



ORANGE COUNTY FIRE AUTHORITY AGENDA

Budget and Finance Committee Meeting

Wednesday, August 13, 2014

12:00 Noon

Orange County Fire Authority Regional Fire Operations and Training Center

1 Fire Authority Road

Room AE117

Irvine, California 92602

Elizabeth Swift, Chair

Randal Bressette, Vice Chair

Sam Allevato Trish Kelley Jerry McCloskey Al Murray Steven Weinberg

Bruce Channing - Ex Officio

Unless legally privileged, all supporting documentation and any writings or documents provided to a majority of the Budget and Finance Committee after the posting of this agenda, which relate to any item on this agenda will be made available for public review in the office of the Clerk of the Authority located on the 2nd floor of the OCFA Regional Fire Operations & Training Center, 1 Fire Authority Road, Irvine, CA 92602, during regular business hours, 8:00 a.m. - 5:00 p.m., Monday through Thursday, and every other Friday, (714) 573-6040. In addition, unless legally privileged, all supporting documentation and any such writings or documents will be available online at <http://www.ocfa.org>.

This Agenda contains a brief general description of each item to be considered. Except as otherwise provided by law, no action or discussion shall be taken on any item not appearing on the following Agenda. Supporting documents, including staff reports, are available for review at the Orange County Fire Authority Regional Fire Operations and Training Center, 1 Fire Authority Road, Irvine, CA 92602 or you may contact Sherry A.F. Wentz, Clerk of the Authority, at (714) 573-6040 Monday through Friday from 8:00 a.m. to 5:00 p.m.

If you wish to speak before the Budget and Finance Committee, please complete a Speaker Form identifying which item(s) you wish to address. Please return the completed form to the Clerk of the Authority. Speaker Forms are available on the counter noted in the meeting room.



In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, you should contact the Clerk of the Authority at (714) 573-6040. Notification 48 hours prior to the meeting will enable the Authority to make reasonable arrangements to assure accessibility to the meeting.

CALL TO ORDER

PLEDGE OF ALLEGIANCE by Director Murray

ROLL CALL

PUBLIC COMMENTS

Any member of the public may address the Committee on items within the Committee's subject matter jurisdiction but which are not listed on this agenda during PUBLIC COMMENTS. However, no action may be taken on matters that are not part of the posted agenda. We request comments made on the agenda be made at the time the item is considered and that comments be limited to three minutes per person. Please address your comments to the Committee as a whole, and do not engage in dialogue with individual Committee Members, Authority staff, or members of the audience.

MINUTES

- 1. Minutes for the July 9, 2014, Budget and Finance Committee Meeting**
Submitted by: Sherry Wentz, Clerk of the Authority

Recommended Action:
Approve as submitted.

CONSENT CALENDAR

- 2. Monthly Investment Reports**
Submitted by: Patricia Jakubiak, Treasurer

Recommended Action:
Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of August 21, 2014, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the reports.

- 3. Monthly Status Update - Orange County Employees' Retirement System**
Submitted by: Lori Zeller, Assistant Chief, Business Services Department

Recommended Action:
Receive and file the report.

- 4. Acceptance of DHS/FEMA Administrative Preparedness Grant**
Submitted by: Jon Jones, Interim Assistant Chief, Operations Department

Recommended Action:
Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Adopt the submitted resolution to accept the Department of Homeland Security/Federal Emergency Management Agency's (DHS/FEMA) Administrative Preparedness Grant.
2. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) revenues and appropriations in the amount of \$1,164,131 for the US&R Program.

- 5. Acceptance of California Fire and Rescue Training Authority Urban Search & Rescue Mobilization Exercise and Training Grant**
Submitted by: Jon Jones, Interim Assistant Chief, Operations Department

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Adopt the proposed resolution to accept the California Fire and Rescue Training Authority Agreement for a grant in the amount of \$100,000.
2. Approve and authorize the Fire Chief or his designee to execute the proposed grant agreement.
3. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) revenues and appropriations in the amount of \$100,000 for the US&R mobilization and deployment exercise.

DISCUSSION CALENDAR

- 6. Annual Investment Report**
Submitted by: Patricia Jakubiak, Treasurer

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of August 21, 2014, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the report.

- 7. Implementation of Internal Control Audit Recommendations - Community Risk Reduction Department**
Submitted by: Lori Zeller, Assistant Chief, Business Services Department

Recommended Actions:

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Receive and file the report.
2. Approve continuation of the professional services provided by Mr. Irwin Bornstein, on a part-time basis and at six-month intervals, for an estimated cost of \$10,000 at each six-month interval through calendar year 2015.
3. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) appropriations by \$10,000 to fund the cost of continued-intermittent services provided by Mr. Bornstein, with one six-month review scheduled to occur during 2014/15 (January 2015).

REPORTS

No items.

ELECTION OF CHAIR AND VICE CHAIR

COMMITTEE MEMBER COMMENTS

ADJOURNMENT – The next regular meeting of the Budget and Finance Committee is scheduled for Wednesday, September 10, 2014, at 12:00 noon.

AFFIDAVIT OF POSTING

I hereby certify under penalty of perjury under the laws of the State of California, that the foregoing Agenda was posted in the lobby and front gate public display case of the Orange County Fire Authority, Regional Training and Operations Center, 1 Fire Authority Road, Irvine, CA, not less than 72 hours prior to the meeting. Dated this 7th day of August 2014.

Sherry A.F. Wentz, CMC
Clerk of the Authority

UPCOMING MEETINGS:

Board of Directors Special Meeting	Thursday, August 14, 2014, 6:00 p.m.
Executive Committee Meeting	Thursday, August 21, 2014, 6:00 p.m.
Claims Settlement Committee Meeting	Thursday, August 28, 2014, 5:30 p.m.
Board of Directors Meeting	Thursday, August 28, 2014, 6:30 p.m.
Human Resources Committee	Tuesday, September 2, 2014, 12 noon
Budget and Finance Committee Meeting	Wednesday, September 10, 2014, 12:00 noon

MINUTES

ORANGE COUNTY FIRE AUTHORITY

Budget and Finance Committee Meeting
Wednesday, July 9, 2014
12:00 Noon

Regional Fire Operations and Training Center
Room AE117
1 Fire Authority Road
Irvine, CA 92602

CALL TO ORDER

A regular meeting of the Orange County Fire Authority Budget and Finance Committee was called to order on July 9, 2014, at 12:00 p.m. by Chair Swift.

PLEDGE OF ALLEGIANCE

Director Allevato led the assembly in the Pledge of Allegiance to our Flag.

ROLL CALL

Present: Sam Allevato, San Juan Capistrano
Randal Bressette, Laguna Hills
Trish Kelley, Mission Viejo
Jerry McCloskey, Laguna Niguel
Al Murray, Tustin
Elizabeth Swift, Buena Park
Steven Weinberg, Dana Point

Absent: None

Also present were:

General Counsel David Kendig
Assistant Chief Brian Stephens
Assistant Chief Lori Smith

Deputy Chief Craig Kinoshita
Assistant Chief Dave Thomas
Assistant Clerk Lydia Slivkoff

PUBLIC COMMENTS (F: 12.02B3)

Chair Swift opened the Public Comments portion of the meeting. Chair Swift closed the Public Comments portion of the meeting without any public comments.

MINUTES

1. **Minutes for the June 11, 2014, Budget and Finance Committee Meeting** (F: 12.02B2)

On motion of Vice Chair Bressette and second by Director Kelley, the Committee voted unanimously to approve the minutes of the June 11, 2014, Budget and Finance Committee Meeting, as submitted.

CONSENT CALENDAR

Agenda Item No. 2 was pulled for separate consideration.

2. **Monthly Status Update – Orange County Employees’ Retirement System** (F: 17.06B)

Director Murray pulled this item to indicate it was refreshing to see a reduction in the unfunded pension liability.

On motion of Director Murray and second by Vice Chair Bressette, the Committee voted unanimously to receive and file the report.

DISCUSSION CALENDAR

3. **Monthly Investment Reports** (F: 11.10D2)

Treasurer Tricia Jakubiak provided an overview of the investment report and current global market activity.

On motion of Director McCloskey and second by Director Murray, the Committee voted unanimously to direct staff to place the item on the agenda for the Executive Committee meeting of July 17, 2014, with the Budget and Finance Committee’s recommendation that the Executive Committee receive and file the reports.

4. **Grant Purchase Approval - Generator and Backup Power for Fire Station 41 (Fullerton Airport)** (F: 19.07C41) (X: 16.03)

Legislative Analyst/Grants Administrator Jay Barkman provided an overview of a grant for a generator at Fire Station 41.

On motion of Vice Chair Bressette and second by Director Murray, the Committee voted unanimously to direct staff to place the item on the agenda for the Board of Directors meeting of July 24, 2014, with the Budget and Finance Committee’s recommendation that the committee take the following actions:

1. Approve a CIP budget adjustment to Fund 122 (Facilities Maintenance and Improvement) for FY 2014/15 to increase appropriations by \$437,000.
2. Increase FY 2014/15 revenue in Fund 122 (Facilities Maintenance and Improvement) by \$252,000.

Minutes

OCFA Budget and Finance Committee Meeting

July 9, 2014 Page - 2

5. Community Risk Reduction Fee Study and Adoption of Associated Fee Schedules
(F: 15.05)

Finance Manager/Auditor Jim Ruane provided a PowerPoint presentation on the Community Risk Reduction fee study and adoption of associated fee schedules.

On motion of Vice Chair Bressette and second by Director Murray, the Committee voted unanimously to direct staff to place the item on the agenda for the Board of Directors meeting of July 24, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors take the following actions:

1. Conduct a Public Hearing.
2. Find that, in accordance with California Government Code Section 66014, the proposed fees do not exceed the cost of providing services and are only for the purpose of meeting operational expenses and are, therefore, exempt from compliance with the California Environmental Quality Act pursuant to Public Resources Code Section 21080.
3. Approve and adopt the proposed Resolution and Exemption Policy approving changes in Community Risk Reduction and Miscellaneous fees and effective date.

REPORTS (F: 12.02B6)

There were no items to report.

COMMITTEE MEMBER COMMENTS (F: 12.02B4)

Chair Swift indicated she attended the Fire Station 41 Air Operations Open House/Dinner with Directors Shawver and Hernandez, and indicated it was a nice event.

Director Murray thanked OCFA for conducting a press conference prior to the 4th of July, and indicated it was a successful event.

ADJOURNMENT – Chair Swift adjourned the meeting at 1:10 p.m. The next regular meeting of the Budget and Finance Committee is scheduled for Wednesday, August 13, 2014, at 12:00 noon.

Lydia Slivkoff, CMC
Assistant Clerk of the Authority

CONSENT CALENDAR - AGENDA ITEM NO. 2
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Patricia Jakubiak, Treasurer

SUBJECT: **Monthly Investment Reports**

Summary:

This agenda item is submitted to the Committee in compliance with the investment policy of the Orange County Fire Authority and with Government Code Section 53646.

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of August 21, 2014, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the reports.

Background:

Attached is the final monthly investment report for the month ended June 30, 2014. A preliminary investment report as of July 25, 2014, is also provided as the most complete report that was available at the time this agenda item was prepared.

Impact to Cities/County:

Not Applicable.

Fiscal Impact:

Not Applicable.

Staff Contact for Further Information:

Patricia Jakubiak, Treasurer

Triciajakubiak@ocfa.org

(714) 573-6301

Attachment:

Final Investment Report – June 2014 / Preliminary Report – July 2014

Orange County Fire Authority Monthly Investment Report



Final Report – June 2014

Preliminary Report – July 2014



Monthly Investment Report Table of Contents

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Orange County Fire Authority

Final Investment Report

June 30, 2014



EXECUTIVE SUMMARY

Portfolio Activity & Earnings

During the month of June 2014, the size of the portfolio decreased slightly from \$159.8 million to \$159.3 million. Significant receipts for the month included quarterly cash contract payments, property tax receipts, intergovernmental payments, and charges for current services totaling \$19.5 million. Significant disbursements for the month included two biweekly payrolls which were approximately \$8.5 million each and a \$1.3 million payment to the County for the residual of the HMD (Hazardous Materials Disposal) Program refunds. Total June cash outflows for operating expenditures were approximately \$21.2 million. The portfolio's balance is expected to increase in the following month with the expected proceeds from the issuance of the \$44.0 million TRANs (Tax and Revenue Anticipation Notes) on July 1, 2014.

In June, the portfolio's yield to maturity (365-day equivalent) decreased by 1 basis point to 0.24% while the effective rate of return stayed unchanged at 0.24% for the month and declined by 1 basis point to 0.30% for the fiscal year to date. The average maturity of the portfolio shortened by 11 days to 185 days to maturity. As the fiscal year 2013/14 ended, interest earnings slightly exceeded budgeted expectations for the year.

Economic News

In June 2014, U.S. economic activity continued to improve modestly. However, overall economic activity remained uneven. On the upside, employment conditions picked up further in June. There were a total of 288,000 new jobs created for the month, a solid employment report. Unemployment conditions also improved, declining to 6.1% from 6.3% previously, though still at an elevated level. Both the University of Michigan Consumer Sentiment Index and the Conference Board Consumer Confidence Index increased for the month. Industrial production also increased, but less than expected. Retail sales increased, but disappointingly missed expectations for the month. The LEI (Leading Economic Index) rose in June. On the other hand, both manufacturing and non-manufacturing sectors declined slightly, and inflation edged up slightly. Housing activity remained mixed, and the NFIB (National Federation of Independent Business) small business optimism index dropped slightly in June. Despite the recently improving jobs and financial conditions, the economic recovery remains fragile and uneven. Thus, current expectations remain that interest rates will likely stay historically low until the second half of 2015.



BENCHMARK COMPARISON AS OF JUNE 30, 2014

<i>3 Month T-Bill:</i> 0.04%	<i>1 Year T-Bill:</i> 0.10%
<i>6 Month T-Bill:</i> 0.06%	<i>LAIF:</i> 0.23%
<i>OCFA Portfolio:</i> 0.24%	

PORTFOLIO SIZE, YIELD, & DURATION

	<u><i>Current Month</i></u>	<u><i>Prior Month</i></u>	<u><i>Prior Year</i></u>
<i>Book Value-</i>	\$159,315,564	\$159,812,738	\$154,571,085
<i>Yield to Maturity (365 day)</i>	0.24%	0.25%	0.29%
<i>Effective Rate of Return</i>	0.24%	0.24%	0.30%
<i>Days to Maturity</i>	185	196	283



ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Summary
June 30, 2014

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, Irvine, CA 92602
 (714)573-6301

(See Note 1 on page 9)

(See Note 2 on page 9)

Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Maturity	YTM/C 360 Equiv.	YTM/C 365 Equiv.
Money Mkt Mutual Funds/Cash	18,775,693.71	18,775,693.71	18,775,693.71	11.84	1	1	0.001	0.001
Commercial Paper Disc. -Amortizing	7,000,000.00	6,998,670.00	6,999,387.50	4.41	113	45	0.070	0.071
Federal Agency Coupon Securities	36,833,333.33	36,736,340.00	36,844,865.64	23.23	1,439	741	0.670	0.679
Federal Agency Disc. -Amortizing	46,000,000.00	45,998,310.00	45,998,170.83	29.00	98	36	0.034	0.034
Local Agency Investment Funds	50,000,000.00	50,014,937.50	50,000,000.00	31.52	1	1	0.225	0.228
Investments	158,609,027.04	158,523,951.21	158,618,117.68	100.00%	368	185	0.239	0.243
Cash and Accrued Interest								
Passbook/Checking (not included in yield calculations)	764,810.40	764,810.40	764,810.40		1	1	0.000	0.000
Accrued Interest at Purchase		26,802.08	26,802.08					
Subtotal		791,612.48	791,612.48					
Total Cash and Investments	159,373,837.44	159,315,563.69	159,409,730.16		368	185	0.239	0.243

Total Earnings	June 30 Month Ending	Fiscal Year To Date	Fiscal Year Ending
Current Year	31,908.57	411,050.78	411,050.78
Average Daily Balance	159,888,727.06	136,816,275.39	
Effective Rate of Return	0.24%	0.30%	

"I certify that this investment report accurately reflects all pooled investments and is in compliance with the investment policy adopted by the Board of Directors to be effective on January 1, 2014. A copy of this policy is available from the Clerk of the Authority. Sufficient investment liquidity and anticipated revenues are available to meet budgeted expenditure requirements for the next thirty days and the next six months."

