	50.0%	49.7%	49.2%	48.7%	21.2%	20.7%	16.8%

Rates shown above have <u>not</u> been adjusted for employers with future service only benefit enhancement in Rate Group #2.

In the December 31, 2033 valuation, Rate Group #1 would be projected to have a small UAAL rate, which would be entirely offset by the favorable 18-month delay adjustment due to the significant decrease in the UAAL rate in the December 31, 2033 valuation. However, in the following year, the UAAL rate would no longer be offset by the 18-month delay adjustment so the employer rate increases in that year. By the December 31, 2035 valuation, there would no longer be a UAAL rate.

Attachment O
Projected Employer Rates by Plans within each Rate Group
Scenario 2: 7.25% for all years

	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A and B	16.8%	17.3%	17.8%	18.2%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.0%	9.5%	9.5%	9.5%
RG #1 - Plan U	15.9%	16.4%	16.9%	17.3%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	8.6%	8.6%	8.6%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	16.9%	17.4%	17.7%	17.6%	17.6%	17.6%	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%	17.4%	17.4%	17.4%	17.4%	8.8%	8.8%	8.8%
RG #2 - Plans I and J	34.9%	35.6%	36.4%	36.9%	36.8%	36.8%	36.8%	36.8%	36.8%	36.8%	36.8%	36.8%	36.8%	36.8%	36.7%	36.7%	36.6%	13.2%	13.2%	13.2%
RG #2 - Plans O and P	27.3%	27.9%	28.7%	29.3%	29.2%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.1%	29.0%	5.5%	5.5%	5.5%
RG #2 - Plan S	32.1%	32.7%	33.6%	34.1%	34.0%	34.0%	34.0%	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%	33.9%	33.8%	10.4%	10.4%	10.4%
RG #2 - Plan T	28.3%	29.0%	29.8%	30.3%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.2%	30.1%	30.1%	30.1%	30.1%	30.0%	6.6%	6.6%	6.6%
RG #2 - Plan U	30.0%	30.7%	31.5%	32.0%	31.9%	31.9%	31.9%	31.9%	31.9%	31.9%	31.9%	31.9%	31.8%	31.8%	31.8%	31.8%	31.7%	8.3%	8.3%	8.3%
RG #2 - Plan W	28.4%	29.1%	29.9%	30.4%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.2%	30.2%	30.2%	30.2%	30.1%	6.7%	6.7%	6.7%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	34.0%	34.5%	34.8%	34.4%	34.1%	33.9%	33.6%	33.4%	33.2%	33.0%	32.7%	32.5%	32.3%	32.2%	32.0%	31.7%	8.1%	8.0%	7.8%
RG #3 - Plans G and H	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%
RG #3 - Plan B	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%
RG #3 - Plan U	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	11.1%	11.0%	10.9%	10.7%	10.6%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%	9.7%	9.6%
RG #5 - Plans A and B	25.5%	26.1%	26.9%	27.4%	27.3%	27.3%	27.3%	27.3%	27.3%	27.3%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	27.2%	10.8%	10.8%	10.8%
RG #5 - Plan U	25.0%	25.6%	26.4%	26.9%	26.8%	26.8%	26.8%	26.8%	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	26.7%	10.3%	10.3%	10.3%
RG #5 - Plans A, B and U (OCTA)	25.5%	26.0%	26.8%	27.3%	27.1%	27.1%	27.0%	27.0%	27.0%	27.0%	26.9%	26.9%	26.9%	26.9%	26.8%	26.8%	26.7%	10.3%	10.3%	10.3%
RG #9 - Plans M and N	24.8%	25.2%	25.7%	26.1%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	25.9%	13.3%	13.3%	13.3%
RG #9 - Plan U	21.9%	22.3%	22.8%	23.2%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.1%	23.0%	10.4%	10.4%	10.4%
RG #9 - Plans M, N and U (TCA)	23.8%	24.1%	24.5%	24.8%	24.5%	24.4%	24.3%	24.2%	24.1%	24.0%	23.9%	23.8%	23.7%	23.7%	23.6%	23.5%	23.4%	10.7%	10.7%	10.7%
RG #10 - Plans I and J	32.0%	32.5%	33.2%	33.6%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%	33.4%	33.4%	33.4%	13.6%	13.6%	13.6%
RG #10 - Plans M and N	31.0%	31.5%	32.2%	32.6%	32.6%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.5%	32.4%	12.6%	12.6%	12.6%
RG #10 - Plan U	27.3%	27.9%	28.5%	29.0%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.9%	28.8%	28.8%	28.8%	28.8%	28.8%	28.7%	9.0%	9.0%	9.0%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	30.9%	31.4%	31.7%	31.5%	31.3%	31.1%	30.9%	30.7%	30.6%	30.4%	30.3%	30.1%	30.0%	29.9%	29.8%	29.6%	9.7%	9.7%	9.6%
RG #11 - Plans M and N, future service	11.1%	11.1%	11.1%	11.3%	11.1%	11.2%	11.2%	11.2%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%
RG #11 - Plan U	10.0%	10.0%	10.0%	10.2%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	10.8%	11.0%	10.8%	10.7%	10.6%	10.6%	10.5%	10.5%	10.5%	10.4%	10.4%	10.4%	10.3%	10.3%	10.3%	10.3%	10.2%	10.2%
RG #12 - Plans G and H, future service	23.0%	22.6%	23.4%	24.0%	23.9%	23.9%	23.9%	23.8%	23.8%	23.8%	23.9%	23.8%	23.8%	23.8%	23.8%	23.8%	23.8%	13.3%	13.3%	13.3%
RG #12 - Plan U	17.3%	16.9%	17.7%	18.3%	18.2%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	18.1%	7.6%	7.6%	7.6%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	21.3%	21.5%	21.6%	21.1%	20.7%	20.4%	20.1%	19.8%	19.6%	19.5%	19.3%	19.2%	19.0%	19.0%	18.9%	18.7%	8.2%	8.1%	8.0%
Safety																				
RG #6 - Plans E and F	47.9%	49.1%	50.1%	50.8%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.6%	50.5%	26.6%	21.9%	21.9%
RG #6 - Plan V	41.3%	42.4%	43.5%	44.2%	44.0%	44.0%	44.0%	44.0%	44.0%	44.0%	44.0%	43.9%	43.9%	43.9%	43.9%	43.9%	43.8%	19.9%	15.2%	15.2%
RG #6 - Plans E, F and V (Probation)	47.8%	48.7%	49.6%	50.2%	49.9%	49.7%	49.5%	49.3%	49.1%	48.8%	48.6%	48.3%	48.0%	47.7%	47.3%	47.0%	46.5%	22.2%	17.1%	16.8%
RG #7 - Plans E and F	63.8%	65.2%	66.7%	67.6%	67.4%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%	67.3%	67.2%	67.2%	67.1%	29.9%	25.6%	25.6%
RG #7 - Plans Q and R	61.2%	62.6%	64.0%	64.9%	64.7%	64.7%	64.7%	64.7%	64.7%	64.7%	64.7%	64.6%	64.6%	64.6%	64.6%	64.6%	64.5%	27.3%	23.0%	23.0%
RG #7 - Plan V	57.6%	59.0%	60.4%	61.3%	61.1%	61.1%	61.1%	61.1%	61.1%	61.1%	61.0%	61.0%	61.0%	61.0%	61.0%	61.0%	60.9%	23.7%	19.4%	19.4%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	64.0%	65.1%	65.7%	65.2%	65.0%	64.7%	64.4%	64.1%	63.9%	63.7%	63.4%	63.2%	63.0%	62.8%	62.6%	62.3%	25.0%	20.5%	20.4%
RG #8 - Plans E and F	49.1%	50.3%	51.5%	52.3%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.1%	52.0%	26.8%	26.8%	26.8%
RG #8 - Plans Q and R	44.1%	45.3%	46.5%	47.3%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.0%	21.9%	21.9%	21.9%
RG #8 - Plan V	37.1%	38.3%	39.5%	40.3%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.1%	40.0%	14.8%	14.8%	14.8%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	48.3%	49.1%	49.4%	48.8%	48.4%	47.9%	47.0%	46.4%	45.9%	45.5%	45.1%	44.8%	44.4%	44.0%	43.6%	43.1%	17.5%	17.2%	16.8%

Rates shown above have not been adjusted for employers with future service only benefit enhancement in Rate Group #2.

Attachment O
Projected Employer Rates by Plans within each Rate Group
Scenario 3: 14.5% for 2017 and 7.25% thereafter