[Signature] 7/4/14
 Patricia Jakubiak, Treasurer

Cash and Investments with GASB 31 Adjustment:

Book Value of Cash & Investments before GASB 31 (Above)	\$ 159,409,730.16
GASB 31 Adjustment to Books (See Note 3 on page 9)	\$ (94,166.47)
Total	\$ 159,315,563.69

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ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Investments
June 30, 2014

(See Note 1 on page 9)

(See Note 2 on page 9)

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Maturity	Maturity Date
Money Mkt Mutual Funds/Cash											
SYS528	528	High Mark 100% US Treasury MMF			18,775,693.71	18,775,693.71	18,775,693.71	0.001	0.001	1	
Subtotal and Average			18,709,992.09		18,775,693.71	18,775,693.71	18,775,693.71		0.001	1	
Commercial Paper Disc. -Amortizing											
36959JHF3	825	GEN ELEC CAP CRP		04/24/2014	7,000,000.00	6,998,670.00	6,999,387.50	0.070	0.071	45	08/15/2014
Subtotal and Average			8,332,515.32		7,000,000.00	6,998,670.00	6,999,387.50		0.071	45	
Federal Agency Coupon Securities											
3133ECM76	809	Federal Farm Credit Bank (Callable anytime)		04/25/2013	9,000,000.00	8,984,520.00	8,996,191.92	0.400	0.424	661	04/22/2016
3134G4TC2	821	Fed Home Loan Mtg Corp (Callable 7-30-14)		04/23/2014	7,500,000.00	7,508,400.00	7,506,054.12	1.550	0.545	29	01/30/2018
3133804V6	787	Fed Home Loan Bank (Callable anytime)		08/09/2012	6,000,000.00	5,990,940.00	6,000,000.00	1.000	0.981	1,135	08/09/2017
3133813R4	800	Fed Home Loan Bank (Callable 7-9-14)		12/20/2012	9,000,000.00	8,928,000.00	9,009,889.28	1.000	0.966	1,227	11/09/2017
313382DC4	803	Fed Home Loan Bank (Callable anytime)		03/15/2013	5,333,333.33	5,324,480.00	5,332,730.34	0.470	0.477	615	03/07/2016
Subtotal and Average			36,847,912.16		36,833,333.33	36,736,340.00	36,844,865.64		0.679	741	
Federal Agency Disc. -Amortizing											
313397F55	827	Freddie Mac		04/24/2014	5,000,000.00	4,999,600.00	4,999,695.83	0.030	0.031	73	09/12/2014
313385YV0	820	Fed Home Loan Bank		03/31/2014	9,000,000.00	9,000,000.00	8,999,985.00	0.030	0.031	2	07/03/2014
313385YU4	823	Fed Home Loan Bank		04/24/2014	8,000,000.00	8,000,000.00	8,000,000.00	0.025	0.026	0	07/01/2014
313385ZM1	824	Fed Home Loan Bank		04/24/2014	9,000,000.00	8,999,910.00	8,999,872.50	0.030	0.031	17	07/18/2014
313385D78	826	Fed Home Loan Bank		04/24/2014	6,000,000.00	5,999,700.00	5,999,705.00	0.030	0.031	59	08/29/2014
313385H33	828	Fed Home Loan Bank		06/19/2014	9,000,000.00	8,999,100.00	8,998,912.50	0.050	0.051	87	09/26/2014
Subtotal and Average			45,998,307.49		46,000,000.00	45,998,310.00	45,998,170.83		0.034	36	
Local Agency Investment Funds											
SYS336	336	Local Agency Invstmt Fund			50,000,000.00	50,014,937.50	50,000,000.00	0.228	0.228	1	
Subtotal and Average			50,000,000.00		50,000,000.00	50,014,937.50	50,000,000.00		0.228	1	
Total and Average			159,888,727.06		158,609,027.04	158,523,961.21	158,618,117.68		0.243	185	

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ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Cash
June 30, 2014

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Maturity
Money Mkt Mutual Funds/Cash										
SYS10104	10104	American Benefit Plan Admin		07/01/2013	15,000.00	15,000.00	15,000.00		0.000	1
SYS10033	10033	Revolving Fund		07/01/2013	20,000.00	20,000.00	20,000.00		0.000	1
SYS4	4	Union Bank of California		07/01/2013	479,810.40	479,810.40	479,810.40		0.000	1
SYS361	361	YORK		07/01/2013	250,000.00	250,000.00	250,000.00		0.000	1
		Average Balance	0.00	Accrued Interest at Purchase		26,802.08	26,802.08			1
				Subtotal		791,612.48	791,612.48			
		Total Cash and Investments	159,888,727.06		159,373,837.44	159,315,563.69	159,409,730.16		0.243	185

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ORANGE COUNTY FIRE AUTHORITY
Aging Report
By Maturity Date
As of July 1, 2014

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, Irvine, CA 92602
 (714)573-6301

				Maturity Par Value	Percent of Portfolio	Current Book Value	Current Market Value	
Aging Interval:	0 days	(07/01/2014 - 07/01/2014)	7 Maturities	0 Payments	77,540,504.11	48.65%	77,540,504.11	77,555,441.61
Aging Interval:	1 - 30 days	(07/02/2014 - 07/31/2014)	2 Maturities	0 Payments	18,000,000.00	11.29%	17,999,857.50	17,999,910.00
Aging Interval:	31 - 60 days	(08/01/2014 - 08/30/2014)	2 Maturities	0 Payments	13,000,000.00	8.16%	12,999,092.50	12,998,370.00
Aging Interval:	61 - 91 days	(08/31/2014 - 09/30/2014)	2 Maturities	0 Payments	14,000,000.00	8.78%	13,998,608.33	13,998,700.00
Aging Interval:	92 - 121 days	(10/01/2014 - 10/30/2014)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	122 - 152 days	(10/31/2014 - 11/30/2014)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	153 - 183 days	(12/01/2014 - 12/31/2014)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	184 - 274 days	(01/01/2015 - 04/01/2015)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	275 - 365 days	(04/02/2015 - 07/01/2015)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	366 - 1095 days	(07/02/2015 - 06/30/2017)	2 Maturities	0 Payments	14,333,333.33	8.99%	14,328,922.26	14,309,000.00
Aging Interval:	1096 - 1825 days	(07/01/2017 - 06/30/2019)	3 Maturities	0 Payments	22,500,000.00	14.13%	22,515,943.38	22,427,340.00
Aging Interval:	1826 days and after	(07/01/2019 -)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Total for			18 Investments	0 Payments		100.00	159,382,928.08	159,288,761.61



NOTES TO PORTFOLIO MANAGEMENT REPORT

- Note 1: Market value of the LAIF investment is calculated using a fair value factor provided by LAIF. The MUFG Union Bank (formerly Union Bank) Trust Department provides market values of the remaining investments.
- Note 2: Book value reflects the cost or amortized cost before the GASB 31 accounting adjustment.
- Note 3: GASB 31 requires governmental entities to report investments at fair value in the financial statements and to reflect the corresponding unrealized gains/ (losses) as a component of investment income. The GASB 31 adjustment is recorded only at fiscal year end. The adjustment for June 30, 2014 includes an increase of \$14,938 to the LAIF investment and a decrease of \$(109,104) to the remaining investments.
- Note 4: The Highmark money market mutual fund functions as the Authority's sweep account. Funds are transferred to and from the sweep account to/from OCFA's checking account in order to maintain a target balance of \$1,000,000 in checking. Since this transfer occurs at the beginning of each banking day, the checking account sometimes reflects a negative balance at the close of the banking day. The negative closing balance is not considered an overdraft since funds are available in the money market mutual fund. The purpose of the sweep arrangement is to provide sufficient liquidity to cover outstanding checks, yet allow that liquidity to be invested while payment of the outstanding checks is pending.



Local Agency Investment Fund (LAIF)

As of June 30, 2014, OCFA has \$50,000,000 invested in LAIF. The fair value of OCFA's LAIF investment is calculated using a participant fair value factor provided by LAIF on a quarterly basis. The fair value factor as of June 30, 2014 is 1.00029875. When applied to OCFA's LAIF investment, the fair value is \$50,014,938 or \$14,938 above cost. Although the fair value of the LAIF investment is higher than cost, OCFA can withdraw the actual amount invested at any time.

LAIF is included in the State Treasurer's Pooled Money Investment Account (PMIA) for investment purposes. The PMIA market valuation at June 30, 2014 is included on the following page.

**State of California
Pooled Money Investment Account
Market Valuation
6/30/2014**

Description	Carrying Cost Plus		Fair Value	Accrued Interest				
	Accrued Interest	Purch.			Amortized Cost			
United States Treasury:								
Bills	\$	13,136,457,349.85	\$	13,142,311,640.16	\$	13,144,944,000.00	NA	
Notes	\$	21,765,761,447.95	\$	21,762,865,451.74	\$	21,781,391,500.00	\$	16,166,795.00
Federal Agency:								
SBA	\$	584,701,224.29	\$	584,694,318.57	\$	581,690,333.88	\$	535,156.27
MBS-REMICs	\$	121,439,884.11	\$	121,439,884.11	\$	130,273,911.65	\$	578,677.42
Debentures	\$	1,941,833,846.14	\$	1,941,765,068.37	\$	1,940,997,500.00	\$	3,716,195.55
Debentures FR	\$	-	\$	-	\$	-	\$	-
Discount Notes	\$	2,744,171,045.14	\$	2,744,520,168.01	\$	2,744,572,450.00	NA	
GNMA	\$	-	\$	-	\$	-	\$	-
Supranational Debentures								
	\$	149,917,129.22	\$	149,917,129.22	\$	150,039,500.00	\$	172,222.50
CDs and YCDs FR								
	\$	-	\$	-	\$	-	\$	-
Bank Notes	\$	600,000,000.00	\$	600,000,000.00	\$	599,930,109.61	\$	201,305.57
CDs and YCDs	\$	12,000,093,467.09	\$	12,000,021,217.09	\$	11,993,880,805.70	\$	4,750,965.30
Commercial Paper	\$	6,697,400,013.90	\$	6,698,911,680.51	\$	6,698,100,611.10	NA	
Corporate:								
Bonds FR	\$	-	\$	-	\$	-	\$	-
Bonds	\$	-	\$	-	\$	-	\$	-
Repurchase Agreements	\$	-	\$	-	\$	-	\$	-
Reverse Repurchase	\$	-	\$	-	\$	-	\$	-
Time Deposits	\$	4,790,140,000.00	\$	4,790,140,000.00	\$	4,790,140,000.00	NA	
AB 55 & GF Loans	\$	314,253,721.22	\$	314,253,721.22	\$	314,253,721.22	NA	
TOTAL	\$	64,846,169,128.91	\$	64,850,840,279.00	\$	64,870,214,443.16	\$	26,121,317.61

Fair Value Including Accrued Interest \$ 64,896,335,760.77

Repurchase Agreements, Time Deposits, AB 55 & General Fund loans, and Reverse Repurchase agreements are carried at portfolio book value (carrying cost).

The value of each participating dollar equals the fair value divided by the amortized cost (1.00029875).
As an example: if an agency has an account balance of \$20,000,000.00, then the agency would report its participation in the LAIF valued at \$20,005,974.99 or \$20,000,000.00 x 1.00029875.



Orange County Fire Authority
Preliminary Investment Report
July 25, 2014



ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Summary
July 25, 2014

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, Irvine, CA 92602
 (714)573-6301

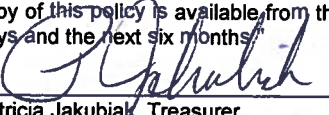
(See Note 1 on page 18)

(See Note 2 on page 18)

Investments	Par Value	Market Value	Book Value	% of Portfolio	Term	Days to Maturity	YTM/C 360 Equiv.	YTM/C 365 Equiv.
Money Mkt Mutual Funds/Cash	21,641,762.12	21,641,762.12	21,641,762.12	12.62	1	1	0.001	0.001
Commercial Paper Disc. -Amortizing	16,000,000.00	15,996,250.00	15,997,637.78	9.33	106	51	0.093	0.094
Federal Agency Coupon Securities	36,833,333.33	36,696,230.00	36,839,613.02	21.48	1,439	716	0.670	0.679
Federal Agency Disc. -Amortizing	47,000,000.00	46,992,070.00	46,991,715.00	27.41	138	94	0.058	0.058
Local Agency Investment Funds	50,000,000.00	50,014,937.50	50,000,000.00	29.16	1	1	0.225	0.228
Investments	171,475,095.45	171,341,249.62	171,470,727.92	100.00%	357	185	0.234	0.237
Cash and Accrued Interest <small>(See Note 4 on page 18)</small>								
Passbook/Checking (not included in yield calculations)	-692,218.16	-692,218.16	-692,218.16		0	0	0.000	0.000
Accrued Interest at Purchase		26,802.08	26,802.08					
Subtotal		-665,416.08	-665,416.08					
Total Cash and Investments	170,782,877.29	170,675,833.54	170,805,311.84		357	185	0.234	0.237

	July 25 Month Ending	Fiscal Year To Date
Total Earnings		
Current Year	28,323.64	28,323.64
Average Daily Balance	177,126,285.47	177,126,285.47
Effective Rate of Return	0.23%	0.23%

"I certify that this investment report accurately reflects all pooled investments and is in compliance with the investment policy adopted by the Board of Directors to be effective on January 1, 2014. A copy of this policy is available from the Clerk of the Authority. Sufficient investment liquidity and anticipated revenues are available to meet budgeted expenditure requirements for the next thirty days and the next six months."


 Patricia Jakubiak, Treasurer 8/1/14

Cash and Investments with GASB 31 Adjustment:

Book Value of Cash & Investments before GASB 31 (Above)	\$ 170,805,311.84
GASB 31 Adjustment to Books (See Note 3 on page 18)	\$ (94,166.47)
Total	\$ 170,711,145.37

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ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Investments
July 25, 2014

(See Note 1 on page 18) (See Note 2 on page 18)

Page 14

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Maturity	Maturity Date
Money Mkt Mutual Funds/Cash											
(See Note 4 on page 18)											
SY5528	528	High Mark 100% US Treasury MMF			21,641,762.12	21,641,762.12	21,641,762.12	0.001	0.001	1	
Subtotal and Average			20,454,016.46		21,641,762.12	21,641,762.12	21,641,762.12		0.001	1	
Commercial Paper Disc. -Amortizing											
36959JHF3	825	GEN ELEC CAP CRP		04/24/2014	7,000,000.00	6,999,580.00	6,999,727.78	0.070	0.071	20	08/15/2014
36959JKA0	829	GEN ELEC CAP CRP		07/01/2014	9,000,000.00	8,996,670.00	8,997,910.00	0.110	0.112	76	10/10/2014
Subtotal and Average			15,997,144.44		16,000,000.00	15,996,250.00	15,997,637.78		0.094	51	
Federal Agency Coupon Securities											
3133ECM76	809	Federal Farm Credit Bank (Callable anytime)		04/25/2013	9,000,000.00	8,985,870.00	8,996,338.16	0.400	0.424	636	04/22/2016
3134G4TC2	821	Fed Home Loan Mtg Corp (Callable 7-30-14)		04/23/2014	7,500,000.00	7,500,600.00	7,500,835.05	1.550	0.545	4	01/30/2018
3133804V6	787	Fed Home Loan Bank (Callable anytime)		08/09/2012	6,000,000.00	5,978,520.00	6,000,000.00	1.000	0.981	1,110	08/09/2017
3133813R4	800	Fed Home Loan Bank (Callable 8-9-14)		12/20/2012	9,000,000.00	8,905,320.00	9,009,884.59	1.000	0.966	1,202	11/09/2017
313382DC4	803	Fed Home Loan Bank (Callable anytime)		03/15/2013	5,333,333.33	5,325,920.00	5,332,755.22	0.470	0.477	590	03/07/2016
Subtotal and Average			36,842,134.28		36,833,333.33	36,696,230.00	36,839,613.02		0.679	716	
Federal Agency Disc. -Amortizing											
313589N58	831	Fed Natl Mortg Assoc		07/01/2014	9,000,000.00	8,998,470.00	8,998,440.00	0.060	0.062	104	11/07/2014
313397F55	827	Freddie Mac		04/24/2014	5,000,000.00	4,999,600.00	4,999,800.00	0.030	0.031	48	09/12/2014
313396BF9	832	Freddie Mac		07/01/2014	9,000,000.00	8,996,580.00	8,995,770.00	0.090	0.093	188	01/30/2015
313385D78	826	Fed Home Loan Bank		04/24/2014	6,000,000.00	5,999,760.00	5,999,830.00	0.030	0.031	34	08/29/2014
313385H33	828	Fed Home Loan Bank		06/19/2014	9,000,000.00	8,999,010.00	8,999,225.00	0.050	0.051	62	09/26/2014
313385L79	830	Fed Home Loan Bank		07/01/2014	9,000,000.00	8,998,650.00	8,998,650.00	0.060	0.062	90	10/24/2014
Subtotal and Average			53,830,783.90		47,000,000.00	46,992,070.00	46,991,715.00		0.058	94	
Local Agency Investment Funds											
SY5336	336	Local Agency Invstmt Fund			50,000,000.00	50,014,937.50	50,000,000.00	0.228	0.228	1	
Subtotal and Average			50,002,206.38		50,000,000.00	50,014,937.50	50,000,000.00		0.228	1	
Total and Average			177,126,285.47		171,475,095.45	171,341,249.62	171,470,727.92		0.237	185	

ORANGE COUNTY FIRE AUTHORITY
Portfolio Management
Portfolio Details - Cash
July 25, 2014

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate	YTM/C 365	Days to Maturity
Money Mkt Mutual Funds/Cash										
SYS10104	10104	American Benefit Plan Admin		07/01/2014	15,000.00	15,000.00	15,000.00		0.000	1
SYS10033	10033	Revolving Fund		07/01/2014	20,000.00	20,000.00	20,000.00		0.000	1
SYS4	4	Union Bank of California		07/01/2014	-977,218.16	-977,218.16	-977,218.16	(See Note 4 on page 18)	0.000	1
SYS361	361	YORK		07/01/2014	250,000.00	250,000.00	250,000.00		0.000	1
Average Balance			0.00	Accrued Interest at Purchase		26,802.08	26,802.08			0
				Subtotal		-665,416.08	-665,416.08			
Total Cash and Investments			177,126,285.47		170,782,877.29	170,675,833.54	170,805,311.84		0.237	185

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ORANGE COUNTY FIRE AUTHORITY
Aging Report
By Maturity Date
As of July 26, 2014

Orange County Fire Authority
 1 Fire Authority Road
 Irvine, Irvine, CA 92602
 (714)573-6301

				Maturity Par Value	Percent of Portfolio	Current Book Value	Current Market Value	
Aging Interval:	0 days	(07/26/2014 - 07/26/2014)	6 Maturities	0 Payments	70,949,543.96	41.54%	70,949,543.96	70,964,481.46
Aging Interval:	1 - 30 days	(07/27/2014 - 08/25/2014)	1 Maturities	0 Payments	7,000,000.00	4.10%	6,999,727.78	6,999,580.00
Aging Interval:	31 - 60 days	(08/26/2014 - 09/24/2014)	2 Maturities	0 Payments	11,000,000.00	6.44%	10,999,630.00	10,999,360.00
Aging Interval:	61 - 91 days	(09/25/2014 - 10/25/2014)	3 Maturities	0 Payments	27,000,000.00	15.81%	26,995,785.00	26,994,330.00
Aging Interval:	92 - 121 days	(10/26/2014 - 11/24/2014)	1 Maturities	0 Payments	9,000,000.00	5.27%	8,998,440.00	8,998,470.00
Aging Interval:	122 - 152 days	(11/25/2014 - 12/25/2014)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	153 - 183 days	(12/26/2014 - 01/25/2015)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	184 - 274 days	(01/26/2015 - 04/26/2015)	1 Maturities	0 Payments	9,000,000.00	5.27%	8,995,770.00	8,996,580.00
Aging Interval:	275 - 365 days	(04/27/2015 - 07/26/2015)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	366 - 1095 days	(07/27/2015 - 07/25/2017)	2 Maturities	0 Payments	14,333,333.33	8.39%	14,329,093.38	14,311,790.00
Aging Interval:	1096 - 1825 days	(07/26/2017 - 07/25/2019)	3 Maturities	0 Payments	22,500,000.00	13.18%	22,510,519.64	22,384,440.00
Aging Interval:	1826 days and after	(07/26/2019 -)	0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Total for			19 Investments	0 Payments		100.00	170,778,509.76	170,649,031.46



NOTES TO PORTFOLIO MANAGEMENT REPORT

- Note 1: Market value of the LAIF investment is calculated using a fair value factor provided by LAIF. The MUFG Union Bank Trust Department provides market values of the remaining investments.
- Note 2: Book value reflects the cost or amortized cost before the GASB 31 accounting adjustment.
- Note 3: GASB 31 requires governmental entities to report investments at fair value in the financial statements and to reflect the corresponding unrealized gains/ (losses) as a component of investment income. The GASB 31 adjustment is recorded only at fiscal year end. The adjustment for June 30, 2014 includes an increase of \$14,938 to the LAIF investment and a decrease of \$(109,104) to the remaining investments.
- Note 4: The Highmark money market mutual fund functions as the Authority's sweep account. Funds are transferred to and from the sweep account to/from OCFA's checking account in order to maintain a target balance of \$1,000,000 in checking. Since this transfer occurs at the beginning of each banking day, the checking account sometimes reflects a negative balance at the close of the banking day. The negative closing balance is not considered an overdraft since funds are available in the money market mutual fund. The purpose of the sweep arrangement is to provide sufficient liquidity to cover outstanding checks, yet allow that liquidity to be invested while payment of the outstanding checks is pending.

**CONSENT CALENDAR – AGENDA ITEM NO. 3
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014**

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Lori Zeller, Assistant Chief
Business Services Department

SUBJECT: **Monthly Status Update - Orange County Employees' Retirement System**

Summary:

This agenda item is submitted to provide a status update regarding steps taken during the last week in June and July 2014, to improve the Orange County Employees' Retirement System's (OCERS) financial policies, procedures, and practices.

Recommended Action:

Receive and file the report.

Background:

OCFA staff has been providing routine updates to the Budget and Finance Committee regarding financial activities occurring at OCERS since 2010. The following report is an update on actions taken during the last month.

Actions Taken/Financial Policies & Practices – Last week in June and July 2014

OCERS BOARD OF RETIREMENT July 21, 2014:

CONSIDERATION OF FUTURE CONTRIBUTION RATES

Mr. Paul Angelo, OCERS' actuary with the Segal Company, reviewed the annual 15-year retirement rate projections (Attachment 1). These rates will be incorporated into OCFA's Five Year Forecast.

INITIAL DISCUSSION OF TRIENNIAL STUDY OF ACTUARIAL ASSUMPTIONS

Every three years, the OCERS Board and actuary review the many different assumptions used in determining funding policy such as life expectancy, assumed earnings rate, and projected rate of retirements. Mr. Angelo presented an opening discussion of the topic, but no action was taken by the Board at this meeting. Mr. Angelo will return next month to continue the review and discussion. It is likely that a total package of updated assumptions will not be voted upon by the OCERS Board until October 2014 (Attachment 2).

EARLY PAYMENT OF CONTRIBUTIONS PROGRAM FOR CALENDAR YEAR 2015

Every year the OCERS Board is asked to renew a statutorily permitted program of allowing for a contribution discount if employer contributions are prepaid. Presently, the discount used is OCERS assumed earnings rate of 7.25%. With nearly all of OCERS plan sponsors participating, OCERS received \$425 million for FY 2014-15. Such a large sum being received at one time presents some unique challenges to the OCERS Investment Team as they work to invest those funds. In addition, OCERS staff believes that providing a discount equivalent to the assumed

earnings rate, at a time when OCERS' staff is questioning if a market correction is at hand, might suggest a needed change in the discount provided. To that end, the OCERS Investment Team suggested that for calendar year 2015, the OCERS Board consider limiting the amount of contributions to be accepted to half the anticipated contributions for the FY 2015-16, or, offer a lower assumed rate of 5.8%. In addition to the Investment Team suggestions, the Board also considered leaving the program unchanged from this current year. The Board ultimately voted to lower the discount rate on prepayments to 5.8% which will be effective in FY 2015/16 (Attachment 3).

OCFA currently realizes a \$2 million savings through the prepayment program using the 7.25% discount rate. At a 5.8% discount rate, it will lower OCFA's savings by approximately \$400,000 per year.

OCERS INVESTMENT MANAGER MONITORING SUBCOMMITTEE June 26, 2014:

INDIVIDUAL MANAGER PRESENTATIONS

NXT Capital and Orchard Landmark (Attachments 4 and 5), managers in the direct lending sector, provided a presentation on the types of loans they are making, their strategy and approach.

In June, there was also news regarding one of OCERS' direct lending managers, Monroe Capital. One of its partners was fired for stealing confidential client information and trade secrets. At the OCERS Plan Sponsor meeting on July 16, 2014, the Chief Investment Officer, Girard Miller, indicated that it did not involve the Monroe Fund that OCERS invests in and should not have an impact. OCERS has committed \$70 million to Monroe Capital to invest in the direct lending market. The CIO also prepared a written response to the Board on July 21, 2014. (Attachment 6)

OCFA staff will continue to monitor actions taken by OCERS to improve its financial policies and practices, and will report back in September regarding progress made during the next month.

Impact to Cities/County:

If OCERS makes any changes to its assumptions as a result of the Triennial Study, it could impact OCFA's future retirement rates starting in FY 2016/17, which would also impact OCFA's cash contract cities.

Fiscal Impact:

See impact to Cities/County.

Staff Contacts for Further Information:

Lori Zeller, Assistant Chief/Business Services Department
LoriZeller@ocfa.org
(714) 573-6020

Tricia Jakubiak, Treasurer
TriciaJakubiak@ocfa.org
(714) 573-6301

Attachments

1. Letter from Segal Consulting Re: Illustrations of Retirement Costs, Unfunded Actuarial Accrued Liability and Funded Ratio under Alternative Economic Scenarios, July 3, 2014
2. Presentation by Segal Consulting, Actuarial Experience Study, July 21, 2014
 - Note: A detailed narrative report by Segal Consulting (supporting material to the presentation) is also on file with the Clerk of the Authority and available upon request.
3. Memo from OCERS, Early Payment of Contributions for FY 2015/16, June 30, 2014
4. Presentation by Direct Lending Manager, NXT Capital, June 26, 2014 (on file with the Clerk of the Authority and available upon request)
5. Presentation by Direct Lending Manager, Orchard Landmark, June 26, 2014 (on file with the Clerk of the Authority and available upon request)
6. New York Times article, *A Fired Banker and Monroe Capital's Public Suit*, June 23, 2014 and OCERS Chief Investment Officer's response to article, July 21, 2014



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 & Associate Actuary
ayeung@segalco.com

VIA E-MAIL and USPS

July 3, 2014

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 Economic Scenarios

Dear Steve:

As requested, we have developed 15-year illustrations of the employer contribution rates for OCERS under three sets of market return “scenarios” after December 31, 2013. 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, 2013 valuation approved by the Board at its meeting in June 2014.

The three market rate of return scenarios are as follows:

- Scenario #1: 0.00% for 2014 and 7.25% thereafter.
- Scenario #2: 7.25% for all years.
- Scenario #3: 14.50% for 2014 and 7.25% thereafter.

The projected contribution rates for the aggregate plan are provided in Attachment A. The projected contribution rates for the ten 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 ten Rate Groups are provided in Attachments D through M. Also, we have added a new Attachment N with the projected contribution rates for the different plans within the ten Rate Groups.

This projection also reflects the potential employer savings as current employees 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. 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 employees. As the impact of those potential savings has not been studied by OCERS, we have not included those 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, 2013 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, 2013 valuation.
- The detailed amortization schedule for OCERS' UAAL as of December 31, 2013 is provided in the valuation report. Any subsequent change in the UAAL due to actuarial gains or losses (e.g., from investment returns on actuarial value greater or less than the assumed 7.25% at market value) are amortized over separate 20-year periods.
- CalPEPRA prescribes new benefit formulas for members with a membership date on and after January 1, 2013. For Rate Groups 1, 3, 9, 10 and 11, we have estimated the Normal Cost savings¹ associated with the enrollment of those employees under the new 2.5% at 67 formula. We have also estimated the changes in employee contributions in accordance with Section 7522.30 of CalPEPRA (i.e., 50:50 sharing of the total Normal Cost with the new employees).

For Rate Group 2, with the exception of the County's attorneys, San Juan Capistrano employees and OCERS Management employees who will receive the 2.5% at 67 formula, all new employees in Rate Group 2 will receive the "new" 1.62% at 65 formula.² We assumed that the proportion of the payrolls from County's attorneys, San Juan Capistrano employees and OCERS Management employees who will receive the 2.5% at 67 formula instead of the "new" 1.62% at 65 formula in the future would remain unchanged from that observed at the December 31, 2013 valuation. As of December 31, 2013, payroll for active members under the 2.5% at 67 formula in these

¹ To estimate the savings, we have made a simplifying assumption that there will be a shift in the proportion of payroll such that current active members would be replaced over the next 20 years (starting in 2013) by new members under 2.5% at 67 on a prorated basis.

² The "new" 1.62% at 65 formula is the CalPEPRA Plan T.

three categories represented about 9.5% of the payroll for members under either the 2.5% at 67 formula or the “new” 1.62% at 65 formula in Rate Group 2. We have estimated the Normal Cost savings³ associated with the enrollment of new members under the two new formulas. We have also estimated the changes in employee contributions in accordance with Section 7522.30 of CalPEPRA.

- For Rate Group 6, 7 and 8 members with a membership date on and after January 1, 2013, we have estimated the Normal Cost savings⁴ associated with the enrollment of those members under the new 2.7% at 57 formula. We have also estimated the changes in employee contributions in accordance with Section 7522.30 of CalPEPRA.
- We understand that, with the exception of new members who would be covered under the “new” 1.62% at 65 formula, 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, 2014 is equal to 120% of \$115,064 (\$138,077 in 2014). To the extent this provision will limit compensation of the new members, our assumption that the total payroll will increase by 3.75% each year over the projection period (for use in determining the contribution rate for the UAAL) may be overstated somewhat. Under that scenario, there will 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

³ To estimate the savings, we have made a simplifying assumption that there will be a shift in the proportion of payroll such that current County’s attorneys, San Juan Capistrano and OCERS Management active members would be replaced over the next 20 years (starting in 2013) by new members under 2.5% at 67 on a prorated basis. All other active members would be replaced over the next 20 years (starting in 2013) by new members under 1.62% at 65 on a prorated basis.

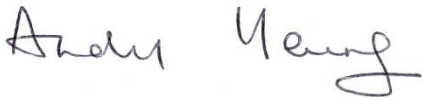
⁴ To estimate the savings, we have made a simplifying assumption that there will be a shift in the proportion of payroll such that current active members would be replaced over the next 20 years (starting in 2013) by new members under 2.7% at 57 on a prorated basis.

Mr. Steve Delaney
July 3, 2014
Page 4

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,

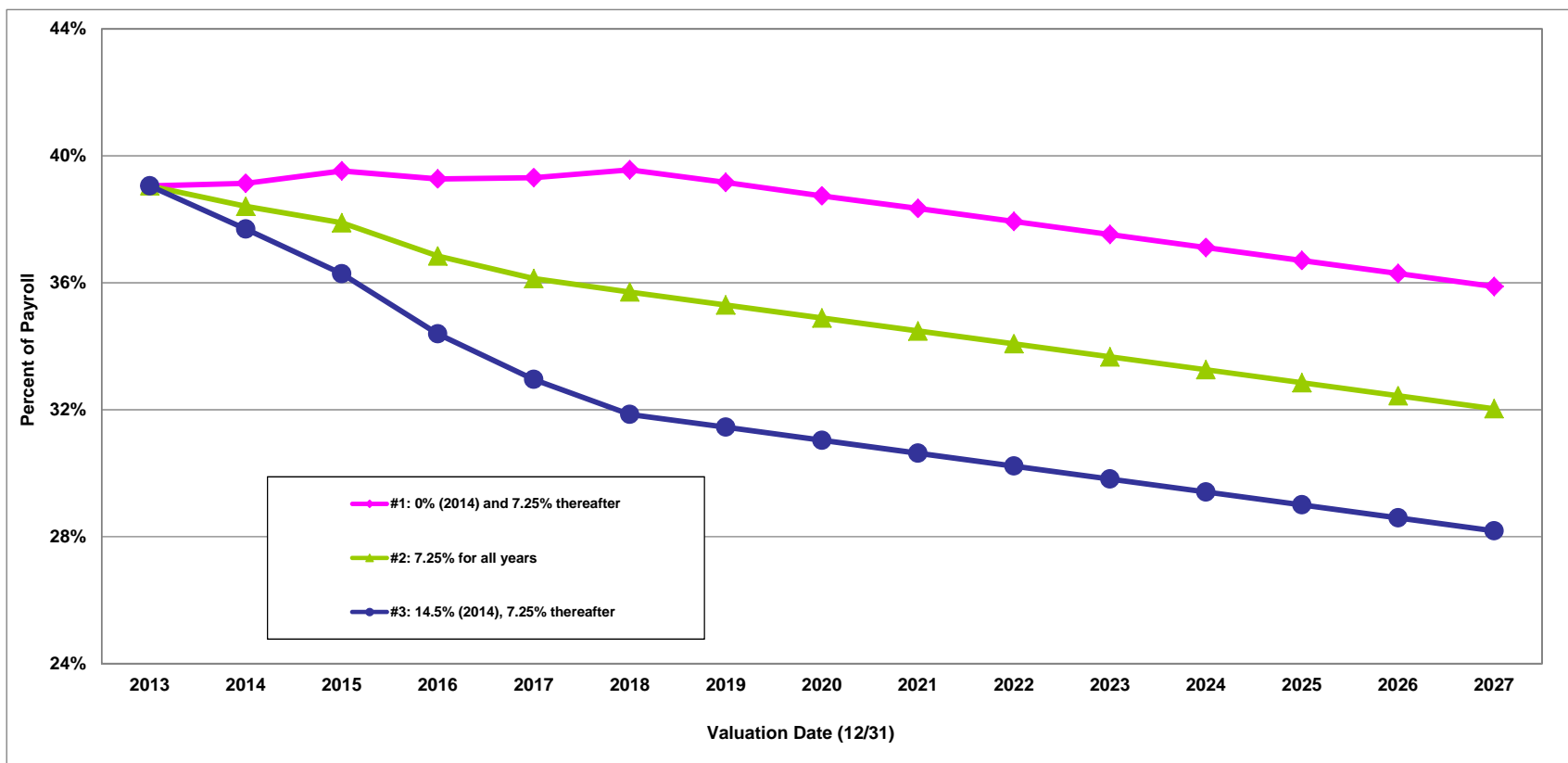
A handwritten signature in cursive script that reads "Andy Yeung". The signature is written in black ink and is positioned to the right of the word "Sincerely,".