	Valuation Date (12/31)																			
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
General																				
RG #1 - Plans A and B	16.8%	16.8%	16.8%	16.6%	16.1%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.7%	15.6%	15.6%	9.5%	9.5%	9.5%	9.5%
RG #1 - Plan U	15.9%	15.9%	15.9%	15.7%	15.2%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	14.8%	8.6%	8.6%	8.6%	8.6%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	16.4%	16.4%	16.4%	16.2%	15.6%	15.2%	15.1%	15.1%	15.1%	15.1%	15.1%	15.0%	15.0%	15.0%	15.0%	15.0%	8.8%	8.8%	8.8%	8.8%
RG #2 - Plans I and J	34.9%	34.8%	34.8%	34.5%	33.7%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	32.9%	32.9%	32.9%	32.9%	32.9%	32.8%	13.2%	13.2%	13.2%
RG #2 - Plans O and P	27.3%	27.2%	27.1%	26.9%	26.0%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.3%	25.2%	5.5%	5.5%	5.5%
RG #2 - Plan S	32.1%	32.0%	31.9%	31.7%	30.8%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.1%	30.0%	10.4%	10.4%	10.4%
RG #2 - Plan T	28.3%	28.2%	28.2%	27.9%	27.0%	26.4%	26.4%	26.4%	26.4%	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	26.3%	26.2%	6.6%	6.6%	6.6%
RG #2 - Plan U	30.0%	29.9%	29.9%	29.6%	28.7%	28.1%	28.1%	28.1%	28.1%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	27.9%	8.3%	8.3%	8.3%
RG #2 - Plan W	28.4%	28.3%	28.3%	28.0%	27.1%	26.5%	26.5%	26.5%	26.5%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.3%	6.7%	6.7%	6.7%
RG #2 - Plans I, J, O, P, S, T, U and W (County et al.)	33.7%	33.3%	32.9%	32.4%	31.3%	30.3%	30.1%	29.8%	29.6%	29.4%	29.1%	28.9%	28.7%	28.5%	28.3%	28.2%	27.9%	8.1%	8.0%	7.8%
RG #3 - Plans G and H	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%
RG #3 - Plan B	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%	10.2%
RG #3 - Plan U	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%	9.3%
RG #3 - Plans B, G, H and U (OCSD)	11.6%	11.4%	11.3%	11.1%	11.0%	10.9%	10.7%	10.6%	10.5%	10.4%	10.3%	10.2%	10.1%	10.0%	9.9%	9.8%	9.8%	9.7%	9.7%	9.6%
RG #5 - Plans A and B	25.5%	25.5%	25.4%	25.2%	24.4%	23.8%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%	23.7%	10.8%	10.8%	10.8%	10.8%
RG #5 - Plan U	25.0%	24.9%	24.9%	24.7%	23.9%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	23.2%	10.3%	10.3%	10.3%	10.3%
RG #5 - Plans A, B and U (OCTA)	25.5%	25.4%	25.3%	25.0%	24.2%	23.6%	23.5%	23.5%	23.5%	23.4%	23.4%	23.4%	23.4%	23.3%	23.3%	23.3%	10.3%	10.3%	10.3%	10.3%
RG #9 - Plans M and N	24.8%	24.7%	24.7%	24.5%	23.9%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.5%	23.5%	13.3%	13.3%	13.3%	13.3%
RG #9 - Plan U	21.9%	21.8%	21.8%	21.6%	21.0%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.5%	20.6%	20.6%	10.4%	10.4%	10.4%	10.4%
RG #9 - Plans M, N and U (TCA)	23.8%	23.6%	23.5%	23.1%	22.4%	21.8%	21.7%	21.6%	21.5%	21.4%	21.3%	21.2%	21.2%	21.1%	21.0%	21.0%	10.8%	10.7%	10.7%	10.7%
RG #10 - Plans I and J	32.0%	31.9%	31.8%	31.6%	30.9%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.3%	30.2%	30.2%	30.2%	13.6%	13.6%	13.6%
RG #10 - Plans M and N	31.0%	30.9%	30.9%	30.6%	29.9%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.3%	29.2%	12.6%	12.6%	12.6%
RG #10 - Plan U	27.3%	27.3%	27.2%	27.0%	26.3%	25.7%	25.7%	25.7%	25.7%	25.7%	25.7%	25.7%	25.6%	25.6%	25.6%	25.6%	25.5%	9.0%	9.0%	9.0%
RG #10 - Plans I, J, M, N and U (OCFA)	30.5%	30.3%	30.1%	29.7%	28.8%	28.1%	27.9%	27.7%	27.5%	27.4%	27.2%	27.1%	26.9%	26.8%	26.7%	26.6%	26.4%	9.7%	9.7%	9.6%
RG #11 - Plans M and N, future service	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%	11.1%
RG #11 - Plan U	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
RG #11 - Plans M and N, future service, and U (Cemetery)	10.9%	10.9%	10.8%	10.8%	10.7%	10.6%	10.6%	10.5%	10.5%	10.4%	10.4%	10.4%	10.4%	10.3%	10.3%	10.3%	10.2%	10.2%	10.2%	10.2%
RG #12 - Plans G and H, future service	23.0%	22.0%	21.9%	21.7%	20.9%	20.3%	20.4%	20.4%	20.4%	20.5%	20.6%	20.6%	20.7%	20.7%	13.3%	13.3%	13.3%	13.3%	13.3%	13.3%
RG #12 - Plan U	17.3%	16.2%	16.1%	15.9%	15.1%	14.5%	14.6%	14.7%	14.7%	14.8%	14.8%	14.9%	14.9%	14.9%	7.6%	7.6%	7.6%	7.6%	7.6%	7.6%
RG #12 - Plans G and H, future service, and U (Law Library)	22.7%	20.7%	20.0%	19.3%	18.1%	17.1%	16.9%	16.6%	16.4%	16.3%	16.2%	16.1%	16.0%	15.9%	8.5%	8.4%	8.2%	8.2%	8.1%	8.0%
Safety																				
RG #6 - Plans E and F	47.9%	48.2%	48.1%	47.8%	46.6%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.7%	45.6%	21.9%	21.9%	21.9%
RG #6 - Plan V	41.3%	41.6%	41.5%	41.2%	40.0%	39.1%	39.1%	39.1%	39.1%	39.1%	39.1%	39.1%	39.1%	39.0%	39.0%	39.0%	39.0%	15.2%	15.2%	15.2%
RG #6 - Plans E, F and V (Probation)	47.8%	47.9%	47.7%	47.2%	45.9%	44.8%	44.6%	44.4%	44.2%	43.9%	43.7%	43.4%	43.1%	42.8%	42.4%	42.1%	41.6%	17.5%	17.1%	16.8%
RG #7 - Plans E and F	63.8%	64.0%	64.0%	63.5%	62.0%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	60.8%	60.7%	60.7%	60.6%	25.6%	25.6%	25.6%
RG #7 - Plans Q and R	61.2%	61.4%	61.3%	60.9%	59.4%	58.2%	58.2%	58.2%	58.2%	58.2%	58.2%	58.1%	58.1%	58.1%	58.1%	58.1%	58.0%	23.0%	23.0%	23.0%
RG #7 - Plan V	57.6%	57.8%	57.7%	57.2%	55.8%	54.6%	54.6%	54.6%	54.6%	54.6%	54.5%	54.5%	54.5%	54.5%	54.5%	54.5%	54.4%	19.4%	19.4%	19.4%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	62.8%	62.8%	62.4%	61.7%	59.9%	58.5%	58.2%	57.9%	57.6%	57.4%	57.2%	56.9%	56.7%	56.5%	56.3%	56.1%	55.8%	20.7%	20.5%	20.4%
RG #8 - Plans E and F	49.1%	49.2%	49.2%	48.8%	47.5%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	46.4%	26.8%	26.8%	26.8%	26.8%
RG #8 - Plans Q and R	44.1%	44.3%	44.2%	43.8%	42.5%	41.5%	41.4%	41.4%	41.4%	41.4%	41.4%	41.4%	41.4%	41.4%	41.4%	41.4%	21.9%	21.9%	21.9%	21.9%
RG #8 - Plan V	37.1%	37.2%	37.2%	36.8%	35.5%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	34.4%	14.8%	14.8%	14.8%	14.8%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	47.8%	47.2%	46.7%	45.9%	44.1%	42.7%	42.3%	41.3%	40.7%	40.2%	39.8%	39.5%	39.1%	38.7%	38.3%	37.9%	18.0%	17.5%	17.2%	16.8%

Rates shown above have not been adjusted for employers with future service only benefit enhancement in Rate Group #2.

I-3

Memorandum

DATE: July 6, 2017

TO: Members, Board of Retirement

FROM: Brenda Shott, Assistant CEO-Finance and Internal Operations

SUBJECT: **SENSITIVITY ANALYSIS OF ALTERNATIVE ECONOMIC ASSUMPTIONS**

Recommendation

Receive and file.

Background/Discussion

OCERS entered into a new contract with Segal in August 2016. As part of the new contract, Segal has agreed to provide up to four sensitivity analyses of alternative economic actuarial assumptions as part of the annual actuarial valuation report. After receiving recommendations of assumptions to be used in the analysis from Segal and a full Board discussion, the Board Chair provided direction to the actuary on the assumptions to be used in the sensitivity analyses at the June 12, 2017 Board meeting. The sensitivity analyses (attached) includes the impact that changes to the assumed investment rate of return and the inflation rate assumption have on the Unfunded Actuarial Accrued Liability and on contribution rates and dollar amounts for both the employer and employees. The sensitivity analysis is provided on an aggregate basis for OCERS as a whole rather than on an individual rate group basis. Paul Angelo will present the results of this analysis at the July 17, 2017 meeting.

Submitted by:

OCERS B.M.S - Approved

____

Brenda Shott

Assistant CEO, Finance and Internal Operations

Segal Consulting

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8283 www.segalco.com

Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary
ayeung@segalco.com

VIA E-MAIL AND USPS

July 7, 2017

Mr. Steve Delaney
Chief Executive Officer
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

Re: Sensitivity Illustrations of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Inflation and Investment Return Assumptions

Dear Steve:

As requested, we have developed 20-year illustrations of the employer contribution rates for OCERS under four alternative sets of inflation and investment return assumptions as if those assumptions were effective December 31, 2016. In this letter, we have also provided the Unfunded Actuarial Accrued Liability (UAAL) in dollars and the funded ratio associated with those projected employer contribution rates, as well the member contribution rates.

These results have been prepared based on the December 31, 2016 valuation approved by the Board at its meeting on June 12, 2017. The illustrations have been prepared for use in studying how sensitive the projection results are to changes in the economic assumptions used in the December 31, 2016 valuation. It is important to note that the above alternatives are not necessarily the assumptions we would recommend to the Board in the triennial experience study that is currently in progress.

The current inflation and investment return assumptions used in the December 31, 2016 valuation are as follows:

- Baseline:[1] 7.25% investment return assumption and 3.00% inflation assumption.

[1] The results provided for the baseline are the same as those provided under Scenario #2 in our letter also dated July 7, 2016 for OCERS as a whole.

The four alternative sets of inflation and investment return assumptions are as follows:

- Alternative #1: 7.00% investment return assumption and 2.75% inflation assumption.
- Alternative #2: 7.00% investment return assumption and 3.00% inflation assumption.
- Alternative #3: 6.75% investment return assumption and 3.00% inflation assumption.
- Alternative #4: 7.25% investment return assumption and 3.25% inflation assumption.

The various projections included are as follows:

- The projected contribution rates for the aggregate plan are provided in Attachment A.
- The projected UAAL and funded ratio for the aggregate plan are provided in Attachment B.
- The projected member contribution rates for the aggregate plan are provided in Attachment C.

SUMMARY OF RESULTS

The changes in the employer contribution rate (including the Normal Cost and UAAL components), the member contribution rate and the UAAL from the baseline for each of the alternatives are summarized below. The impact of the assumption changes is determined as if those assumptions were effective in the December 31, 2016 valuation.

Change in:	Alternative #1	Alternative #2	Alternative #3	Alternative #4
Investment Return*	-0.25%	-0.25%	-0.50%	0.00%
Inflation*	-0.25%	0.00%	0.00%	0.25%
Employer Rate				
Normal Cost Rate	0.08%	0.96%	2.00%	0.45%
UAAL Rate	-0.02%	2.09%	4.21%	-0.07%
Total Rate	0.06%	3.05%	6.21%	0.38%
Member Rate	0.01%	0.74%	1.55%	0.32%
UAAL ($000s)	$(17,160)	$555,878**	$1,138,641***	$82,890

* *Relative to 7.25% investment return assumption and 3.00% inflation assumption used in the baseline.*
** *After a transfer of $16,135,000 from the O.C. Sanitation District UAAL Deferred Account.*
*** *After a transfer of $34,067,000 from the O.C. Sanitation District UAAL Deferred Account.*

METHODS AND ASSUMPTIONS

The methods and actuarial assumptions we used to prepare the employer contribution rates, the UAAL and the funded ratio are the same as those used in Scenario #2 in our letter titled

"Illustrations of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Investment Return Scenarios" also dated July 7, 2017 with the exception of the following:

- The illustrations are based on the actuarial assumptions and census data used in our December 31, 2016 valuation report for the Retirement Plan. With the exception of the inflation and investment return assumptions specified above, it is assumed that all actuarial assumptions would be met in the future and that there would be no change in the future for any of the actuarial assumptions adopted by the Board for the December 31, 2016 valuation. In particular, it is assumed that the actual future inflation and investment return experience under each of the four alternatives would follow the corresponding inflation and investment return assumed for that alternative.