Andy Yeung

MYM/bqb
Enclosures

cc: Suzanne Jenike
Brenda Shott

Attachment A: Projected Employer Rates Aggregate Plan



Valuation Date (12/31)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	39.1%	39.1%	39.5%	39.3%	39.3%	39.6%	39.2%	38.7%	38.3%	37.9%	37.5%	37.1%	36.7%	36.3%	35.9%
#2: 7.25% for all years	39.1%	38.4%	37.9%	36.8%	36.1%	35.7%	35.3%	34.9%	34.5%	34.1%	33.7%	33.3%	32.9%	32.4%	32.0%
#3: 14.5% (2014), 7.25% thereafter	39.1%	37.7%	36.3%	34.4%	33.0%	31.9%	31.5%	31.0%	30.6%	30.2%	29.8%	29.4%	29.0%	28.6%	28.2%

Attachment B
Projected Employer Rates by Rate Group
Scenario 1: 0% for 2014 and 7.25% thereafter

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	21.4%	21.9%	22.0%	22.3%	22.7%	22.7%	22.7%	22.7%	22.6%	22.6%	22.6%	22.6%	22.5%	22.5%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	37.1%	37.4%	37.1%	37.1%	37.3%	36.9%	36.5%	36.1%	35.7%	35.3%	34.8%	34.4%	34.0%	33.6%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	34.7%	35.2%	35.1%	35.3%	35.7%	35.5%	35.3%	35.1%	34.9%	34.7%	34.5%	34.3%	34.2%	34.0%
RG #5 - Plans A and B (OCTA)	27.0%	27.4%	28.1%	28.2%	28.5%	29.1%	29.1%	29.1%	29.1%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%
RG #9 - Plans M, N and U (TCA)	26.2%	26.3%	26.6%	26.5%	26.6%	26.9%	26.8%	26.6%	26.4%	26.3%	26.1%	26.0%	25.8%	25.7%	25.5%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	37.2%	37.6%	37.4%	37.5%	37.8%	37.6%	37.3%	37.1%	36.8%	36.6%	36.3%	36.0%	35.8%	35.5%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	22.3%	22.5%	22.4%	22.5%	22.6%	22.3%	22.1%	21.9%	21.6%	21.4%	21.1%	20.9%	20.7%	20.4%
Safety															
RG #6 - Plans E, F and V (Probation)	40.7%	40.8%	41.1%	40.9%	40.9%	41.2%	40.7%	40.3%	39.9%	39.5%	39.1%	38.6%	38.2%	37.8%	37.4%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	56.8%	57.7%	57.7%	58.1%	58.8%	58.6%	58.3%	58.1%	57.8%	57.5%	57.3%	57.0%	56.7%	56.5%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	49.9%	50.4%	50.1%	50.2%	50.5%	50.0%	49.5%	49.0%	48.5%	48.0%	47.5%	46.9%	46.4%	45.9%

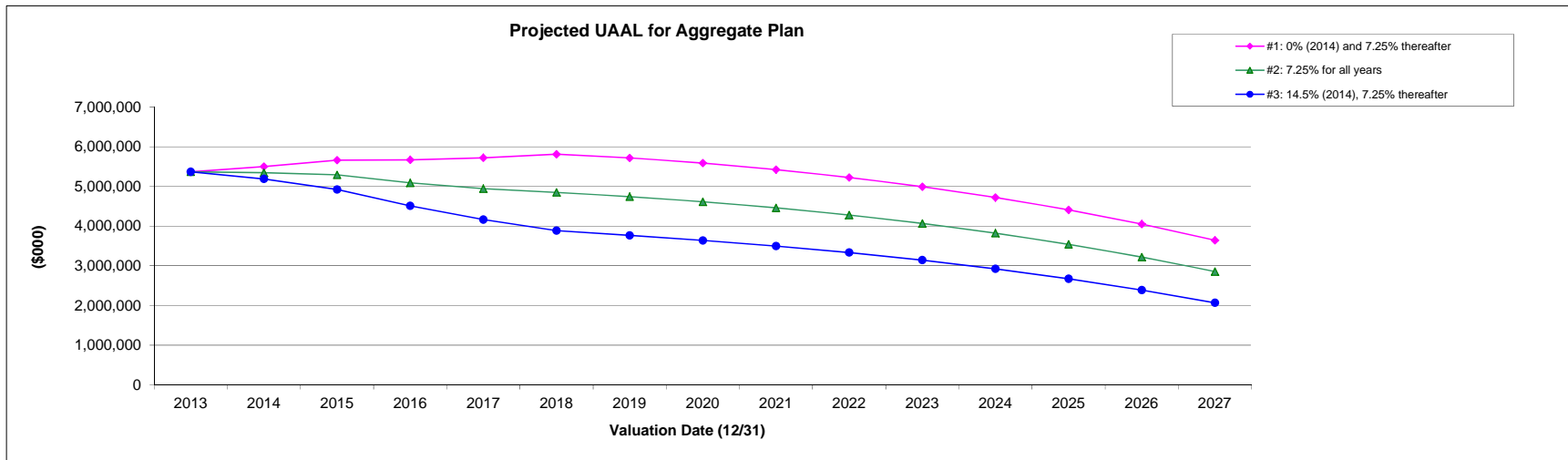
Attachment B
Projected Employer Rates by Rate Group
Scenario 2: 7.25% for all years

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	20.9%	20.8%	20.3%	20.1%	20.1%	20.1%	20.0%	20.0%	20.0%	20.0%	20.0%	19.9%	19.9%	19.9%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	36.4%	35.9%	34.9%	34.2%	33.8%	33.4%	32.9%	32.5%	32.1%	31.7%	31.3%	30.9%	30.5%	30.1%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	34.1%	33.8%	33.0%	32.6%	32.4%	32.2%	32.0%	31.8%	31.6%	31.4%	31.2%	31.0%	30.9%	30.7%
RG #5 - Plans A and B (OCTA)	27.0%	26.8%	26.8%	26.2%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	25.9%	25.9%	25.9%	25.9%	25.9%
RG #9 - Plans M, N and U (TCA)	26.2%	25.9%	25.7%	25.2%	24.9%	24.7%	24.6%	24.4%	24.3%	24.1%	24.0%	23.9%	23.7%	23.6%	23.4%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	36.6%	36.3%	35.5%	35.0%	34.7%	34.5%	34.2%	34.0%	33.7%	33.5%	33.2%	33.0%	32.7%	32.5%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	21.8%	21.4%	20.8%	20.3%	20.1%	19.9%	19.7%	19.6%	19.4%	19.1%	18.9%	18.7%	18.5%	18.3%
Safety															
RG #6 - Plans E, F and V (Probation)	40.7%	40.1%	39.5%	38.5%	37.7%	37.3%	36.9%	36.5%	36.1%	35.6%	35.2%	34.8%	34.4%	34.0%	33.5%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	55.7%	55.2%	54.0%	53.3%	53.0%	52.7%	52.5%	52.2%	52.0%	51.7%	51.4%	51.2%	50.9%	50.7%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	49.0%	48.4%	47.0%	46.1%	45.6%	45.1%	44.6%	44.1%	43.6%	43.1%	42.6%	42.1%	41.5%	41.0%

Attachment B
Projected Employer Rates by Rate Group
Scenario 3: 14.5% for 2014 and 7.25% thereafter

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	20.4%	19.6%	18.6%	17.9%	17.4%	17.4%	17.4%	17.4%	17.3%	17.3%	17.3%	17.3%	17.3%	17.2%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	35.7%	34.4%	32.6%	31.3%	30.2%	29.8%	29.4%	29.0%	28.6%	28.2%	27.7%	27.3%	26.9%	26.5%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	33.5%	32.4%	31.0%	29.8%	29.1%	28.9%	28.7%	28.5%	28.3%	28.1%	27.9%	27.7%	27.5%	27.3%
RG #5 - Plans A and B (OCTA)	27.0%	26.2%	25.4%	24.3%	23.4%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.8%	22.8%	22.8%
RG #9 - Plans M, N and U (TCA)	26.2%	25.6%	24.8%	23.9%	23.1%	22.6%	22.4%	22.3%	22.1%	22.0%	21.8%	21.7%	21.5%	21.4%	21.3%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	36.1%	35.0%	33.6%	32.5%	31.7%	31.4%	31.1%	30.9%	30.6%	30.4%	30.1%	29.9%	29.6%	29.4%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	21.3%	20.3%	19.0%	18.0%	17.4%	17.2%	17.1%	16.9%	16.7%	16.5%	16.4%	16.2%	16.0%	15.9%
Safety															
RG #6 - Plans E, F and V (Probation)	40.7%	39.4%	38.0%	36.1%	34.6%	33.5%	33.1%	32.7%	32.2%	31.8%	31.4%	31.0%	30.6%	30.1%	29.7%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	54.6%	52.8%	50.3%	48.5%	47.2%	46.9%	46.7%	46.4%	46.1%	45.9%	45.6%	45.4%	45.1%	44.8%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	48.1%	46.4%	44.0%	42.1%	40.8%	40.2%	39.7%	39.2%	38.7%	38.2%	37.7%	37.2%	36.7%	36.2%

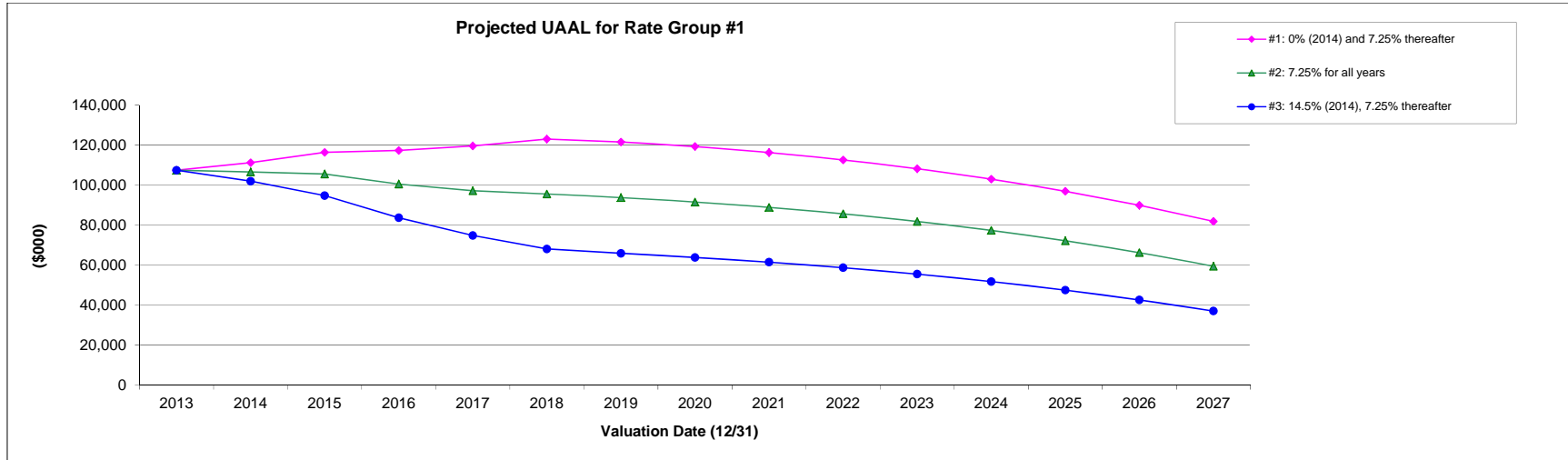
Attachment C Projected UAAL and Funded Ratio for Aggregate Plan



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	5,367,917	5,499,845	5,660,142	5,668,643	5,720,240	5,810,572	5,716,873	5,586,936	5,421,382	5,223,909	4,991,511	4,720,817	4,408,430	4,050,561	3,643,121
#2: 7.25% for all years	5,367,917	5,343,789	5,291,461	5,089,678	4,942,434	4,848,113	4,740,698	4,612,876	4,459,640	4,278,487	4,066,819	3,821,706	3,540,227	3,219,111	2,854,693
#3: 14.5% (2014), 7.25% thereafter	5,367,917	5,187,734	4,922,780	4,510,713	4,164,443	3,885,454	3,764,509	3,638,906	3,497,994	3,333,167	3,142,236	2,922,712	2,672,151	2,387,797	2,066,544

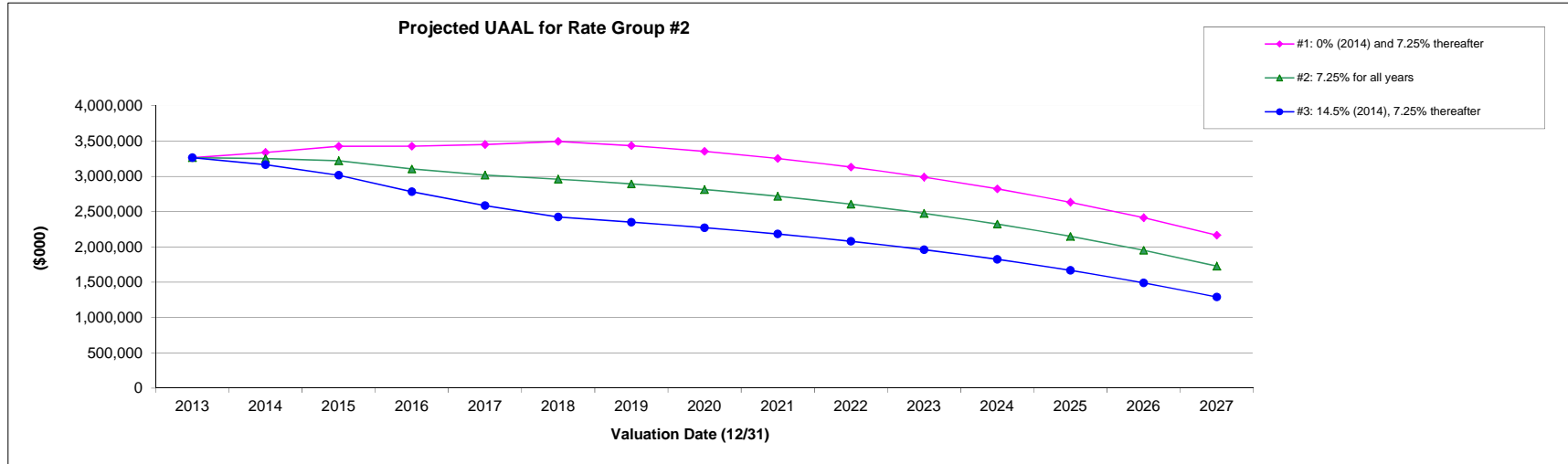
Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	66.0%	67.2%	68.1%	69.9%	71.3%	72.4%	74.3%	76.2%	78.0%	79.9%	81.7%	83.6%	85.4%	87.2%	89.0%
#2: 7.25% for all years	66.0%	68.1%	70.2%	73.0%	75.2%	77.0%	78.7%	80.3%	81.9%	83.5%	85.1%	86.7%	88.3%	89.8%	91.4%
#3: 14.5% (2014), 7.25% thereafter	66.0%	69.0%	72.3%	76.0%	79.1%	81.5%	83.1%	84.5%	85.8%	87.2%	88.5%	89.8%	91.1%	92.4%	93.8%