- The detailed amortization schedule for OCERS' UAAL as of December 31, 2016 is provided in the valuation report. The change in UAAL due to the changes in the inflation and investment return assumptions are amortized over a 20-year period as of December 31, 2016. Any subsequent changes in the UAAL due to actuarial gains or losses (e.g., from investment returns on valuation value of assets greater or less than the assumed rates) are amortized over separate 20-year periods.

OTHER CONSIDERATIONS

Projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

This study was prepared under the supervision of Andy Yeung, ASA, MAAA. I am a member of the American Academy of Actuaries and meet the qualification requirements to provide the opinion contained herein.

Please let us know if you have any questions.

Sincerely,

Andy Yeung

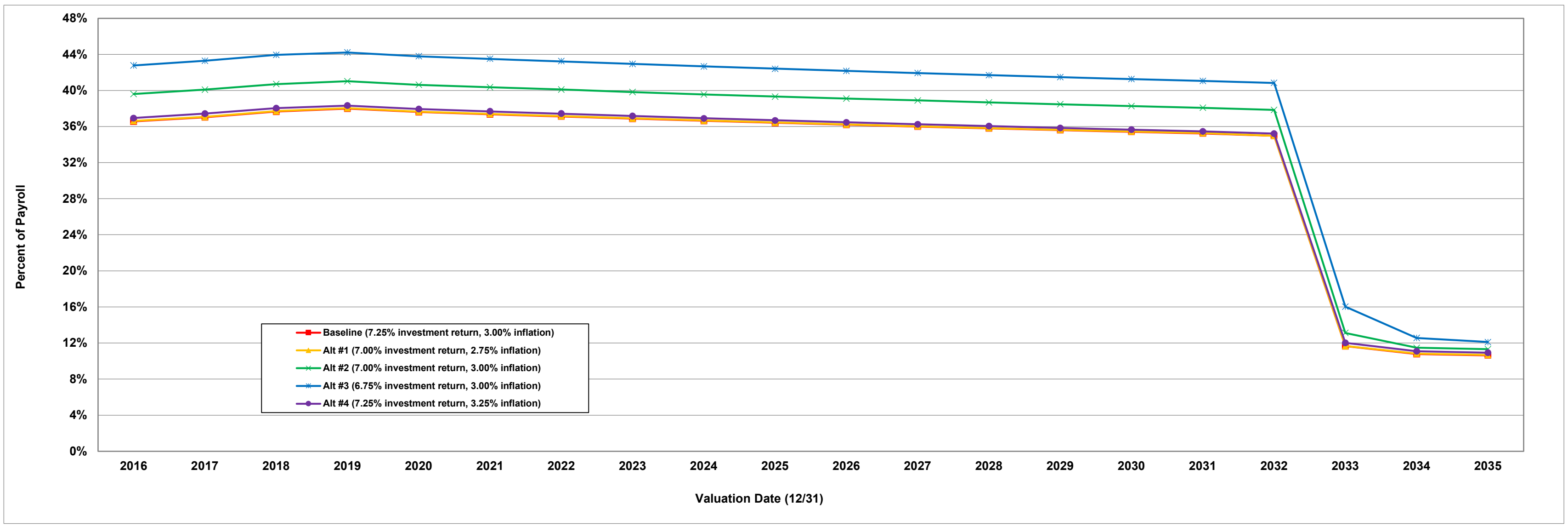
Andy Yeung

MYM/gxk
Enclosures

cc: Suzanne Jenike
Brenda Shott

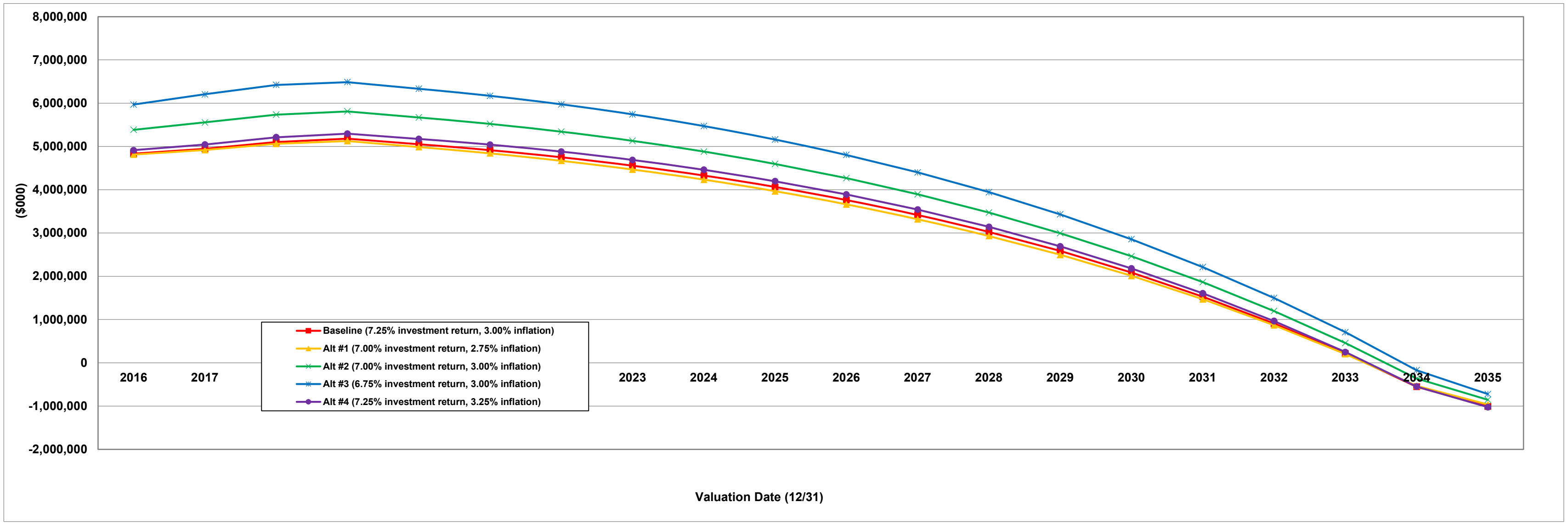
5494363v2/05794.001

Attachment A
Projected Employer Rates
Aggregate Plan



Valuation Date (12/31)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Baseline (7.25% investment return, 3.00% inflation)	36.6%	37.0%	37.7%	38.0%	37.6%	37.4%	37.1%	36.9%	36.6%	36.4%	36.2%	36.0%	35.8%	35.6%	35.4%	35.2%	35.0%	11.7%	10.8%	10.6%
Alt #1 (7.00% investment return, 2.75% inflation)	36.6%	37.1%	37.7%	38.0%	37.7%	37.4%	37.2%	36.9%	36.7%	36.4%	36.2%	36.0%	35.8%	35.6%	35.5%	35.3%	35.0%	11.7%	10.8%	10.7%
Alt #2 (7.00% investment return, 3.00% inflation)	39.6%	40.1%	40.7%	41.0%	40.6%	40.4%	40.1%	39.8%	39.6%	39.3%	39.1%	38.9%	38.7%	38.5%	38.3%	38.1%	37.8%	13.1%	11.5%	11.3%
Alt #3 (6.75% investment return, 3.00% inflation)	42.8%	43.3%	44.0%	44.2%	43.8%	43.5%	43.3%	42.9%	42.7%	42.4%	42.2%	41.9%	41.7%	41.5%	41.3%	41.1%	40.8%	16.0%	12.6%	12.1%
Alt #4 (7.25% investment return, 3.25% inflation)	36.9%	37.4%	38.0%	38.3%	37.9%	37.7%	37.4%	37.2%	36.9%	36.7%	36.5%	36.3%	36.1%	35.8%	35.7%	35.5%	35.2%	12.0%	11.1%	10.9%

Attachment B
Projected UAAL and Funded Ratio for Aggregate Plan



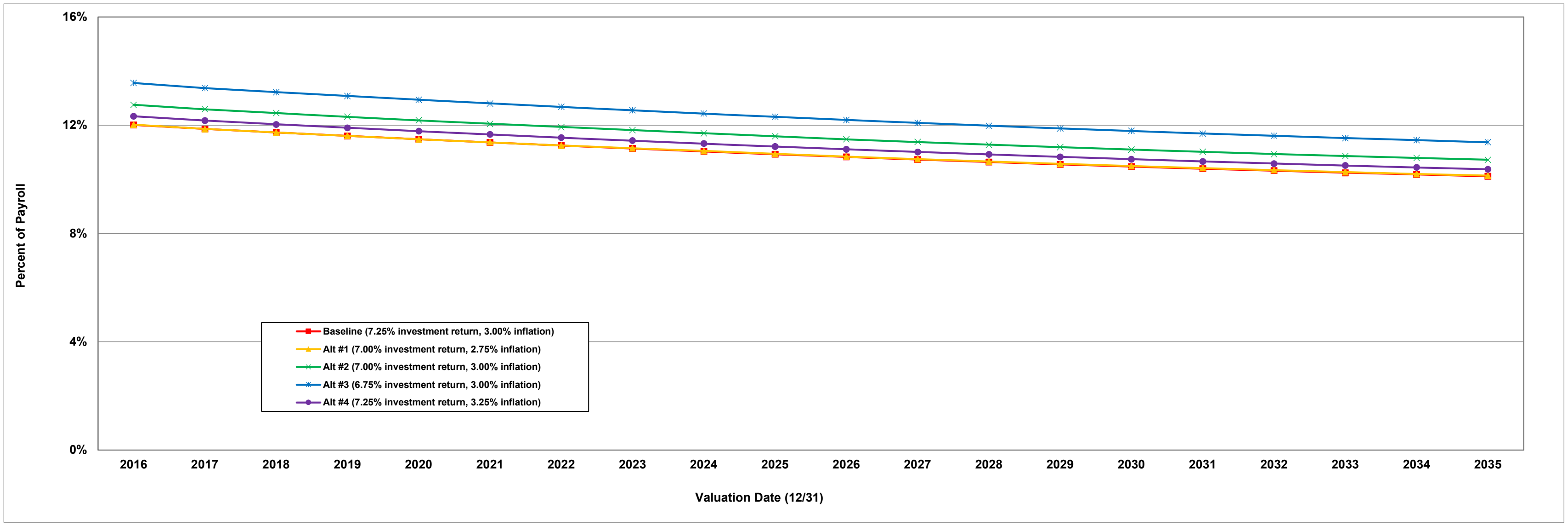
UAAL ($ 000)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Baseline (7.25% investment return, 3.00% inflation)	4,830,483	4,946,070	5,100,809	5,178,645	5,049,336	4,915,483	4,749,615	4,555,092	4,327,797	4,064,644	3,762,358	3,417,411	3,026,071	2,584,142	2,087,169	1,530,374	908,598	216,348	-550,933	-1,007,251
Alt #1 (7.00% investment return, 2.75% inflation)	4,813,323	4,917,855	5,060,873	5,127,043	4,986,834	4,842,938	4,668,244	4,466,259	4,233,076	3,965,963	3,661,975	3,318,025	2,930,620	2,496,111	2,010,554	1,469,695	869,073	203,709	-529,858	-963,187
Alt #2 (7.00% investment return, 3.00% inflation)	5,386,361	5,555,193	5,735,057	5,809,935	5,669,680	5,522,590	5,341,397	5,129,298	4,881,969	4,596,234	4,268,670	3,895,691	3,473,259	2,997,070	2,462,520	1,864,654	1,198,235	457,547	-362,719	-854,070
Alt #3 (6.75% investment return, 3.00% inflation)	5,969,124	6,204,972	6,421,930	6,487,160	6,334,179	6,171,761	5,973,062	5,741,053	5,471,281	5,160,423	4,804,925	4,401,018	3,944,503	3,430,960	2,855,728	2,213,699	1,499,270	706,555	-170,345	-722,456
Alt #4 (7.25% investment return, 3.25% inflation)	4,913,373	5,045,003	5,212,425	5,296,331	5,172,078	5,042,494	4,879,944	4,687,386	4,460,632	4,196,459	3,891,285	3,541,321	3,142,562	2,690,534	2,180,457	1,607,241	965,295	248,654	-548,194	-1,023,920

Funded Ratio	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Baseline (7.25% investment return, 3.00% inflation)	73.1%	73.9%	74.4%	75.4%	77.2%	78.9%	80.6%	82.2%	83.9%	85.5%	87.2%	88.9%	90.6%	92.3%	94.0%	95.8%	97.6%	99.4%	101.4%	102.4%
Alt #1 (7.00% investment return, 2.75% inflation)	73.1%	73.9%	74.5%	75.4%	77.2%	78.9%	80.6%	82.2%	83.9%	85.5%	87.2%	88.8%	90.5%	92.2%	93.9%	95.7%	97.6%	99.4%	101.4%	102.5%
Alt #2 (7.00% investment return, 3.00% inflation)	70.9%	71.6%	72.1%	73.2%	75.1%	77.0%	78.8%	80.6%	82.3%	84.1%	85.9%	87.7%	89.4%	91.3%	93.1%	95.0%	96.9%	98.9%	100.9%	102.0%
Alt #3 (6.75% investment return, 3.00% inflation)	68.8%	69.2%	69.8%	71.0%	73.1%	75.0%	77.0%	78.9%	80.8%	82.7%	84.5%	86.4%	88.3%	90.3%	92.2%	94.2%	96.2%	98.3%	100.4%	101.7%
Alt #4 (7.25% investment return, 3.25% inflation)	72.7%	73.5%	74.1%	75.0%	76.8%	78.5%	80.2%	81.9%	83.6%	85.3%	87.0%	88.7%	90.4%	92.1%	93.9%	95.7%	97.5%	99.4%	101.3%	102.4%

Under Alternative #2, the UAAL as of December 31, 2016 is after a transfer of $16,135,000 from the O.C. Sanitation District UAAL Deferred Account to pay off the UAAL resulting from the assumption changes. Rate Group #3 remains 100% funded as a result of the transfer.

Under Alternative #3, the UAAL as of December 31, 2016 is after a transfer of $34,067,000 from the O.C. Sanitation District UAAL Deferred Account to pay off the UAAL resulting from the assumption changes. Rate Group #3 becomes underfunded, even after the transfer, due to the assumption changes.

Attachment C
Projected Member Rates
Aggregate Plan



Valuation Date (12/31)	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Baseline (7.25% investment return, 3.00% inflation)	12.0%	11.9%	11.7%	11.6%	11.5%	11.4%	11.3%	11.1%	11.0%	10.9%	10.8%	10.7%	10.6%	10.6%	10.5%	10.4%	10.3%	10.2%	10.2%	10.1%
Alt #1 (7.00% investment return, 2.75% inflation)	12.0%	11.9%	11.7%	11.6%	11.5%	11.4%	11.3%	11.2%	11.1%	10.9%	10.8%	10.8%	10.7%	10.6%	10.5%	10.4%	10.3%	10.3%	10.2%	10.1%
Alt #2 (7.00% investment return, 3.00% inflation)	12.8%	12.6%	12.5%	12.3%	12.2%	12.1%	11.9%	11.8%	11.7%	11.6%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	10.9%	10.9%	10.8%	10.7%
Alt #3 (6.75% investment return, 3.00% inflation)	13.6%	13.4%	13.2%	13.1%	12.9%	12.8%	12.7%	12.6%	12.4%	12.3%	12.2%	12.1%	12.0%	11.9%	11.8%	11.7%	11.6%	11.5%	11.5%	11.4%
Alt #4 (7.25% investment return, 3.25% inflation)	12.3%	12.2%	12.0%	11.9%	11.8%	11.7%	11.5%	11.4%	11.3%	11.2%	11.1%	11.0%	10.9%	10.8%	10.7%	10.7%	10.6%	10.5%	10.4%	10.4%

I-4

Memorandum

DATE: July 6, 2017

TO: Members, Board of Retirement

FROM: Brenda Shott, Assistant CEO-Finance and Internal Operations

SUBJECT: **ARITHMETIC VS. GEOMETRIC METHODOLOGIES – INFORMATIONAL REVIEW**

Recommendation

Receive and File

Background/Discussion

OCERS entered into a new contract with Segal in August 2016. As part of the new contract, Segal has agreed to provide an informational presentation for the Board on the use of expected arithmetic average returns and expected geometric average returns in developing an expected return on assets assumption. This presentation is to provide information in preparation for the triennial experience study later this year; however, no action is anticipated for the discussion on July 17.

Paul Angelo will present this informational review at the July 17, 2017 Board meeting.

Submitted by:

OCERS B.M.S - Approved

____

Brenda Shott

Assistant CEO, Finance and Internal Operations

Segal Consulting

OCERS

Arithmetic vs. Geometric Methodologies Informational Presentation

July 17, 2017

Paul Angelo

Segal Consulting

5496122v2

Summary

- Two ways to calculate an average investment return over multiple periods
  - Arithmetic average return and geometric average return
- For measuring multi-period historical returns, the geometric average is most appropriate
  - Reflects "volatility drain", i.e., the wealth diminishing effect of investment volatility
  - Classic example: 20% gain followed by a 20% loss
    - Arithmetic average return is 0%
    - Geometric average return is a 2% loss – and in fact you will have 2% less assets

Summary (continued)

- In contrast, for setting a discount rate to measure future pension obligations, there are two valid approaches
  - Future expected arithmetic average return
  - Future expected geometric average return
- Both of these fully reflect the wealth diminishing effect of future investment volatility
- The difference is in whether you are targeting an expected (mean) accumulated value or a median accumulated value
  - Using a future expected arithmetic average return will produce a mean or expected accumulated value
  - Using a future expected geometric average return will produce a median accumulated value (for long time horizons)

Setting a Discount Rate based on Expected Rate of Return (EROR)

- Public pension plans (including OCERS) set the valuation discount rate based on the expected rate of return (EROR)
  - Used for both funding and financial reporting
  - Set by the Board as part of the economic assumptions
    - Based on OCERS' asset allocation
  - Note this is in contrast to corporate plans' "market liabilities"
    - Based on current yield curve, independent of plan assets
- For any asset allocation and capital market assumptions, there is more than one way to determine an EROR
  - Expected arithmetic average return vs. geometric average return
  - Also, expected "mean" return vs. expected "median" return
- Caution: must distinguish future (expected) average returns from actual or historical average returns

Terminology: What does "mean" mean?

- Two meanings: "expected value" and "average"
- The "expected value" mean is a property of an assumed probability distribution of future returns
- The "average" mean is a statistic of a multi-period sample taken from a probability distribution
  - Two kinds: arithmetic average and geometric average
- We will use "mean" only to refer to an expected value of a distribution of future returns
  - So, we will only talk about geometric or arithmetic averages, not geometric or arithmetic means
- AND, for those future returns, we will consider both the mean return (probability weighted expected value) and the median return (50/50 probability of being higher or lower)

Arithmetic vs Geometric Average Returns

- For measuring returns over a multi-year period (N periods)
- Arithmetic: Add up N single period returns, divide by N
- Geometric: Multiply together $(1+i_N)$ for N single period returns, take Nth root, subtract 1
  - Nth root of cumulative return - 1
- The easy part: the geometric average return will be less than the arithmetic average return
  (unless all N returns are identically equal)
  - Classic example: N = 2, $i_2 = -1 \times i_1$, Arithmetic average = 0.
  - But geometric average = square root $(1 - i^2) -1 < 0$
- For example, suppose fund earns +20%, then -20%
  - Arithmetic average return is 0%
  - Geometric average return is square root of (1.20) x (0.80), - 1 = square root of 0.96 – 1 = -0.0202 = -2.02%

Arithmetic vs Geometric Average Returns

- So for measuring multi-period historical returns against expected earnings, geometric average is the relevant statistic
  - Reflects “volatility drain”, i.e., the wealth diminishing effect of investment volatility
- Key concept: “accumulated or terminal wealth” – and the equivalent or effective single rate
  - How much would I have from an initial investment of $100?
  - Useful for both historical returns (accumulated wealth) and future returns (expected wealth)
  - In our example, $100 + 20% = $120, then $120 – 20% = $96
    - So our terminal wealth is $96, not $100
  - Then ask: what single rate, earned each year, would grow the $100 to reach the same terminal wealth?
    - Here it is the geometric average (i.e., -2.02%), since that would give $100 x (1-2.02%) x (1-2.02%) = $96

Looking backward versus Looking forward

- Key confusion about arithmetic vs geometric returns:
  - Are we are talking about using historical results to compare actual returns to expected returns, or
  - Are we talking about whether a future expected arithmetic [average] return or a future expected geometric [average] return is the appropriate EROR to use as the discount rate
- Reference: Actuarial Standard of Practice No. 27 (ASOP 27), Section 3.8.3.j and (especially) Appendix 3.
  - The discount rate is a forward-looking assumption.
  - “The use of a forward looking expected arithmetic [average] return as an investment return assumption will produce a mean [i.e., expected value] accumulated value.”
  - “The use of a forward looking expected geometric [average] return as an investment return assumption will produce an accumulated value that generally converges to the median accumulated value as the time horizon lengthens.”