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



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	107,421	111,203	116,375	117,313	119,580	123,005	121,555	119,290	116,255	112,568	108,160	102,963	96,902	89,896	81,857
#2: 7.25% for all years	107,421	106,572	105,560	100,494	97,190	95,544	93,723	91,530	88,846	85,620	81,804	77,342	72,163	66,201	59,394
#3: 14.5% (2014), 7.25% thereafter	107,421	101,940	94,741	83,667	74,783	68,049	65,867	63,757	61,438	58,692	55,478	51,753	47,464	42,564	37,003
Funded Ratio															
#1: 0% (2014) and 7.25% thereafter	74.4%	74.8%	74.9%	76.0%	76.6%	77.1%	78.4%	79.7%	81.1%	82.5%	83.9%	85.3%	86.7%	88.2%	89.6%
#2: 7.25% for all years	74.4%	75.9%	77.3%	79.4%	81.0%	82.2%	83.3%	84.5%	85.6%	86.7%	87.8%	89.0%	90.1%	91.3%	92.5%
#3: 14.5% (2014), 7.25% thereafter	74.4%	76.9%	79.6%	82.8%	85.4%	87.3%	88.3%	89.2%	90.0%	90.9%	91.7%	92.6%	93.5%	94.4%	95.3%

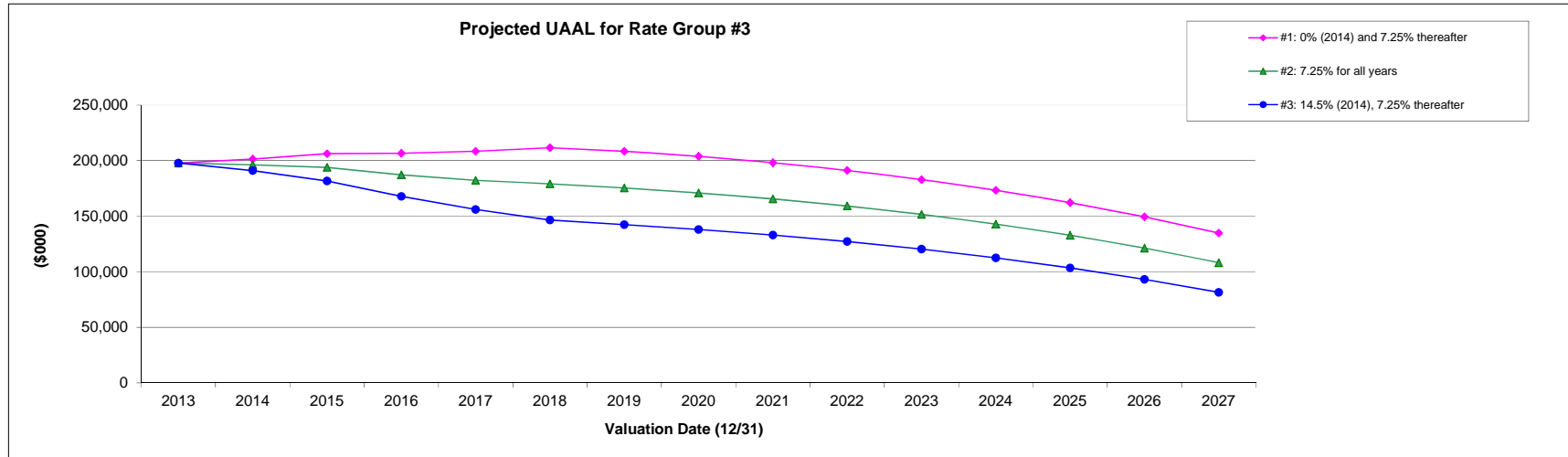
Attachment E
Projected UAAL and Funded Ratio for Rate Group #2
Plans I, J, O, P, S, T and U



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	3,264,765	3,338,560	3,425,840	3,426,831	3,450,588	3,494,341	3,434,957	3,354,130	3,252,120	3,130,873	2,988,454	2,822,901	2,632,169	2,413,985	2,165,892
#2: 7.25% for all years	3,264,765	3,251,522	3,220,427	3,104,571	3,017,972	2,959,538	2,892,760	2,813,304	2,718,178	2,605,978	2,475,051	2,323,681	2,150,164	1,952,445	1,728,298
#3: 14.5% (2014), 7.25% thereafter	3,264,765	3,164,485	3,015,009	2,782,234	2,585,242	2,424,565	2,350,200	2,271,901	2,183,619	2,080,553	1,961,220	1,824,075	1,667,670	1,490,303	1,290,058

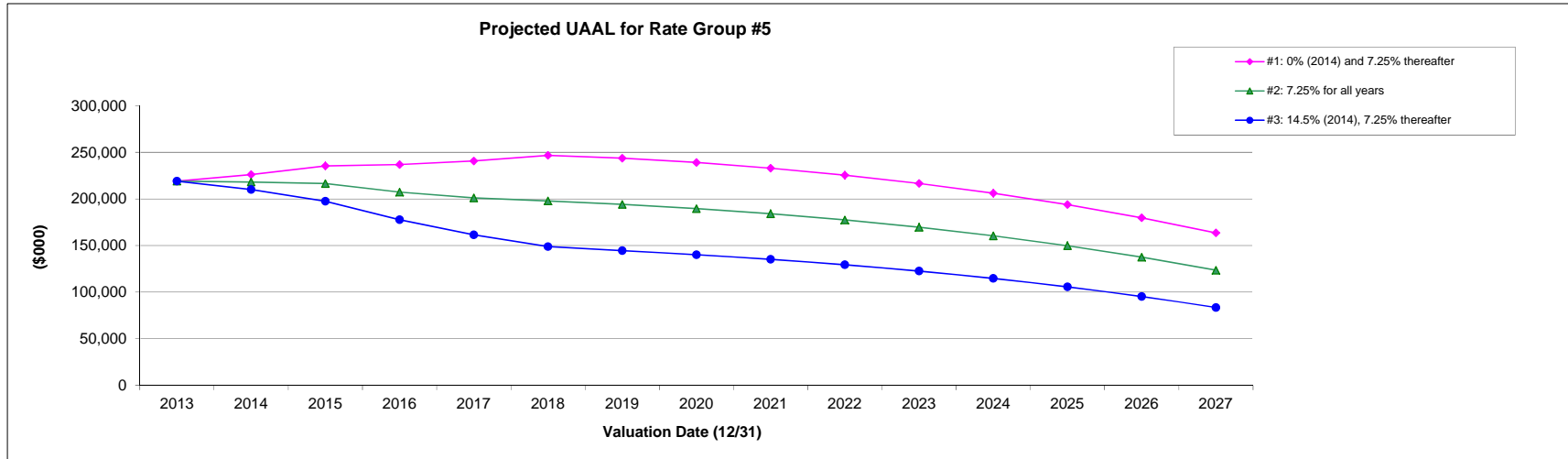
Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	64.0%	65.3%	66.3%	68.1%	69.5%	70.7%	72.6%	74.5%	76.5%	78.4%	80.3%	82.2%	84.1%	86.0%	87.9%
#2: 7.25% for all years	64.0%	66.2%	68.3%	71.1%	73.3%	75.2%	76.9%	78.6%	80.3%	82.0%	83.7%	85.3%	87.0%	88.7%	90.4%
#3: 14.5% (2014), 7.25% thereafter	64.0%	67.1%	70.3%	74.1%	77.1%	79.6%	81.2%	82.7%	84.2%	85.6%	87.1%	88.5%	89.9%	91.4%	92.8%

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



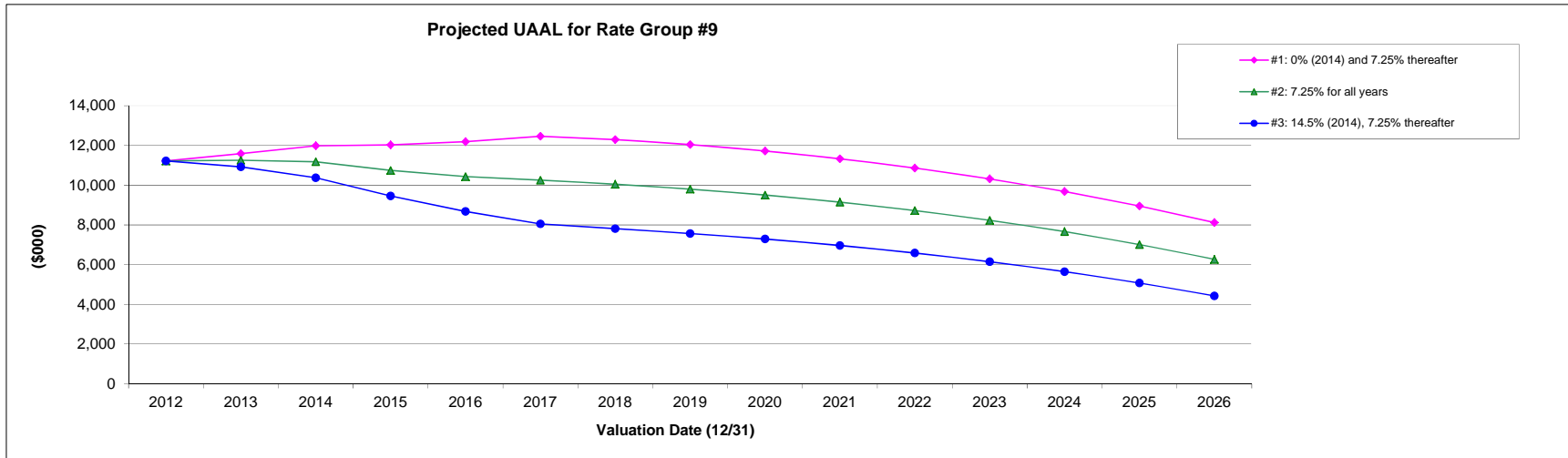
UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	197,831	201,408	206,295	206,661	208,482	211,638	208,416	203,902	198,114	191,166	182,943	173,335	162,213	149,437	134,858
#2: 7.25% for all years	197,831	196,233	193,994	187,251	182,290	179,093	175,407	170,967	165,593	159,195	151,670	142,923	132,842	121,305	108,175
#3: 14.5% (2014), 7.25% thereafter	197,831	191,059	181,695	167,849	156,112	146,571	142,415	138,039	133,075	127,230	120,408	112,523	103,484	93,186	81,512
Funded Ratio															
#1: 0% (2014) and 7.25% thereafter	63.4%	65.1%	66.4%	68.4%	70.0%	71.3%	73.4%	75.5%	77.5%	79.5%	81.5%	83.4%	85.3%	87.2%	89.0%
#2: 7.25% for all years	63.4%	66.0%	68.4%	71.4%	73.8%	75.8%	77.6%	79.4%	81.2%	83.0%	84.7%	86.3%	88.0%	89.6%	91.2%
#3: 14.5% (2014), 7.25% thereafter	63.4%	66.9%	70.4%	74.3%	77.5%	80.2%	81.8%	83.4%	84.9%	86.4%	87.8%	89.2%	90.6%	92.0%	93.4%

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



	UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter		219,042	226,088	235,284	236,793	240,662	246,653	243,628	239,023	232,889	225,437	216,539	206,057	193,841	179,722	163,531
#2: 7.25% for all years		219,042	218,063	216,404	207,244	201,069	197,778	194,072	189,584	184,082	177,459	169,615	160,432	149,787	137,542	123,552
#3: 14.5% (2014), 7.25% thereafter		219,042	210,039	197,522	177,681	161,458	148,879	144,484	140,111	135,239	129,457	122,679	114,802	105,726	95,340	83,532
Funded Ratio																
#1: 0% (2014) and 7.25% thereafter		71.1%	71.8%	72.4%	73.7%	74.8%	75.6%	77.2%	78.8%	80.5%	82.1%	83.7%	85.3%	86.9%	88.4%	90.0%
#2: 7.25% for all years		71.1%	72.8%	74.6%	77.0%	78.9%	80.4%	81.8%	83.2%	84.6%	85.9%	87.2%	88.6%	89.9%	91.2%	92.5%
#3: 14.5% (2014), 7.25% thereafter		71.1%	73.8%	76.8%	80.3%	83.1%	85.3%	86.5%	87.6%	88.7%	89.7%	90.8%	91.8%	92.8%	93.9%	94.9%

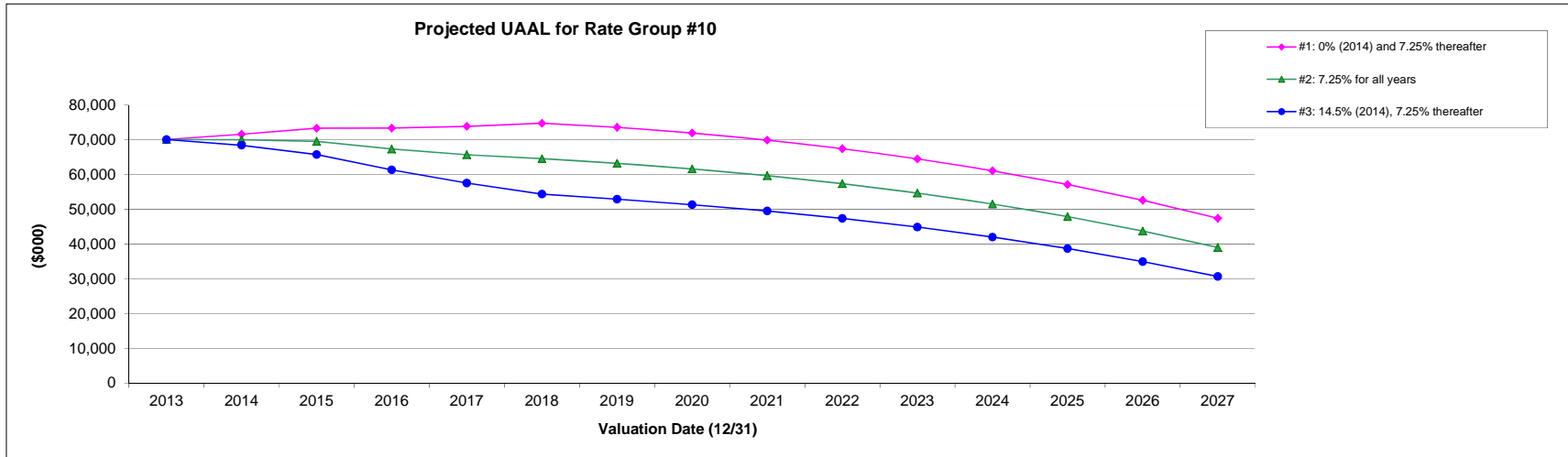
Attachment H
Projected UAAL and Funded Ratio for Rate Group #9
Plans M, N and U (TCA)



UAAL (\$000)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
#1: 0% (2014) and 7.25% thereafter	11,222	11,589	11,983	12,028	12,188	12,461	12,292	12,045	11,719	11,327	10,862	10,316	9,682	8,952	8,118
#2: 7.25% for all years	11,222	11,255	11,178	10,742	10,431	10,252	10,047	9,801	9,502	9,145	8,723	8,232	7,662	7,009	6,265
#3: 14.5% (2014), 7.25% thereafter	11,222	10,921	10,373	9,457	8,677	8,049	7,809	7,564	7,290	6,965	6,587	6,149	5,647	5,074	4,424

Funded Ratio	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
#1: 0% (2014) and 7.25% thereafter	66.1%	67.9%	69.5%	71.9%	73.8%	75.3%	77.5%	79.6%	81.7%	83.6%	85.4%	87.1%	88.8%	90.4%	91.9%
#2: 7.25% for all years	66.1%	68.8%	71.6%	74.9%	77.5%	79.7%	81.6%	83.4%	85.1%	86.7%	88.3%	89.7%	91.1%	92.5%	93.7%
#3: 14.5% (2014), 7.25% thereafter	66.1%	69.8%	73.6%	77.9%	81.3%	84.0%	85.7%	87.2%	88.6%	89.9%	91.2%	92.3%	93.5%	94.5%	95.6%

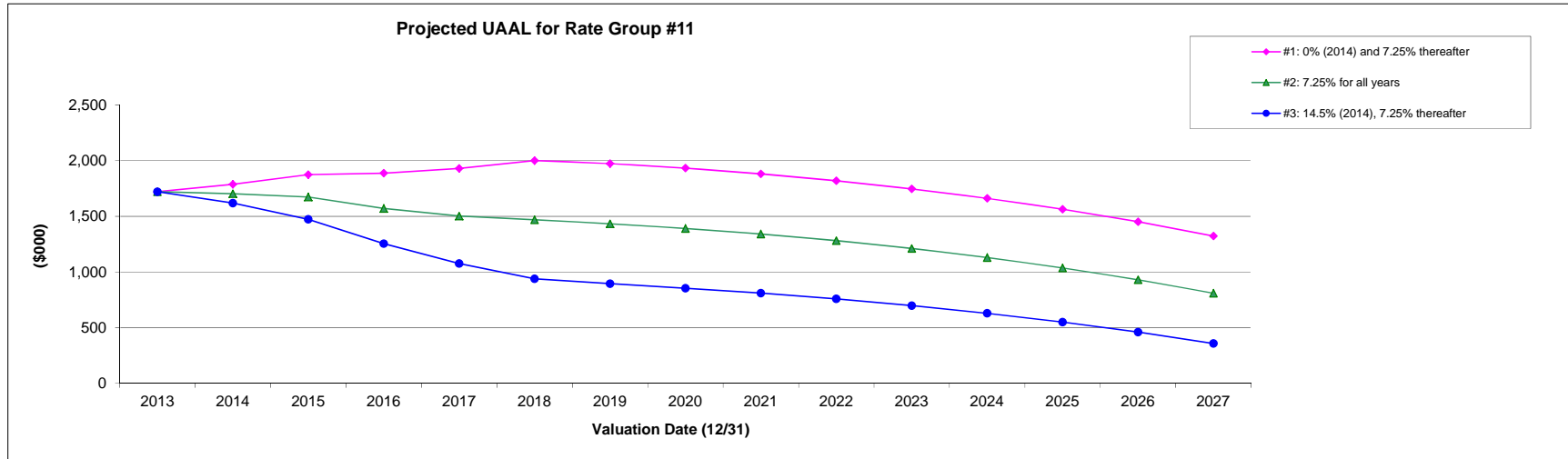
Attachment I
Projected UAAL and Funded Ratio for Rate Group #10
Plans I, J, M, N and U (OCFA)



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	70,091	71,624	73,359	73,400	73,883	74,780	73,605	71,986	69,920	67,442	64,515	61,096	57,144	52,607	47,431
#2: 7.25% for all years	70,091	70,037	69,565	67,380	65,712	64,571	63,243	61,641	59,703	57,396	54,686	51,536	47,904	43,748	39,018
#3: 14.5% (2014), 7.25% thereafter	70,091	68,451	65,773	61,365	57,556	54,389	52,911	51,330	49,523	47,390	44,900	42,019	38,713	34,945	30,670

Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	59.9%	61.8%	63.4%	65.8%	67.8%	69.5%	71.8%	74.1%	76.4%	78.6%	80.8%	82.9%	84.9%	86.9%	88.9%
#2: 7.25% for all years	59.9%	62.6%	65.3%	68.6%	71.3%	73.6%	75.8%	77.9%	79.9%	81.8%	83.7%	85.5%	87.3%	89.1%	90.8%
#3: 14.5% (2014), 7.25% thereafter	59.9%	63.5%	67.2%	71.4%	74.9%	77.8%	79.7%	81.6%	83.3%	85.0%	86.6%	88.2%	89.8%	91.3%	92.8%

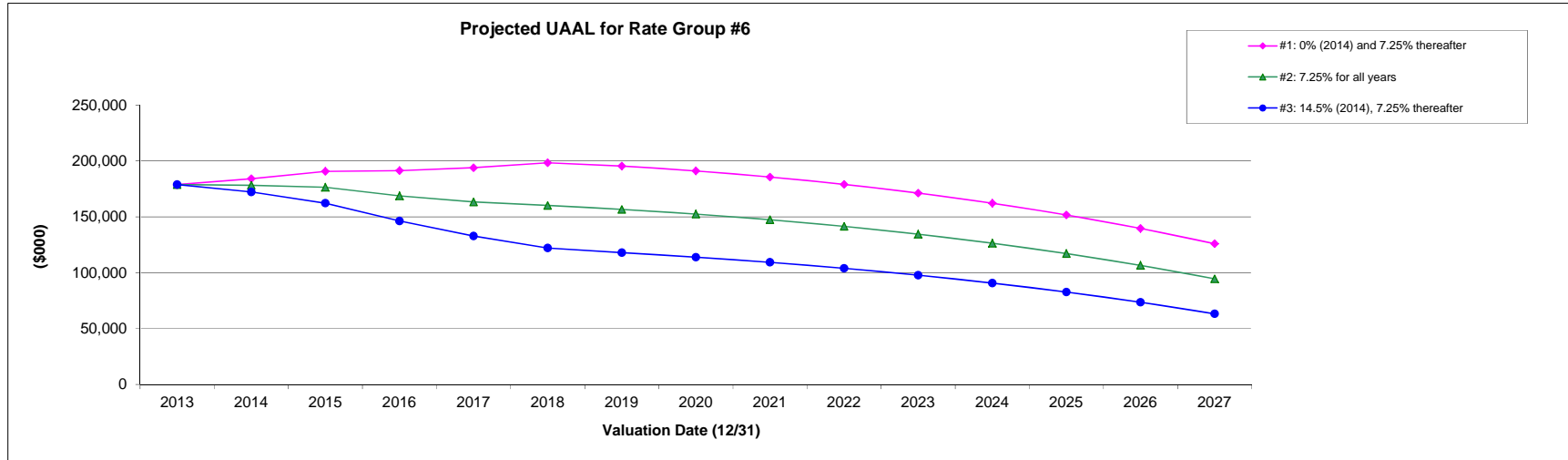
Attachment J
Projected UAAL and Funded Ratio for Rate Group #11
Plans M and N, future service, and U (Cemetery)



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	1,721	1,788	1,875	1,888	1,931	2,002	1,974	1,934	1,882	1,820	1,747	1,662	1,564	1,452	1,323
#2: 7.25% for all years	1,721	1,704	1,674	1,571	1,503	1,469	1,433	1,391	1,341	1,282	1,211	1,129	1,036	930	809
#3: 14.5% (2014), 7.25% thereafter	1,721	1,619	1,474	1,255	1,076	938	895	854	810	758	698	628	549	460	357

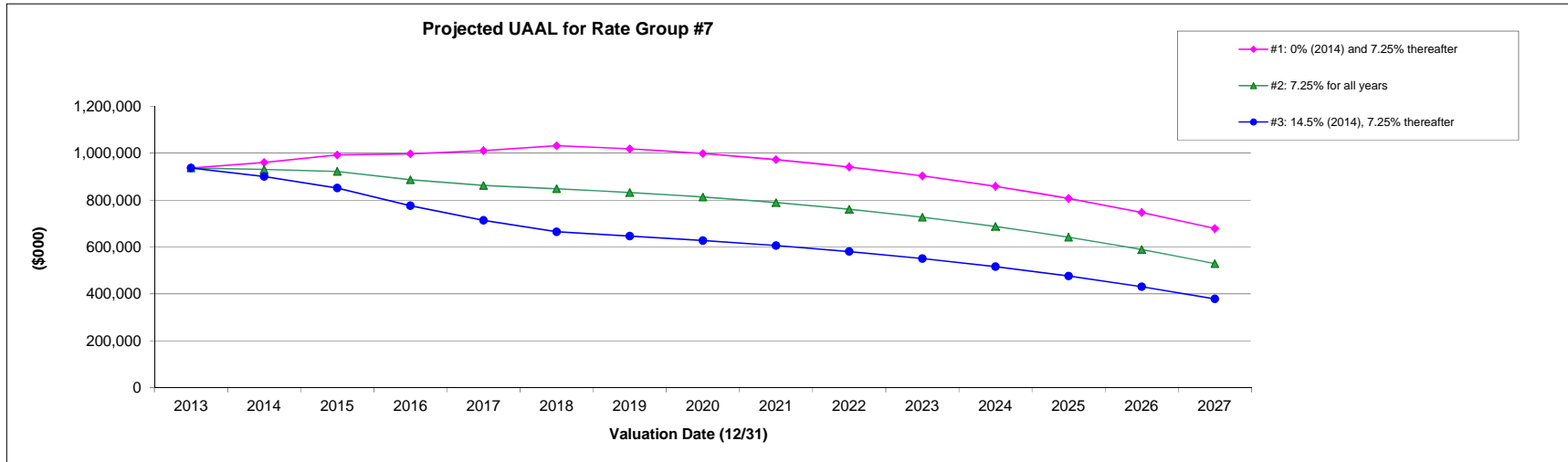
Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	76.5%	77.4%	78.0%	79.4%	80.5%	81.1%	82.7%	84.2%	85.6%	87.0%	88.4%	89.6%	90.9%	92.1%	93.2%
#2: 7.25% for all years	76.5%	78.5%	80.4%	82.9%	84.8%	86.2%	87.4%	88.6%	89.8%	90.9%	91.9%	93.0%	94.0%	94.9%	95.9%
#3: 14.5% (2014), 7.25% thereafter	76.5%	79.5%	82.7%	86.3%	89.1%	91.2%	92.2%	93.0%	93.8%	94.6%	95.4%	96.1%	96.8%	97.5%	98.2%

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



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	178,873	184,157	190,678	191,342	193,930	198,368	195,402	191,142	185,624	179,025	171,241	162,161	151,667	139,630	125,914
#2: 7.25% for all years	178,873	178,207	176,458	168,792	163,349	160,185	156,650	152,460	147,426	141,468	134,499	126,428	117,153	106,565	94,547
#3: 14.5% (2014), 7.25% thereafter	178,873	172,257	162,242	146,263	132,816	122,084	117,982	113,860	109,306	103,987	97,831	90,763	82,701	73,557	63,236
Funded Ratio															
#1: 0% (2014) and 7.25% thereafter	68.7%	70.2%	71.4%	73.4%	74.9%	76.2%	78.1%	80.1%	82.0%	83.8%	85.5%	87.1%	88.7%	90.3%	91.8%
#2: 7.25% for all years	68.7%	71.2%	73.5%	76.5%	78.9%	80.8%	82.5%	84.1%	85.7%	87.2%	88.6%	90.0%	91.3%	92.6%	93.8%
#3: 14.5% (2014), 7.25% thereafter	68.7%	72.1%	75.7%	79.7%	82.8%	85.3%	86.8%	88.1%	89.4%	90.6%	91.7%	92.8%	93.9%	94.9%	95.9%

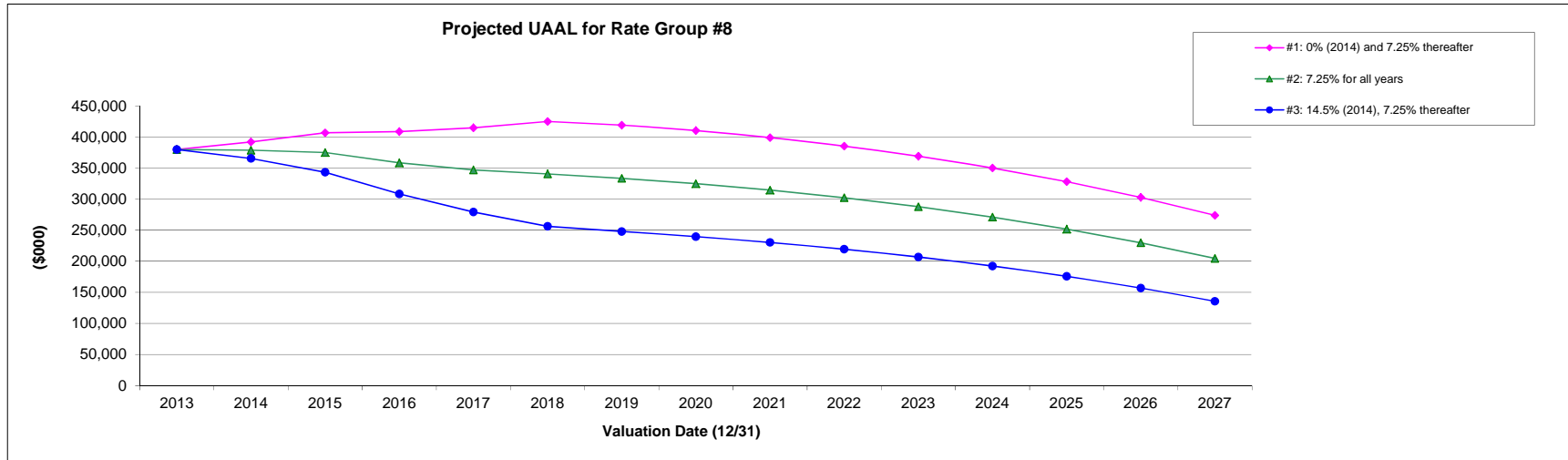
Attachment L
Projected UAAL and Funded Ratio for Rate Group #7
Plans E, F, Q, R and V (Law Enforcement)



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	937,181	960,777	992,749	997,512	1,010,927	1,032,057	1,018,668	998,859	972,777	941,144	903,408	858,998	807,301	747,638	679,258
#2: 7.25% for all years	937,181	930,873	922,212	886,902	862,487	848,561	832,605	813,221	789,487	760,966	727,197	687,681	641,878	589,224	529,074
#3: 14.5% (2014), 7.25% thereafter	937,181	900,970	851,672	776,268	714,010	665,009	646,482	627,531	606,142	580,742	550,937	516,295	476,382	430,715	378,754

Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	68.1%	69.2%	69.9%	71.5%	72.7%	73.7%	75.5%	77.2%	79.0%	80.8%	82.5%	84.2%	85.9%	87.6%	89.3%
#2: 7.25% for all years	68.1%	70.1%	72.1%	74.7%	76.7%	78.4%	79.9%	81.5%	83.0%	84.5%	85.9%	87.4%	88.8%	90.3%	91.7%
#3: 14.5% (2014), 7.25% thereafter	68.1%	71.1%	74.2%	77.8%	80.7%	83.0%	84.4%	85.7%	86.9%	88.1%	89.3%	90.5%	91.7%	92.9%	94.1%

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



UAAL (\$000)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	379,770	392,066	406,734	408,624	414,778	424,966	419,038	410,333	398,943	385,245	369,034	350,058	328,067	302,784	273,911
#2: 7.25% for all years	379,770	378,734	375,007	358,486	346,993	340,570	333,400	324,852	314,523	302,243	287,836	271,095	251,798	229,721	204,612
#3: 14.5% (2014), 7.25% thereafter	379,770	365,401	343,287	308,373	279,278	256,316	247,923	239,550	230,295	219,439	206,842	192,335	175,738	156,863	135,516

Funded Ratio	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
#1: 0% (2014) and 7.25% thereafter	69.9%	71.2%	72.2%	74.0%	75.4%	76.5%	78.3%	80.2%	82.0%	83.7%	85.4%	87.0%	88.6%	90.1%	91.6%
#2: 7.25% for all years	69.9%	72.1%	74.3%	77.2%	79.4%	81.1%	82.8%	84.3%	85.8%	87.2%	88.6%	89.9%	91.2%	92.5%	93.7%
#3: 14.5% (2014), 7.25% thereafter	69.9%	73.1%	76.5%	80.4%	83.4%	85.8%	87.2%	88.4%	89.6%	90.7%	91.8%	92.9%	93.9%	94.9%	95.8%

Attachment N
Projected Employer Rates by Plans within each Rate Group
Scenario 1: 0% for 2014 and 7.25% thereafter