What does that mean?

- Say we have developed our capital market assumptions so we can simulate a distribution of future returns
  - We can also simulate a distribution of future wealth outcomes
  - Including a mean wealth (probability weighted expected value) and a median wealth (50/50 probability of being higher or lower)
  - We focus on terminal wealth because the goal of pension funding is to achieve some level of accumulated assets (based on projected benefits)
    - It is not to earn some expected level of return
- What the ASOP says about future expected terminal wealth
  - Expected wealth: matches <u>expected</u> <u>arithmetic</u> average return
  - Median wealth: matches <u>median</u> <u>geometric</u> average return
    - Which the <u>expected</u> <u>geometric</u> return gets close to over time
  - Here "matches" means that is the single rate, earned each year, that would grow reach that value of terminal wealth

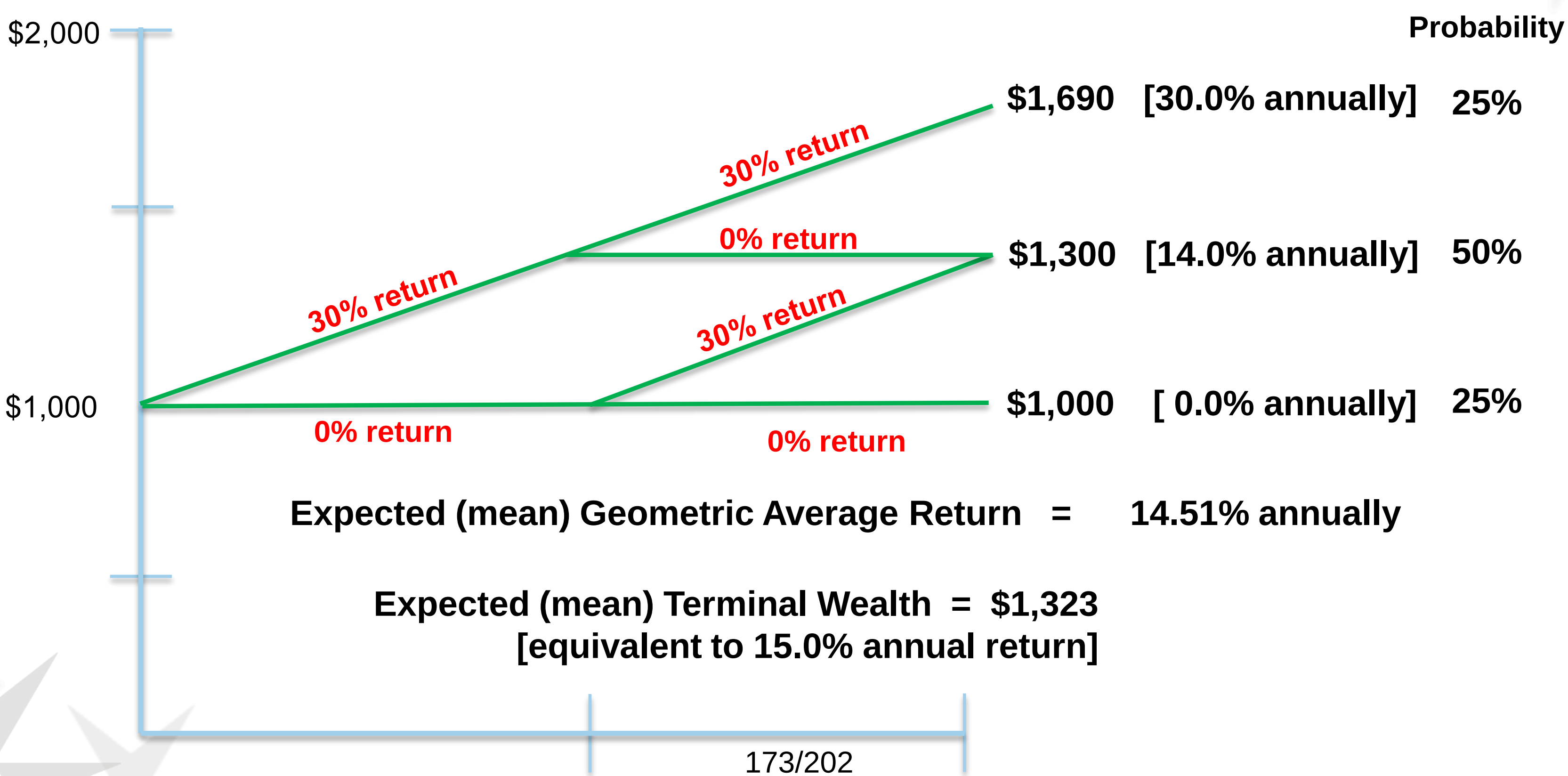
What does that mean?

- What the ASOP says about future expected terminal wealth
  - Expected value: matches <u>expected</u> <u>arithmetic</u> average return
  - Median value: matches <u>median</u> <u>geometric</u> average return
    - Which the <u>expected</u> <u>geometric</u> return gets close to over time

- All these results fully reflect “volatility drain” (the wealth diminishing effect of investment volatility)
  - That is, in our simulations, for each trial the terminal wealth is reduced for the effect of variable returns in that trial
  - Even so, the expected arithmetic average return is the single rate that will accumulate to the expected terminal wealth
    - That means that if you use the expected arithmetic average return as the discount rate, you will have an expected gain/loss of zero

Simple example (from ASOP 27 Appendix 3)

- 50% probability of earning a 1-year return of 30%
- 50% probability of earning a 1-year return of 0%.
  - The mean (expected value) of the single period return is 15%.
- Possible investment results for initial $1,000 investment:



ASOP 27 Example (continued)

- Expected geometric average return is 14.51%
  - Less than 15% (i.e., the expected arithmetic average return)
- Expected wealth is $1322.50
  - ¼ x 1690 + ½ x 1300 + ¼ x 1000
- Equivalent annual discount rate is 15% (!!)
  - Square root of (1322.50/1000), -1
- But if you fund a target liability of $1323 with $1000 today, there is a 75% (¾) chance that you will fall short
  - The median ($1300) is less than the mean ($1323)
- Other ASOP 27 style examples show same results
  - But the mean/median relationship is better illustrated with a simulation

Simulating future distributions

- ➢Generate series of N future year returns from assumed distribution of returns
  - This set of multi-year returns (N years) makes up one “trial”
- ➢Calculate statistics of interest for this trial:
  - Multi-year average return (arithmetic and geometric)
  - Terminal wealth (compounded value of $1) after N years
    - Including “volatility drain” for that trial
- ➢Do this K times (K is large)
  - Average those K trial values of each statistic to get simulated expected value (mean) for that statistic
  - Order those K trial values of each statistic and pick the middle one to get simulated median value for that statistic
- ➢Segal simulations used an 8% EROR (i.e., OCERS’ 7.25% without the risk adjustment), and 10,000 trials for 40 years

Results of Segal Simulations

- For each trial we compare two terminal wealth values
  - An "actual wealth" based on simulated returns from that trial (including the wealth reducing effect of volatility)
  - An "expected wealth" based on constant assumed return of 8% (with no reduction for volatility)
  - Difference is the cumulative investment gain/loss for that trial
- Over all trials, those gains and losses average to zero!
  - This is just another way to demonstrate that the single rate that accumulates to the expected terminal wealth is the expected arithmetic average return (i.e., 8%).
- Simulation also shows that the expected geometric average return gets close to the median geometric average return
  - Which accumulates to the median terminal wealth

The core result in all this

<u>These two are equal:</u>

- Discount rate equivalent to expected terminal wealth
  - i.e., the "no expected surplus or unfunded" discount rate
- Future expected arithmetic average return
  - i.e., the mean of the expected single year distribution

<u>And these two are equal</u>

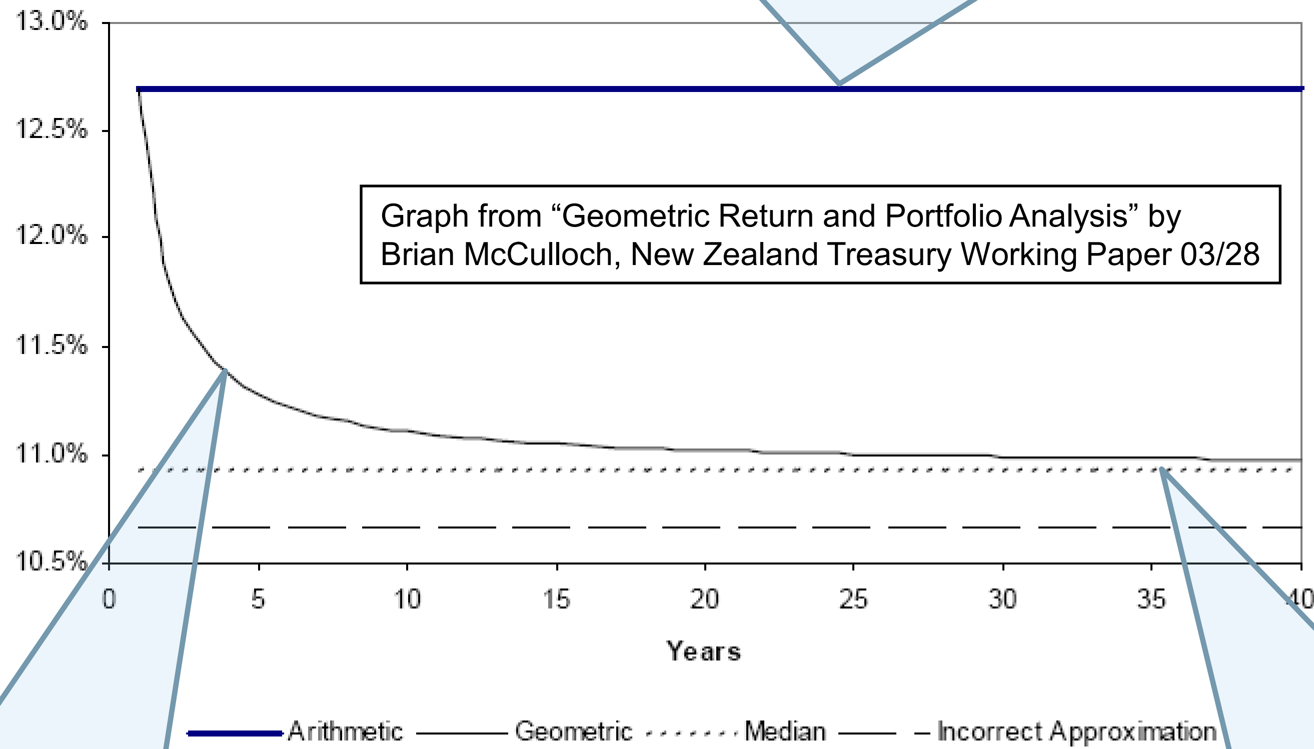
- Discount rate equivalent to median terminal wealth
  - i.e., the "50/50 chance of surplus or unfunded" discount rate
- Median geometric average return
  - Note that this is <u>not</u> the mean geometric average return
  - But as time increases the mean geometric average return gets close to ("converges to") the median