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A and B	21.2%	21.5%	22.0%	22.1%	22.5%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%
RG #1 - Plan U	20.7%	21.1%	21.6%	21.7%	22.0%	22.5%	22.5%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%	22.4%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	21.4%	21.9%	22.0%	22.3%	22.7%	22.7%	22.7%	22.7%	22.6%	22.6%	22.6%	22.6%	22.5%	22.5%
RG #2 - Plans I and J	37.4%	37.8%	38.4%	38.5%	38.8%	39.4%	39.3%	39.2%	39.2%	39.1%	39.0%	38.9%	38.8%	38.8%	38.7%
RG #2 - Plans O and P	29.3%	29.7%	30.4%	30.5%	30.8%	31.3%	31.2%	31.2%	31.1%	31.0%	30.9%	30.9%	30.8%	30.7%	30.6%
RG #2 - Plan S	36.2%	36.6%	37.2%	37.3%	37.6%	38.2%	38.1%	38.0%	38.0%	37.9%	37.8%	37.7%	37.6%	37.6%	37.5%
RG #2 - Plan T	30.4%	30.8%	31.5%	31.6%	31.9%	32.4%	32.3%	32.3%	32.2%	32.1%	32.0%	32.0%	31.9%	31.8%	31.7%
RG #2 - Plan U	32.3%	32.7%	33.3%	33.4%	33.7%	34.3%	34.2%	34.1%	34.1%	34.0%	33.9%	33.8%	33.7%	33.7%	33.6%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	37.1%	37.4%	37.1%	37.1%	37.3%	36.9%	36.5%	36.1%	35.7%	35.3%	34.8%	34.4%	34.0%	33.6%
RG #3 - Plans G and H	34.8%	35.1%	35.8%	35.9%	36.2%	36.8%	36.7%	36.7%	36.7%	36.6%	36.6%	36.5%	36.5%	36.5%	36.4%
RG #3 - Plan B	32.4%	32.8%	33.4%	33.5%	33.9%	34.4%	34.4%	34.3%	34.3%	34.2%	34.2%	34.2%	34.1%	34.1%	34.0%
RG #3 - Plan U	31.5%	31.9%	32.5%	32.6%	33.0%	33.5%	33.5%	33.5%	33.4%	33.4%	33.3%	33.3%	33.3%	33.2%	33.2%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	34.7%	35.2%	35.1%	35.3%	35.7%	35.5%	35.3%	35.1%	34.9%	34.7%	34.5%	34.3%	34.2%	34.0%
RG #5 - Plans A and B (OCTA)	27.0%	27.4%	28.1%	28.2%	28.5%	29.1%	29.1%	29.1%	29.1%	29.0%	29.0%	29.0%	29.0%	29.0%	29.0%
RG #9 - Plans M and N	26.4%	26.6%	27.0%	27.1%	27.4%	27.7%	27.7%	27.7%	27.7%	27.7%	27.7%	27.6%	27.6%	27.6%	27.6%
RG #9 - Plan U	23.7%	23.9%	24.3%	24.4%	24.6%	25.0%	25.0%	25.0%	25.0%	25.0%	24.9%	24.9%	24.9%	24.9%	24.9%
RG #9 - Plans M, N and U (TCA)	26.2%	26.3%	26.6%	26.5%	26.6%	26.9%	26.8%	26.6%	26.4%	26.3%	26.1%	26.0%	25.8%	25.7%	25.5%
RG #10 - Plans I and J	37.4%	37.7%	38.3%	38.4%	38.7%	39.2%	39.2%	39.1%	39.1%	39.1%	39.0%	39.0%	38.9%	38.9%	38.8%
RG #10 - Plans M and N	37.5%	37.8%	38.4%	38.5%	38.8%	39.3%	39.3%	39.2%	39.2%	39.1%	39.1%	39.0%	39.0%	39.0%	38.9%
RG #10 - Plan U	33.0%	33.4%	34.0%	34.1%	34.4%	34.9%	34.8%	34.8%	34.8%	34.7%	34.6%	34.6%	34.6%	34.5%	34.5%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	37.2%	37.6%	37.4%	37.5%	37.8%	37.6%	37.3%	37.1%	36.8%	36.6%	36.3%	36.0%	35.8%	35.5%
RG #11 - Plans M and N, future service	22.2%	22.5%	22.9%	23.0%	23.2%	23.6%	23.5%	23.4%	23.4%	23.3%	23.3%	23.3%	23.2%	23.2%	23.1%
RG #11 - Plan U	18.5%	18.8%	19.2%	19.3%	19.6%	19.9%	19.8%	19.8%	19.7%	19.7%	19.6%	19.6%	19.5%	19.5%	19.5%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	22.3%	22.5%	22.4%	22.5%	22.6%	22.3%	22.1%	21.9%	21.6%	21.4%	21.1%	20.9%	20.7%	20.4%
Safety															
RG #6 - Plans E and F	40.7%	41.1%	41.9%	42.0%	42.4%	43.0%	43.0%	42.9%	42.9%	42.8%	42.8%	42.7%	42.7%	42.6%	42.6%
RG #6 - Plan V	33.7%	34.1%	34.8%	34.9%	35.3%	36.0%	35.9%	35.9%	35.8%	35.8%	35.7%	35.7%	35.6%	35.6%	35.5%
RG #6 - Plans E, F and V (Probation)	40.7%	40.8%	41.1%	40.9%	40.9%	41.2%	40.7%	40.3%	39.9%	39.5%	39.1%	38.6%	38.2%	37.8%	37.4%
RG #7 - Plans E and F	56.7%	57.3%	58.5%	58.8%	59.4%	60.4%	60.4%	60.4%	60.4%	60.4%	60.3%	60.3%	60.3%	60.3%	60.3%
RG #7 - Plans Q and R	55.0%	55.7%	56.9%	57.1%	57.8%	58.8%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.7%	58.6%
RG #7 - Plan V	51.6%	52.3%	53.5%	53.7%	54.4%	55.3%	55.3%	55.3%	55.3%	55.3%	55.3%	55.3%	55.3%	55.2%	55.2%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	56.8%	57.7%	57.7%	58.1%	58.8%	58.6%	58.3%	58.1%	57.8%	57.5%	57.3%	57.0%	56.7%	56.5%
RG #8 - Plans E and F	50.0%	50.5%	51.5%	51.6%	52.2%	53.0%	53.0%	52.9%	52.9%	52.8%	52.8%	52.7%	52.7%	52.6%	52.6%
RG #8 - Plans Q and R	45.8%	46.4%	47.3%	47.5%	48.0%	48.8%	48.8%	48.8%	48.7%	48.7%	48.6%	48.6%	48.5%	48.5%	48.4%
RG #8 - Plan V	41.0%	41.5%	42.5%	42.6%	43.2%	44.0%	44.0%	43.9%	43.9%	43.8%	43.8%	43.7%	43.7%	43.6%	43.6%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	49.9%	50.4%	50.1%	50.2%	50.5%	50.0%	49.5%	49.0%	48.5%	48.0%	47.5%	46.9%	46.4%	45.9%

Attachment N
Projected Employer Rates by Plans within each Rate Group
Scenario 2: 7.25% for all years

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A and B	21.2%	21.0%	20.9%	20.4%	20.3%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%	20.2%
RG #1 - Plan U	20.7%	20.5%	20.5%	20.0%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%	19.8%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	20.9%	20.8%	20.3%	20.1%	20.1%	20.1%	20.0%	20.0%	20.0%	20.0%	20.0%	19.9%	19.9%	19.9%
RG #2 - Plans I and J	37.4%	37.1%	36.9%	36.3%	35.9%	35.8%	35.7%	35.7%	35.6%	35.5%	35.4%	35.4%	35.3%	35.2%	35.1%
RG #2 - Plans I and P	29.3%	29.0%	28.9%	28.2%	27.8%	27.8%	27.7%	27.6%	27.6%	27.5%	27.4%	27.3%	27.2%	27.2%	27.1%
RG #2 - Plan S	36.2%	35.9%	35.7%	35.1%	34.7%	34.6%	34.5%	34.5%	34.4%	34.3%	34.2%	34.2%	34.1%	34.0%	33.9%
RG #2 - Plan T	30.4%	30.1%	30.0%	29.3%	28.9%	28.9%	28.8%	28.7%	28.6%	28.6%	28.5%	28.4%	28.3%	28.3%	28.2%
RG #2 - Plan U	32.3%	32.0%	31.8%	31.2%	30.8%	30.7%	30.6%	30.6%	30.5%	30.4%	30.3%	30.3%	30.2%	30.1%	30.0%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	36.4%	35.9%	34.9%	34.2%	33.8%	33.4%	32.9%	32.5%	32.1%	31.7%	31.3%	30.9%	30.5%	30.1%
RG #3 - Plans G and H	34.8%	34.5%	34.4%	33.8%	33.5%	33.5%	33.4%	33.4%	33.3%	33.3%	33.3%	33.2%	33.2%	33.2%	33.1%
RG #3 - Plan B	32.4%	32.2%	32.0%	31.4%	31.1%	31.1%	31.0%	31.0%	31.0%	30.9%	30.9%	30.9%	30.8%	30.8%	30.7%
RG #3 - Plan U	31.5%	31.3%	31.2%	30.6%	30.2%	30.2%	30.2%	30.1%	30.1%	30.1%	30.0%	30.0%	30.0%	29.9%	29.9%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	34.1%	33.8%	33.0%	32.6%	32.4%	32.2%	32.0%	31.8%	31.6%	31.4%	31.2%	31.0%	30.9%	30.7%
RG #5 - Plans A and B (OCTA)	27.0%	26.8%	26.8%	26.2%	26.0%	26.0%	26.0%	26.0%	26.0%	26.0%	25.9%	25.9%	25.9%	25.9%	25.9%
RG #9 - Plans M and N	26.4%	26.3%	26.2%	25.8%	25.6%	25.6%	25.6%	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%	25.5%
RG #9 - Plan U	23.7%	23.5%	23.4%	23.1%	22.9%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%	22.8%
RG #9 - Plans M, N and U (TCA)	26.2%	25.9%	25.7%	25.2%	24.9%	24.7%	24.6%	24.4%	24.3%	24.1%	24.0%	23.9%	23.7%	23.6%	23.4%
RG #10 - Plans I and J	37.4%	37.2%	37.1%	36.5%	36.2%	36.1%	36.1%	36.1%	36.0%	36.0%	35.9%	35.9%	35.8%	35.8%	35.7%
RG #10 - Plans M and N	37.5%	37.3%	37.2%	36.6%	36.3%	36.2%	36.2%	36.1%	36.1%	36.1%	36.0%	36.0%	35.9%	35.9%	35.8%
RG #10 - Plan U	33.0%	32.8%	32.7%	32.1%	31.8%	31.8%	31.7%	31.7%	31.7%	31.6%	31.6%	31.5%	31.5%	31.4%	31.4%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	36.6%	36.3%	35.5%	35.0%	34.7%	34.5%	34.2%	34.0%	33.7%	33.5%	33.2%	33.0%	32.7%	32.5%
RG #11 - Plans M and N, future service	22.2%	22.0%	21.8%	21.3%	21.1%	21.1%	21.0%	21.1%	21.1%	21.1%	21.1%	21.1%	21.1%	21.0%	21.0%
RG #11 - Plan U	18.5%	18.3%	18.1%	17.7%	17.4%	17.4%	17.3%	17.4%	17.5%	17.4%	17.4%	17.4%	17.4%	17.4%	17.3%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	21.8%	21.4%	20.8%	20.3%	20.1%	19.9%	19.7%	19.6%	19.4%	19.1%	18.9%	18.7%	18.5%	18.3%
Safety															
RG #6 - Plans E and F	40.7%	40.5%	40.3%	39.6%	39.2%	39.2%	39.1%	39.1%	39.0%	39.0%	38.9%	38.9%	38.8%	38.8%	38.7%
RG #6 - Plan V	33.7%	33.4%	33.3%	32.6%	32.2%	32.1%	32.1%	32.0%	32.0%	31.9%	31.9%	31.8%	31.8%	31.7%	31.7%
RG #6 - Plans E, F and V (Probation)	40.7%	40.1%	39.5%	38.5%	37.7%	37.3%	36.9%	36.5%	36.1%	35.6%	35.2%	34.8%	34.4%	34.0%	33.5%
RG #7 - Plans E and F	56.7%	56.2%	56.1%	55.1%	54.6%	54.6%	54.6%	54.6%	54.6%	54.5%	54.5%	54.5%	54.5%	54.5%	54.5%
RG #7 - Plans Q and R	55.0%	54.6%	54.4%	53.4%	53.0%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.9%	52.8%	52.8%
RG #7 - Plan V	51.6%	51.2%	51.0%	50.0%	49.6%	49.5%	49.5%	49.5%	49.5%	49.5%	49.5%	49.4%	49.4%	49.4%	49.4%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	55.7%	55.2%	54.0%	53.3%	53.0%	52.7%	52.5%	52.2%	52.0%	51.7%	51.4%	51.2%	50.9%	50.7%
RG #8 - Plans E and F	50.0%	49.6%	49.5%	48.6%	48.2%	48.1%	48.1%	48.0%	48.0%	47.9%	47.9%	47.9%	47.8%	47.8%	47.7%
RG #8 - Plans Q and R	45.8%	45.5%	45.3%	44.4%	44.0%	44.0%	43.9%	43.9%	43.8%	43.8%	43.7%	43.7%	43.6%	43.6%	43.6%
RG #8 - Plan V	41.0%	40.6%	40.5%	39.6%	39.2%	39.1%	39.1%	39.0%	39.0%	38.9%	38.9%	38.8%	38.8%	38.7%	38.7%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	49.0%	48.4%	47.0%	46.1%	45.6%	45.1%	44.6%	44.1%	43.6%	43.1%	42.6%	42.1%	41.5%	41.0%

Attachment N
Projected Employer Rates by Plans within each Rate Group
Scenario 3: 14.5% for 2014 and 7.25% thereafter

	Valuation Date (12/31)														
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
General															
RG #1 - Plans A and B	21.2%	20.5%	19.8%	18.7%	18.0%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%	17.6%
RG #1 - Plan U	20.7%	20.0%	19.3%	18.3%	17.6%	17.2%	17.2%	17.1%	17.1%	17.1%	17.2%	17.1%	17.1%	17.1%	17.1%
RG #1 - Plans A, B and U (non-OCTA, non-OCSD)	21.1%	20.4%	19.6%	18.6%	17.9%	17.4%	17.4%	17.4%	17.4%	17.3%	17.3%	17.3%	17.3%	17.3%	17.2%
RG #2 - Plans I and J	37.4%	36.4%	35.4%	34.0%	33.0%	32.3%	32.2%	32.1%	32.0%	32.0%	31.9%	31.8%	31.7%	31.7%	31.6%
RG #2 - Plans I and P	29.3%	28.4%	27.4%	26.0%	24.9%	24.2%	24.1%	24.1%	24.0%	23.9%	23.8%	23.8%	23.7%	23.6%	23.5%
RG #2 - Plan S	36.2%	35.2%	34.2%	32.8%	31.8%	31.1%	31.0%	30.9%	30.8%	30.8%	30.7%	30.6%	30.5%	30.5%	30.4%
RG #2 - Plan T	30.4%	29.5%	28.5%	27.0%	26.0%	25.3%	25.2%	25.1%	25.1%	25.0%	24.9%	24.9%	24.8%	24.7%	24.6%
RG #2 - Plan U	32.3%	31.3%	30.3%	28.9%	27.9%	27.2%	27.1%	27.0%	26.9%	26.9%	26.8%	26.7%	26.6%	26.6%	26.5%
RG #2 - Plans I, J, O, P, S, T and U	37.0%	35.7%	34.4%	32.6%	31.3%	30.2%	29.8%	29.4%	29.0%	28.6%	28.2%	27.7%	27.3%	26.9%	26.5%
RG #3 - Plans G and H	34.8%	33.9%	33.0%	31.7%	30.8%	30.2%	30.1%	30.1%	30.0%	30.0%	30.0%	29.9%	29.9%	29.8%	29.8%
RG #3 - Plan B	32.4%	31.6%	30.7%	29.4%	28.4%	27.8%	27.7%	27.7%	27.7%	27.6%	27.6%	27.5%	27.5%	27.5%	27.4%
RG #3 - Plan U	31.5%	30.7%	29.8%	28.5%	27.5%	26.9%	26.9%	26.8%	26.8%	26.8%	26.7%	26.7%	26.7%	26.6%	26.6%
RG #3 - Plans B, G, H and U (Law Library, OCSD)	34.5%	33.5%	32.4%	31.0%	29.8%	29.1%	28.9%	28.7%	28.5%	28.3%	28.1%	27.9%	27.7%	27.5%	27.3%
RG #5 - Plans A and B (OCTA)	27.0%	26.2%	25.4%	24.3%	23.4%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.9%	22.8%	22.8%	22.8%
RG #9 - Plans M and N	26.4%	25.9%	25.3%	24.5%	23.8%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.4%	23.3%	23.3%	23.3%
RG #9 - Plan U	23.7%	23.2%	22.6%	21.7%	21.1%	20.7%	20.7%	20.7%	20.7%	20.7%	20.6%	20.6%	20.6%	20.6%	20.6%
RG #9 - Plans M, N and U (TCA)	26.2%	25.6%	24.8%	23.9%	23.1%	22.6%	22.4%	22.3%	22.1%	22.0%	21.8%	21.7%	21.5%	21.4%	21.3%
RG #10 - Plans I and J	37.4%	36.6%	35.8%	34.6%	33.6%	33.0%	33.0%	33.0%	32.9%	32.9%	32.8%	32.8%	32.7%	32.7%	32.7%
RG #10 - Plans M and N	37.5%	36.7%	35.9%	34.6%	33.7%	33.1%	33.1%	33.0%	33.0%	33.0%	32.9%	32.9%	32.8%	32.8%	32.8%
RG #10 - Plan U	33.0%	32.3%	31.4%	30.2%	29.3%	28.7%	28.6%	28.6%	28.6%	28.5%	28.5%	28.4%	28.4%	28.4%	28.3%
RG #10 - Plans I, J, M, N and U (OCFA)	37.1%	36.1%	35.0%	33.6%	32.5%	31.7%	31.4%	31.1%	30.9%	30.6%	30.4%	30.1%	29.9%	29.6%	29.4%
RG #11 - Plans M and N, future service	22.2%	21.5%	20.7%	19.6%	18.8%	18.3%	18.4%	18.4%	18.4%	18.4%	18.4%	18.5%	18.5%	18.6%	18.6%
RG #11 - Plan U	18.5%	17.8%	17.0%	15.9%	15.1%	14.7%	14.7%	14.7%	14.8%	14.8%	14.8%	14.8%	14.8%	14.9%	14.9%
RG #11 - Plans M and N, future service, and U (Cemetery)	22.2%	21.3%	20.3%	19.0%	18.0%	17.4%	17.2%	17.1%	16.9%	16.7%	16.5%	16.4%	16.2%	16.0%	15.9%
Safety															
RG #6 - Plans E and F	40.7%	39.8%	38.7%	37.2%	36.1%	35.4%	35.3%	35.3%	35.2%	35.2%	35.1%	35.1%	35.0%	35.0%	34.9%
RG #6 - Plan V	33.7%	32.7%	31.7%	30.2%	29.1%	28.3%	28.3%	28.2%	28.2%	28.1%	28.1%	28.0%	28.0%	27.9%	27.9%
RG #6 - Plans E, F and V (Probation)	40.7%	39.4%	38.0%	36.1%	34.6%	33.5%	33.1%	32.7%	32.2%	31.8%	31.4%	31.0%	30.6%	30.1%	29.7%
RG #7 - Plans E and F	56.7%	55.2%	53.6%	51.4%	49.8%	48.8%	48.8%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%	48.7%
RG #7 - Plans Q and R	55.0%	53.5%	52.0%	49.7%	48.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.1%	47.0%	47.0%	47.0%	47.0%
RG #7 - Plan V	51.6%	50.1%	48.6%	46.3%	44.7%	43.7%	43.7%	43.7%	43.7%	43.7%	43.6%	43.6%	43.6%	43.6%	43.6%
RG #7 - Plans E, F, Q, R and V (Law Enforcement)	56.3%	54.6%	52.8%	50.3%	48.5%	47.2%	46.9%	46.7%	46.4%	46.1%	45.9%	45.6%	45.4%	45.1%	44.8%
RG #8 - Plans E and F	50.0%	48.7%	47.4%	45.5%	44.2%	43.2%	43.2%	43.2%	43.1%	43.1%	43.0%	43.0%	42.9%	42.9%	42.9%
RG #8 - Plans Q and R	45.8%	44.6%	43.3%	41.4%	40.0%	39.1%	39.0%	39.0%	38.9%	38.9%	38.9%	38.8%	38.8%	38.7%	38.7%
RG #8 - Plan V	41.0%	39.7%	38.4%	36.5%	35.1%	34.2%	34.2%	34.1%	34.1%	34.1%	34.0%	34.0%	33.9%	33.9%	33.8%
RG #8 - Plans E, F, Q, R and V (Fire Authority)	49.8%	48.1%	46.4%	44.0%	42.1%	40.8%	40.2%	39.7%	39.2%	38.7%	38.2%	37.7%	37.2%	36.7%	36.2%

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

MEMORANDUM

DATE: July 10, 2014
TO: Members, Board of Retirement
FROM: Steve Delaney, Chief Executive Officer
SUBJECT: INITIAL DISCUSSION OF TRIENNIAL STUDY OF ACTUARIAL ASSUMPTIONS

Recommendation:

Receive and file.