Graphs showing three future "average" returns

- Expected (Mean) Arithmetic Average Return:
  - Independent of time horizon
  - Corresponds to the expected terminal wealth
- Expected (Mean) Geometric Average Return:
  - Dependent on time horizon
  - Asymptotically approaches median geometric return
- Median Geometric Average Return:
  - Independent of time horizon
  - Corresponds to the median terminal wealth
- Second graph shows theoretical and simulated averages

Three Measures of Future "Average" Returns

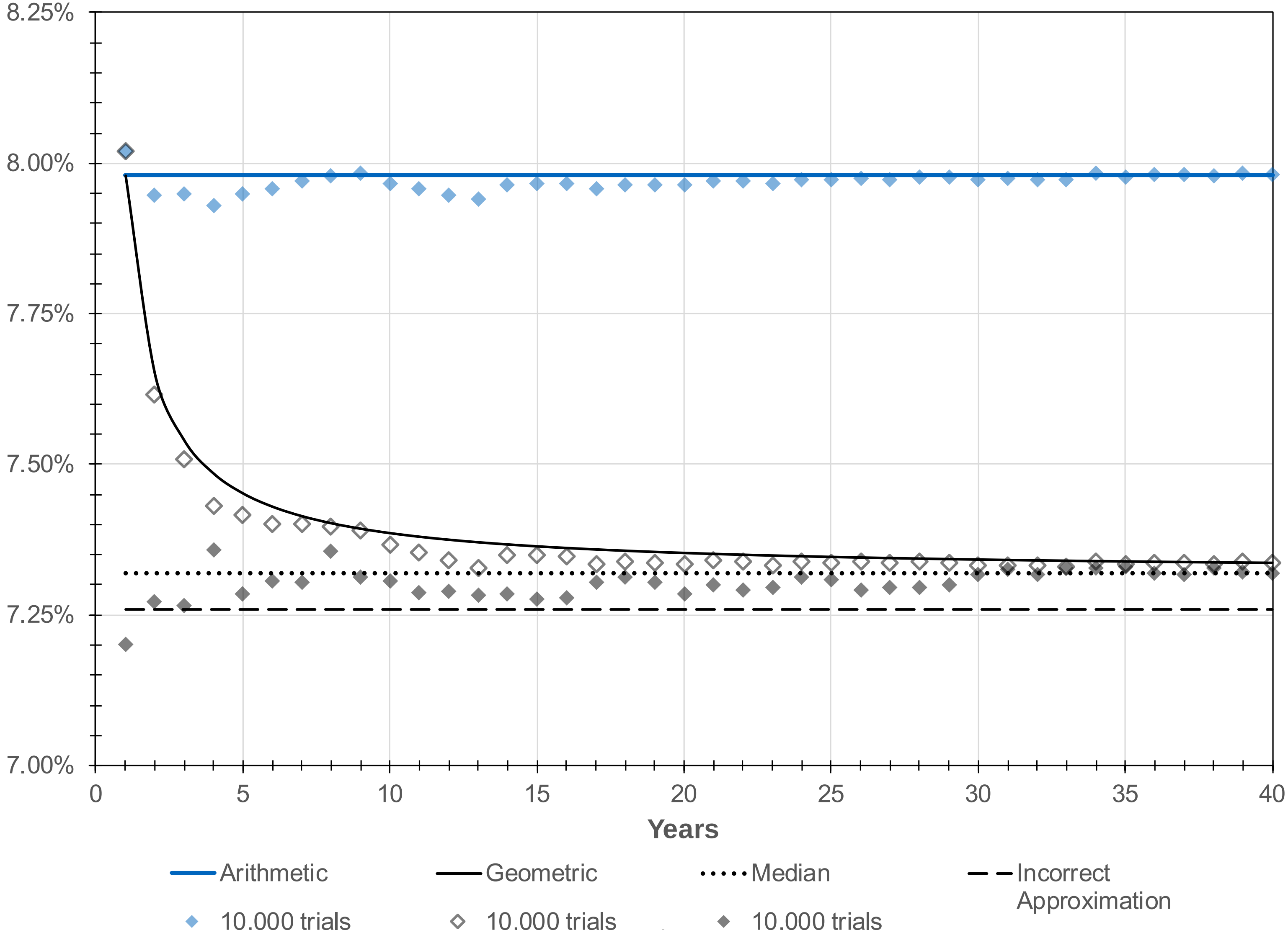
Expected (mean) Arithmetic Average Return:
- Independent of time horizon
- Determines the Expected terminal wealth
- Percentile of wealth depends on time horizon and volatility



Expected (mean) Geometric Average Return:
- Dependent on time horizon
- Asymptotically approaches median geometric return
- In the limit, corresponds to the 50th percentile of terminal wealth

Median Geometric Average Return:
- Independent of time horizon
- Corresponds to the 50th percentile of terminal wealth
- wealth

Simulation of future average returns



In theory, discount rate selection depends on two subtly different goals

- Goal based on target funding level, not returns
- If you want to expect to meet funding target (no expected surplus or shortfall), discount at the expected arithmetic average return
  - That is, the mean of the single period distribution
  - But expect to fall short more than half the time
- If you want a 50/50 chance of meeting funding target, discount at the *median* of the expected geometric average return distribution
  - Expected geometric average return converges to this value
  - But you will have expected actuarial gains

What about the Expected Geometric Average?

- Neither of these is the expected (mean) geometric average return (the one that depends on time horizon)
- Why is this statistic often proposed as the discount rate?
  - Perhaps because we think it relates to either expected (mean) or median wealth
    - Unrelated to expected wealth (except for 1 year horizon)
    - Related to median wealth only for long horizons
  - Perhaps because it predicts what the N year historical geometric average will be – looking back from year N!
    - And we forget that our goal is achieving funding, not achieving assumed returns
  - Or perhaps because we think – <u>incorrectly</u> – that discounting at the expected arithmetic average return ignores the wealth diminishing effect of investment return volatility

Means versus Medians – in theory

- How can it be that targeting expected value (mean) wealth differs from targeting median wealth?
  - Math answer is that future compound returns are distributed asymmetrically, with a high end tail bigger than the low end tail
    - That makes the mean greater than the median
  - Mean wealth is affected by high end outliers
    - Also, assets cannot go negative so there is a floor on negative returns
  - In contrast, median wealth is “outlier insensitive”
- Medians are also more intuitive, and are implicit in stochastic assumption modeling
  - Assumption recommendations that are directly based on stochastic modeling tend to focus on percentiles, not expected values

Arithmetic vs Geometric – in practice

- Models using expected arithmetic average returns for discount rate (like Segal's) are not tied to a single stochastic simulation
  - Allows use of a survey of capital market assumptions rather than a single firm's opinion
  - Based on expected values that are available without reference to stochastic simulation
    - Also consistent with other actuarial measurements
- Models using expected geometric average returns for discount rate are usually based on a stochastic simulation
  - Using a single set of capital market assumptions
  - Based on median values, which requires a stochastic simulation
  - Can introduce inconsistent inflation components for expected return versus salary growth and COLAs

Arithmetic vs Geometric – in practice

- How about just using Segal model but with expected geometric average returns from Segal's survey?
  - Not so straightforward, since cannot simply weight geometric returns by asset allocation
  - Must convert each asset class from geometric to arithmetic, then weight by asset allocation, then convert back
- More importantly, Segal model is developed, calibrated and road tested consistently using arithmetic returns
  - Ad hoc adjustment for expected geometric returns would lower discount rate by 50 to 75 basis points – or more
    - Depending on portfolio standard deviation
  - Yet Segal recommended ERORs are not consistently 50 to 75 basis points higher than other firms

DISCUSSION

I-5

Memorandum

DATE: July 3, 2017

TO: Members of the Board of Retirement

FROM: Brenda Shott, Assistant CEO, Finance and Internal Operations

SUBJECT: **FUTURE SERVICE ONLY CONTRIBUTION RATE CREDIT CORRECTION**

Recommendation

Approve revised employer contribution rates for employers eligible for the future service only rate credit for Fiscal Years 2015-2016, 2016-2017 and 2017-2018 and the related correction of employer contributions received.

Background/Discussion

In the early 2000's several employers adopted enhanced benefit formulas for their employees. Some of the employers adopted the enhanced benefit formulas retroactively for previous service earned as well as for all future service to be earned, whereas others adopted the enhanced benefit formulas for future service only. For employers in Rate Groups #2 and #3 (rate groups with multiple employers) who adopted enhanced benefit formulas for future service only, the actuary has annually calculated a "future service only rate credit". The "future service only rate credit" is subtracted from the employer contribution rate calculated by the actuary for the applicable benefit formula in order to account for the reduced UAAL amount for not applying the enhanced benefit formula to past service credit earned by members. Rate Groups with only one employer have rates calculated specifically for them and their contribution rate takes into consideration whether the enhanced benefits were retroactive or future service only so there is no "future service only rate credit" in those other rate groups.

In 2013, California Public Employee Pension Reform Act (PEPRA) became effective which created new lower benefit formulas for new employees hired after January 1, 2013. As such, the actuary has annually calculated specific contribution rates for the PEPRA formulas in each Rate Group. Staff implemented the PEPRA rates for all employers within each rate group, regardless of whether they had previously adopted the legacy enhanced benefit formulas for future service only or if they adopted them retroactively and no "future service only rate credit" was applied. In recent discussions with the actuary, Staff learned that the "future service only rate credit" should have been applied to the PEPRA contribution rates for employers in Rate Groups #2 and #3 who adopted the enhanced benefits on a future service only basis. Since 2013, the "future service only rate credit" has ranged from 1.59% - 2.04% for Rate Group #2 and 3.47% - 4.24% for Rate Group #3.

As result of Staff not applying the future service only rate credit to the PEPRA member's employer contribution rate, the following employers have overpaid contributions for PEPRA members since 2013:

- Orange County Children and Family Commission (OC Children and Family Commission)
- Orange County Local Agency Formation Commission (OC LAFCO)
- Orange County Employees Retirement System (OCERS)
- Orange County Public Law Library

Memorandum

In connection with conversations between OCERS Staff and Segal with regards to the application of the "future service only credit", Segal became aware that they had an error in their calculation of the "future service only credit" for rate group 2 in the 2013, 2014 and 2015 actuarial valuations. The error was a result of inadvertently excluding the payroll amounts for members in Rate Group #2 that are enrolled in plans other than Plans I and J (2.7% @ 55 – which are the enhanced benefit formulas) in the calculation of the rate credit. The attached letter from Segal explains in detail the methodology of calculating the credit and provides the revised "future service rate credit" for the 2013-2015 valuations which establish the rates for Fiscal Years 2015-2016, 2016-2017 and 2017-2018. The rate correction reduces the "future service only rate credit" and so increases the employer contribution rates for OC Children and Family Commission, OC LAFCO and OCERS by 0.09%, 0.15% and 0.16% for the 2013, 2014 and 2015 valuations, respectively.

The Board of Retirement must approve all contribution rates; the correction of the "future service only rate credit" is a change to the contribution rates for the employers impacted. Therefore, Staff will be asking the Board to approve the revised employer contribution rates for employers eligible for the future service only rate credit for the impacted years and the related correction of employer contributions received.

Staff has analysed the transmittals submitted by the four employers impacted by both not applying the "future service only rate credit" to PEPRA members as well as for the revised "future service only rate credit" amount for each employer. On a net basis, all four employers have overpaid contributions between July 1, 2013 and pay period 11 of FY 2016-17 as result of these corrections as follows:

	Law Library	Children & Family	LAFCO	OCERS	Total
Underpayment (rate credit correction)	N/A	($1,119.68)	($531.11)	($10,967.65)	($12,618.44)
Overpayment (applying rate credit to PEPRA members)	$3,303.83	$9,819.40	$6,031.81	$20,808.43	$39,963.47
Net Overpayment Due to Employer	$3,303.83	$8,699.72	$5,500.70	$9,840.78	$27,345.03

Should the Board approve Staff's recommendation, the net overpayment of contributions will be updated to reflect the most current pay period (PP15) and the revised contribution rate reflecting the corrected future service only rate credit will be implemented in the following pay period (PP16). The net amount overpaid by each employer will be credited to the effected employers by reducing future contributions required to be made (no cash refunds will actually be issued).

Memorandum

Submitted by:

OCERS B.M.S - Approved

____

Brenda Shott

Assistant CEO, Finance and Internal Operations

Segal Consulting

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308
T 415.263.8200 www.segalco.com

VIA E-MAIL AND USPS

June 26, 2017

Mr. Steve Delaney
Chief Executive Officer
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

**Re: Orange County Employees Retirement System
Application of Adjustment to UAAL Rate for
Future Service Only Benefit Improvement**

Dear Steve:

As discussed, we have prepared presentations of the 2017-2018 employer contribution rates to clarify how the reductions to the Unfunded Actuarial Accrued Liability (UAAL) rate provided in our December 31, 2015 valuation should be applied to reflect the future service only benefit improvements for those employers who did not adopt the enhanced benefit formulas for past and future service under either Plans I and J (2.7% @ 55) or Plans G and H (2.5% @ 55).

It has been our intent to include the payrolls for all active employees[1] from those employers at December 31 (the date of the actuarial valuation) in calculating the above UAAL rate credit in the prior valuations. However, we have inadvertently excluded some of the payrolls for members in Rate Group #2 enrolled in plans other than Plans I and J (2.7% @ 55). We have included the revised rate credits based on the December 31, 2013,[2] 2014 and 2015 valuations for use in setting the employer contribution rates for fiscal years 2015-2016, 2016-2017 and 2017-2018.

BACKGROUND

Four employers at OCERS in Rate Groups #2 and #3 adopted the enhanced benefit formulas for future service only. Orange County Local Agency Formation Commission,[3] Orange County

1 *These include employees enrolled in the enhanced plans (Plans I and J – 2.7% @ 55 and Plans G and H – 2.5% @ 55) as well as those subsequently enrolled in Plans O and P (1.62% @ 65) and the CalPEPRA plans (Plan T – 1.62% @ 65 and Plan U – 2.5% @ 67).*

2 *While these other plans (namely, Plans O, P, T and U) have been in existence prior to the December 31, 2013 valuation, there was no active payroll as of those prior valuation dates and therefore no rate revisions are necessary.*

3 *Improvement is prospective only for service after June 23, 2005.*

Employees Retirement System[4] and Children and Families Commission[5] are all employers in Rate Group #2 who adopted the enhanced benefit formulas (Plans I and J – 2.7% @ 55) for future service only. Law Library[6] is an employer in Rate Group #3 who adopted the enhanced benefit formula (Plans G and H – 2.5% @ 55) for future service only. Service prior to the date of the future service improvement continues to be credited under Plans A and B.

Since these employers did not adopt the enhanced benefit for past and future service, but rather future service only, these employers received a rate credit which reduces their UAAL rate. For instance, on page 28 of our December 31, 2015 actuarial valuation, we calculate this rate adjustment for these employers.[7]

METHODOLOGY

We have been asked to clarify how the reductions to the UAAL rate provided in our December 31, 2015 valuation should be applied to reflect the future service only benefit improvements for those employers who did not adopt the enhanced benefit formulas for past and future service under either Plans I and J (2.7% @ 55) or Plans G and H (2.5% @ 55). Specifically, we have been asked to clarify which payroll to apply the credit.

The future service only benefit improvement credit to the UAAL rate is calculated as of the valuation date. This calculation requires calculating the Actuarial Accrued Liability (AAL) for active members at the above employers (1) assuming that both past and future service was improved and (2) assuming that only future service was improved. The difference in the AAL between (1) and (2) is the reduction in the AAL associated with adopting the enhanced formula for future service only.

The UAAL rate credit is determined by amortizing the reduction in AAL referenced above over a 20-year period beginning December 31, 2013[8] (with 18 years remaining as of December 31, 2015) using a 7.25% interest rate and a 3.50% payroll growth assumption. The payment is spread over all active payroll for these employers including the payroll for the employees subsequently enrolled in Plans O and P (1.62% @ 65)[9] or the CalPEPRA plans (i.e., either Plan T – 1.62% @ 65 or Plan U – 2.5% @ 67). This is similar to the other UAAL bases which are amortized over all active payroll (versus payroll for only Plans G and H or I and J), so that the UAAL can continue to be funded over an open group payroll.

---

4 *Improvement for management members is prospective only for service after June 30, 2005.*

5 *Improvement is prospective only for service after December 22, 2005.*

6 *Improvement is prospective only for service after June 23, 2005.*

7 *Again, that rate adjustment is before the revision presented in this letter to include the payrolls for all employees from those employers at the December 31, 2015 valuation.*

8 *Previously amortized over a 30-year period effective December 31, 2004 (and used to determine the contribution rates for the 2006-2007 fiscal year) before the Board adopted as part of a new actuarial funding policy to re-amortize the outstanding balance of the UAAL from the December 31, 2012 valuation over a declining 20-year period effective with the December 31, 2013 valuation.*

9 *Applicable for Orange County Local Agency Formation Commission members hired on or after July 1, 2010 but before January 1, 2013.*

Instead of including the payrolls for all active employees from those employers at December 31 (the date of the actuarial valuation) in calculating the above UAAL rate credit, in the prior valuations we have inadvertently excluded some of the payrolls for members in Rate Group #2 enrolled in plans other than Plans I and J (2.7% @ 55). Therefore, we have included in Attachments A, B and C the revised rate credits based on the December 31, 2013,[10] 2014 and 2015 valuations for use in setting the employer contribution rates for fiscal years 2015-2016, 2016-2017 and 2017-2018.

CALCULATION OF CONTRIBUTION IMPACT

It is our understanding that the UAAL rate credits shown in our actuarial valuations have only been applied to the payrolls for Plans I and J (2.7% @ 55) for the employers in Rate Group #2 or the payrolls for Plans G and H (2.5% @ 55) for the employer in Rate Group #3. This means that the UAAL rate credits have not been applied to the payrolls for those enrolled in Plans O and P (1.62% @ 65) and the CalPEPRA plans (Plan T – 1.62% @ 65 and Plan U – 2.5% @ 67).

As directed by OCERS, we will provide in a stand-alone Excel spreadsheet an estimate of the amount of over contributions by each of the four employers because the UAAL rate credits have not been applied to payrolls for those enrolled in Plans O, P, T or U. In that spreadsheet, we will also estimate the amount of under contributions for the three employers in Rate Group #2 because the UAAL rate credits have been overstated in the prior valuations for members enrolled in Plans I and J. The values shown in the spreadsheet are provided for illustrative purposes only because the over and under contributions should be calculated using the spreadsheet but based on actual payrolls during each pay period that we do not have available in our valuation systems.

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary. The undersigned are members of the American Academy of Actuaries and meet the qualification requirements to render the actuarial opinion contained herein.

Please let us know if you have any questions.

Sincerely,

Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President & Actuary

Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Actuary

MYM/bbf
Enclosure

---

10 *While these other plans (namely, Plans O, P, T and U) have been in existence prior to the December 31, 2013 valuation, there was no active payroll as of those prior valuation dates and therefore no rate revisions are necessary.*

Attachment A

Recommended Employer Contribution Rates as of December 31, 2013 (Dollar Amounts in Thousands)

General Employers – Orange County Local Agency Formation Commission, Orange County Employees Retirement System and Children and Families Commission

	December 31, 2013 Valuation (For Fiscal Year 2015-2016)		
	Rate[1]	Rate[2]	Rate[3]
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)			
Normal Cost	13.66%	13.66%	13.66%
UAAL[4]	22.22%	22.13%	23.72%
Total Contribution	35.88%	35.79%	37.38%
Increase/(Decrease) in Rate		(0.09%)	1.59%
Rate Group #2 – Plans O and P (1.62% @ 65)[5]			
Normal Cost	5.61%	5.61%	5.61%
UAAL[4]	22.22%	22.13%	23.72%
Total Contribution	27.83%	27.74%	29.33%
Increase/(Decrease) in Rate		(0.09%)	1.59%
Rate Group #2 – Plan T (1.62% @ 65 PEPRA)[6]			
Normal Cost	6.70%	6.70%	6.70%
UAAL[4]	22.22%	22.13%	23.72%
Total Contribution	28.92%	28.83%	30.42%
Increase/(Decrease) in Rate		(0.09%)	1.59%
Rate Group #2 – Plan U (2.5% @ 67 PEPRA)[7]			
Normal Cost	8.56%	8.56%	8.56%
UAAL[4]	22.22%	22.13%	23.72%
Total Contribution	30.78%	30.69%	32.28%
Increase/(Decrease) in Rate		(0.09%)	1.59%

(1) *These rates are after reflecting payrolls from all active employees in the revised future service only benefit improvements under 2.7% @ 55.*
(2) *These rates are after reflecting future service only benefit improvements under 2.7% @ 55 as shown originally in the December 31, 2013 valuation.*
(3) *These rates are before reflecting future service only benefit improvements under 2.7% @ 55.*
(4) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*
(5) *Applicable for Orange County Local Agency Formation Commission members hired on or after July 1, 2010 but before January 1, 2013.*
(6) *Applicable for Orange County Local Agency Formation Commission members hired on or after January 1, 2013.*
(7) *Applicable for Orange County Retirement System and Children and Families Commission members hired on or after January 1, 2013.*
Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 27 of the December 31, 2013 valuation.

Attachment A

Recommended Employer Contribution Rates as of December 31, 2013 (Dollar Amounts in Thousands)

General Employers – Law Library

	December 31, 2013 Valuation (For Fiscal Year 2015-2016)	
	Rate[1]	Rate[2]
Rate Group #3 – Plans G and H (2.5% @ 55 – Law Library)		
Normal Cost	12.89%	12.89%
UAAL[3]	18.29%	21.87%
Total Contribution	31.18%	34.76%
Increase/(Decrease) in Rate		3.58%
Rate Group #3 – Plan U (2.5% @ 67 PEPRA – Law Library)[4]		
Normal Cost	9.66%	9.66%
UAAL[3]	18.29%	21.87%
Total Contribution	27.95%	31.53%
Increase/(Decrease) in Rate		3.58%

(1) *These rates are after reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(2) *These rates are before reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(3) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*

(4) *Applicable for Law Library members hired on or after January 1, 2013.*

Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 27 of the December 31, 2013 valuation.

Attachment B

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers – Orange County Local Agency Formation Commission, Orange County Employees Retirement System and Children and Families Commission

	December 31, 2014 Valuation (For Fiscal Year 2016-2017)		
	Rate[1]	Rate[2]	Rate[3]
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)			
Normal Cost	13.22%	13.22%	13.22%
UAAL[4]	20.08%	19.93%	21.72%
Total Contribution	33.30%	33.15%	34.94%
Increase/(Decrease) in Rate		(0.15%)	1.79%
Rate Group #2 – Plans O and P (1.62% @ 65)[5]			
Normal Cost	5.49%	5.49%	5.49%
UAAL[4]	20.08%	19.93%	21.72%
Total Contribution	25.57%	25.42%	27.21%
Increase/(Decrease) in Rate		(0.15%)	1.79%
Rate Group #2 – Plan T (1.62% @ 65 PEPRA)[6]			
Normal Cost	6.61%	6.61%	6.61%
UAAL[4]	20.08%	19.93%	21.72%
Total Contribution	26.69%	26.54%	28.33%
Increase/(Decrease) in Rate		(0.15%)	1.79%
Rate Group #2 – Plan U (2.5% @ 67 PEPRA)[7]			
Normal Cost	8.33%	8.33%	8.33%
UAAL[4]	20.08%	19.93%	21.72%
Total Contribution	28.41%	28.26%	30.05%
Increase/(Decrease) in Rate		(0.15%)	1.79%

(1) *These rates are after reflecting payrolls from all active employees in the revised future service only benefit improvements under 2.7% @ 55.*
(2) *These rates are after reflecting future service only benefit improvements under 2.7% @ 55 as shown originally in the December 31, 2014 valuation.*
(3) *These rates are before reflecting future service only benefit improvements under 2.7% @ 55.*
(4) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*
(5) *Applicable for Orange County Local Agency Formation Commission members hired on or after July 1, 2010 but before January 1, 2013.*
(6) *Applicable for Orange County Local Agency Formation Commission members hired on or after January 1, 2013.*
(7) *Applicable for Orange County Retirement System and Children and Families Commission members hired on or after January 1, 2013.*

Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 28 of the December 31, 2014 valuation.

Attachment B

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers – Law Library

	December 31, 2014 Valuation (For Fiscal Year 2016-2017)	
	Rate[1]	Rate[2]
Rate Group #3 – Plans G and H (2.5% @ 55 – Law Library)		
Normal Cost	12.40%	12.40%
UAAL[3],[4]	16.80%	20.21%
Total Contribution	29.20%	32.61%
Increase/(Decrease) in Rate		3.41%
Rate Group #3 – Plan U (2.5% @ 67 PEPRA – Law Library)[4]		
Normal Cost	9.00%	9.00%
UAAL[3]	16.80%	20.21%
Total Contribution	25.80%	29.21%
Increase/(Decrease) in Rate		3.41%

(1) *These rates are after reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(2) *These rates are before reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(3) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*

(4) *Applicable for Law Library members hired on or after January 1, 2013.*

Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 28 of the December 31, 2014 valuation.

Attachment C

Recommended Employer Contribution Rates as of December 31, 2015 (Dollar Amounts in Thousands)

General Employers – Orange County Local Agency Formation Commission, Orange County Employees Retirement System and Children and Families Commission

	December 31, 2015 Valuation (For Fiscal Year 2017-2018)		
	Rate[(1)]	Rate[(2)]	Rate[(3)]
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)			
Normal Cost	13.19%	13.19%	13.19%
UAAL[(4)]	20.79%	20.63%	22.45%
Total Contribution	33.98%	33.82%	35.64%
Increase/(Decrease) in Rate		(0.16%)	1.82%
Rate Group #2 – Plans O and P (1.62% @ 65)[(5)]			
Normal Cost	5.46%	5.46%	5.46%
UAAL[(4)]	20.79%	20.63%	22.45%
Total Contribution	26.25%	26.09%	27.91%
Increase/(Decrease) in Rate		(0.16%)	1.82%
Rate Group #2 – Plan T (1.62% @ 65 PEPRA)[(6)]			
Normal Cost	6.56%	6.56%	6.56%
UAAL[(4)]	20.79%	20.63%	22.45%
Total Contribution	27.35%	27.19%	29.01%
Increase/(Decrease) in Rate		(0.16%)	1.82%
Rate Group #2 – Plan U (2.5% @ 67 PEPRA)[(7)]			
Normal Cost	8.35%	8.35%	8.35%
UAAL[(4)]	20.79%	20.63%	22.45%
Total Contribution	29.14%	28.98%	30.80%
Increase/(Decrease) in Rate		(0.16%)	1.82%

(1) *These rates are after reflecting payrolls from all active employees in the revised future service only benefit improvements under 2.7% @ 55.*

(2) *These rates are after reflecting future service only benefit improvements under 2.7% @ 55 as shown originally in the December 31, 2015 valuation.*

(3) *These rates are before reflecting future service only benefit improvements under 2.7% @ 55.*

(4) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*

(5) *Applicable for Orange County Local Agency Formation Commission members hired on or after July 1, 2010 but before January 1, 2013.*

(6) *Applicable for Orange County Local Agency Formation Commission members hired on or after January 1, 2013.*

(7) *Applicable for Orange County Retirement System and Children and Families Commission members hired on or after January 1, 2013.*

Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 28 of the December 31, 2015 valuation.

Attachment C

Recommended Employer Contribution Rates as of December 31, 2015 (Dollar Amounts in Thousands)

General Employers – Law Library

	December 31, 2015 Valuation (For Fiscal Year 2017-2018)	
	Rate[1]	Rate[2]
Rate Group #3 – Plans G and H (2.5% @ 55 – Law Library)		
Normal Cost	12.33%	12.33%
UAAL[3],[4]	18.81%	22.08%
Total Contribution	31.14%	34.41%
Increase/(Decrease) in Rate		3.27%
Rate Group #3 – Plan U (2.5% @ 67 PEPRA – Law Library)[5]		
Normal Cost[6]	9.25%	9.25%
UAAL[3],[4]	18.81%	22.08%
Total Contribution	28.06%	31.33%
Increase/(Decrease) in Rate		3.27%

(1) *These rates are after reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(2) *These rates are before reflecting future service only benefit improvements under 2.5% @ 55 employer rate adjustment.*

(3) *UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.*

(4) *The December 31, 2015 rates are before adjustment to the contribution rates for the fiscal year 2017-2018 for additional UAAL contributions anticipated to be made by Law Library on December 15, 2016.*

(5) *Applicable for Law Library members hired on or after January 1, 2013.*

(6) *The December 31, 2015 Normal Cost rate has not been adjusted to reflect an employee who has since declined OCERS membership.*

Note that this presentation will be used in future actuarial valuation reports to replace the presentation currently used as shown on page 28 of the December 31, 2015 valuation.

I-6

Memorandum

DATE: July 6, 2017

TO: Members, Board of Retirement

FROM: Brenda Shott, Assistant CEO-Finance and Internal Operations

SUBJECT: **REVIEW OF FUNDING POLICY TIMING AND RELATIONSHIP TO EXPERIENCE STUDIES**

Recommendation

Receive and file.

Background/Discussion

The Orange County Employees Retirement System (OCERS) is charged with administering defined benefit plans for its members. Administering the system includes establishing systematic funding of current and future benefit payments for members of OCERS. In doing so, the Board of Retirement engages the services of an actuary to assist in establishing contributions that will fully fund the System's liabilities, and that, as a percentage of payroll, will remain as level as possible for each generation of active members. In order for the actuary to perform the requested services, the Board must approve specific funding objectives, methods, and assumptions to be used in the actuarial valuation for the purpose of funding member benefits. The funding objectives and methods are set in the Board's Actuarial Funding Policy by the following three components:

a. Actuarial Cost Method: the process used to allocate the total present value of future benefits to each year (Normal Cost), and all past years (Actuarial Accrued Liability);

b. Asset Smoothing Method: the process used that spreads the recognition of investment gains or losses over a period of time for the purposes of determining the Actuarial Value of Assets used in the actuarial valuation process; and

c. Amortization Policy: the decisions on how, in terms of duration and pattern, to reduce the difference between the Actuarial Accrued Liability and the Actuarial Value of Assets (after adjustment for non-valuation reserves) in a systematic manner.

The Board reviews this policy every three years. The last review of the Actuarial Funding Policy occurred in December 2014. The next scheduled review of the Actuarial Funding Policy would be December 2017.

In order to project the cost and liabilities of the pension fund, assumptions are made about all future events that could affect the amount and timing of the benefits to be paid and the assets to be accumulated. Every three years the actuary prepares an experience study of all of the assumptions made in the annual valuations. The experience studies, both economic and demographic, are the basis by which the actuary will make recommendations to the Board of Retirement on assumptions to be used in future actuarial valuations. The Board will be receiving the triennial experience studies in July and will be asked to approve economic and demographic assumptions in September 2017. The approved assumptions will be used in the valuations for calendar years 2017, 2018 and 2019. Contribution rates in those valuations will be effective in fiscal years 2019/2020, 2020/2021 and 2021/2022 respectively.

ORANGE COUNTY OCERS EMPLOYEES RETIREMENT SYSTEM

Memorandum

The question has arisen as to whether or not the timing of reviewing and approving changes to the Actuarial Funding Policy should be separate from or combined with the review of the experience studies and approval of assumptions. Paul Angelo will be lead this discussion at the July 17, 2017 Board meeting.

Submitted by:

OCERS B.M.S - Approved

____

Brenda Shott

Assistant CEO, Finance and Internal Operations