Background:

Every three years OCERS has its actuary conduct an experience review. That process involves comparing assumed to actual experience for the period, and developing both economic and demographic assumptions to incorporate in succeeding plan valuation.

On July 21, 2014, Mr. Angelo will be presenting the results of the current actuarial experience study. The attached materials include his presentation related to the actuarial experience study, presentation on the payroll growth assumption, the economic assumptions report and the non-economic assumptions report.

Submitted by:

Steve Delaney
Chief Executive Officer

**Orange County Employees
Retirement System**

Actuarial Experience Study

July 21, 2014

Paul Angelo, FSA

Segal Consulting, San Francisco

Actuarial Assumptions

- Actuarial assumptions – two kinds
 - Demographic
 - When benefits will be payable
 - Amount of benefits
 - Economic
 - How assets grow
 - How salaries increase

Demographic Assumptions

➤ Rates of “decrement”

- Termination, mortality, disability, retirement
- Termination
 - Withdrawal
 - Deferred vested
- Mortality
 - Before and after retirement
 - Service connected or not
 - Service, disability, beneficiary

➤ Percent married

➤ Member/spouse age difference

➤ Reciprocity

➤ Assumptions can be different for General and Safety

Economic Assumptions

- Inflation - component, plus COLA
- Investment return
 - Real return
- Salary increases
 - Real wage increases (“across the board”)
 - Merit and promotion (included with demographic assumptions)

Selection of Actuarial Assumptions

- Objective, long term
- Recent experience of future expectations
 - Demographic: recent experience
 - Economic: not necessarily!
- Client specific or not
- Consistency among assumptions
- Desired pattern of cost incidence
 - Good assumptions produce level cost
 - Beware “results based” assumptions!

Always remember

$$\mathbf{C + I = B + E}$$

Contributions + Investment Income
equals

Benefit Payments + Expenses

- Actuarial valuation determines the current or “measured” cost, not the ultimate cost
- Assumptions and funding methods affect only the timing of costs

Setting Demographic Assumptions

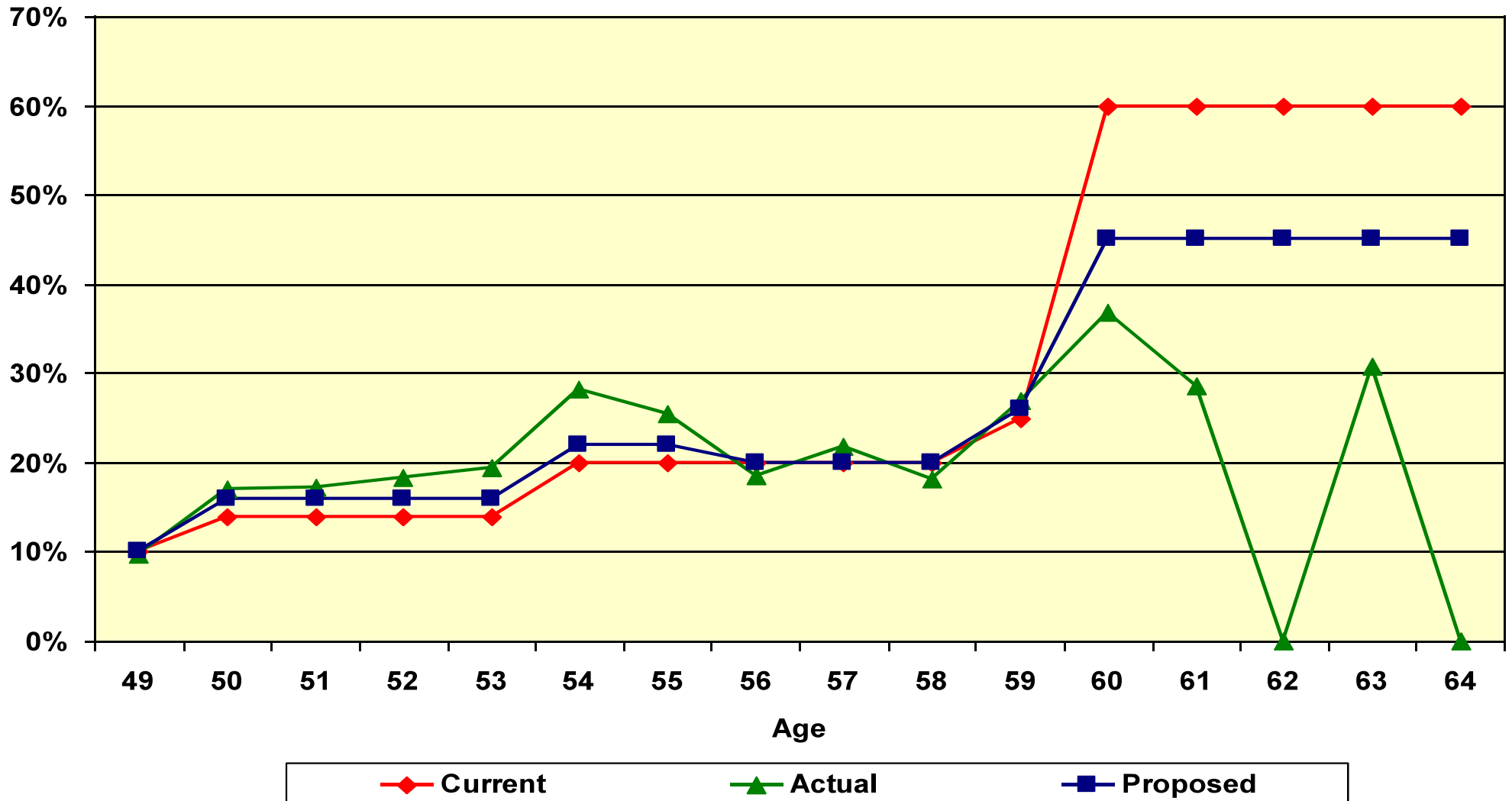
- To determine rates for each assumption we count the “decrements” and “exposures” for that event
 - Exposures = Number of employees who could have terminated, retired, etc.
 - Decrements = Number of employees who actually terminated, retired, etc.
 - This gives the “actual” decrement rates during the period
- Compare to the “current” assumed rates (or to expected number of decrements based on those current rates)
- Develop “proposed” new assumption based on both “current” assumption and recent “actual” experience
 - Weight the “actual” based on “credibility”

Setting Demographic Assumption – Retirement Rates

➤ Retirement Rates from Experience Study

Chart 3

Retirement Rates - Safety Law Enforcement Members (31664.1)



Recommendations - Demographic

- Retirement rates:
 - Slightly later retirements for both General and Safety
- Termination rates:
 - Change to service based structure
 - Overall, the termination rates have been decreased except for General OCTA members
 - Separate assumption for how many elect a refund
- Disability incidence:
 - Decreased at some ages for both General and Safety

Setting Demographic Assumptions – Mortality

➤ Mortality Rates

- Service retirement – Shorter life expectancies for General and longer life expectancies for Safety
- Disabled retirement – Longer life expectancies for General and Safety
- Preferable to have a margin of around 10%
 - Actual deaths during the study period around 10% greater than the expected deaths
- Can allow for margin using “age setbacks”, mortality improvement scales or both
- The Society of Actuaries has published scales to estimate future mortality improvements:
 - Scale AA - Has been standard since around 2000
 - » Does not accurately reflect recent improvements in mortality
 - Scale BB - Interim standard scale issued in 2012
 - Scale MP-2014 - Exposure draft issued in 2014

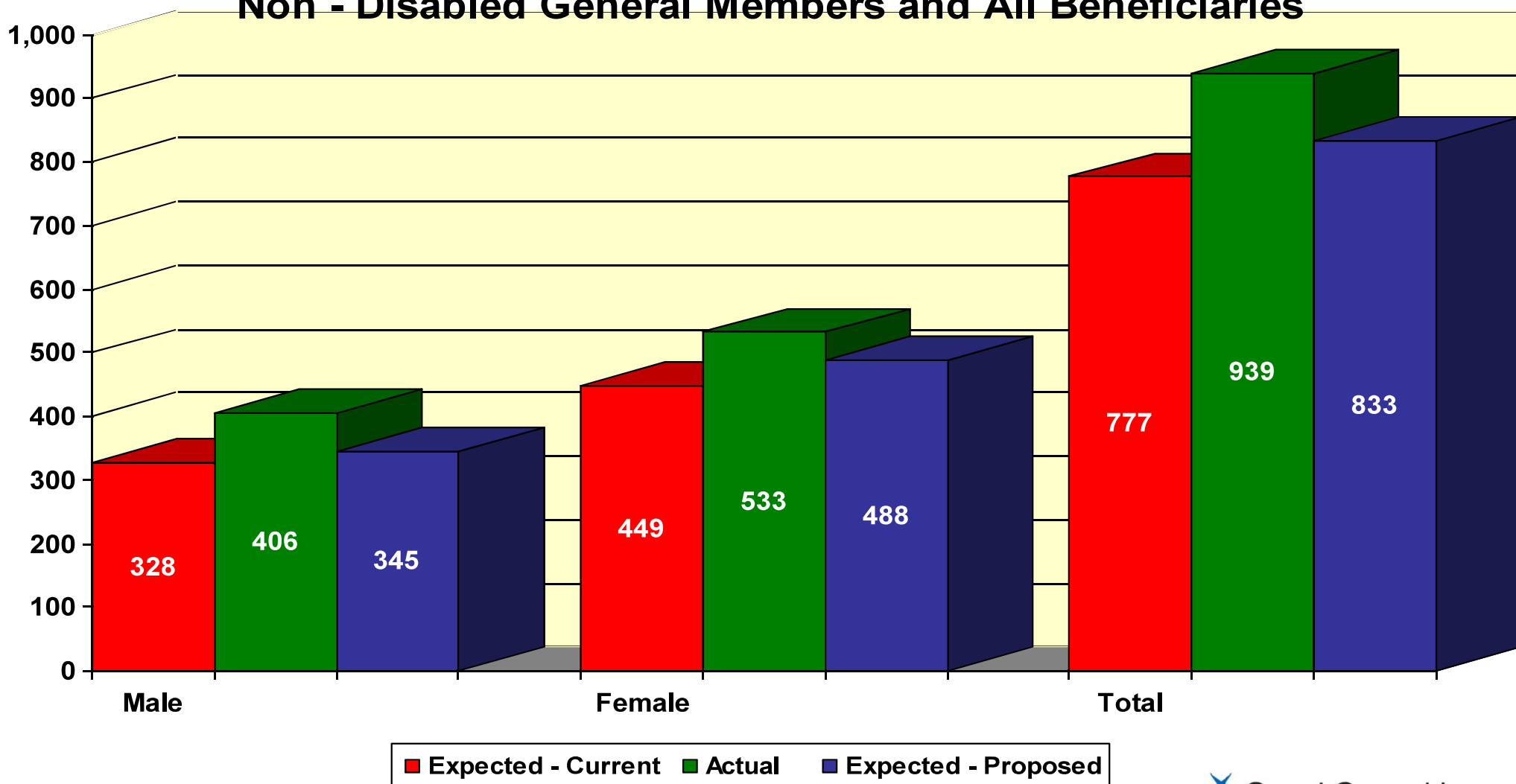
Setting Demographic Assumptions – Mortality Rates

➤ Mortality Experience from Experience Study

Chart 10

Post - Retirement Deaths

Non - Disabled General Members and All Beneficiaries



Setting Demographic Assumptions – Mortality

- Two ways to use mortality improvement scales to project future mortality improvements:
 - Static or Generational
- Static projection to a future year - reflect mortality at a future date, not as of today
 - Recommend use of static mortality projection to achieve approximately 10% margin for future mortality improvement
 - Use Scale BB projected to 2020
- Future studies might include a recommendation for generational mortality
 - Each future year has its own mortality table that reflects the forecasted improvements at every age
 - Younger participants have more future mortality improvement built in than for older participants
- CalPERS recently adopted a static projection

Economic Assumptions

- Price Inflation (CPI):
 - Investment Return, Salary Increases, COLA
- Salary Increases
 - “Across the board” increases
 - Includes price inflation plus real wage growth
 - Promotional & Merit: based on experience
 - Really is a “demographic” assumption
- Investment Return (Investment Earnings)
 - Components include price inflation, real return, expenses (administrative and/or investment)
 - Generally based on passive returns

Current Economic Assumptions

- Last full review was for 12/31/2012
 - Price inflation (CPI): 3.25%
 - Wage inflation: 3.75%
 - So real wage growth is 0.50%
 - Investment return: 7.25%
 - So net real return is 4.00%

Economic Assumptions - Recommended

- Price inflation (CPI)
 - Maintain at 3.25%
- Salary increases
 - Maintain price inflation at 3.25%
 - Maintain the “Across the Board” real wage at 0.50%
 - Total wage inflation maintained at 3.75%
 - Promotional and merit: slight increases to rates overall for Safety and decreases for General
- Investment return: Increase from 7.25% to 7.50% or maintain at 7.25%, gross of administrative expenses
- Explicit Administrative Expense Load
 - 0.9% of payroll allocated between the employer and member

Economic Assumptions - Recommended

	<u>Recommended</u>		<u>Alternative</u>		<u>12/31/13 Valuation</u>	
	<u>Return</u>	<u>Pay</u>	<u>Return</u>	<u>Pay</u>	<u>Return</u>	<u>Pay</u>
Price Inflation	3.25%	3.25%	3.25%	3.25%	3.25%	3.25%
Real Wages	n/a	0.50%	n/a	0.50%	n/a	0.50%
Merit (20+ years)	n/a	0.75%*	n/a	0.75%*	n/a	1.00%
Net Real Return	4.25%**	n/a	4.00%**	n/a	4.00%	n/a
Total	7.50%	4.50%	7.25%	4.50%	7.25%	4.75%

* For General members (Safety is 1.50%)

** Recommended return is gross of administrative expense

Price Inflation (CPI)

- Historical Consumer Price Index
 - Median 15-year moving average = 3.4%
 - Median 30-year moving average = 4.2%
- 15-year averages have been declining due to recent low inflation
- NASRA Survey
 - Median inflation assumption is 3.00%
- Social Security Forecast = 2.8%
- Recommend keeping current 3.25% annual inflation assumption

Salary Increase Assumption - Recommended

- Three components
- Price inflation: maintain at 3.25%
- Real increases: maintain at 0.50%
 - Department of Labor: Annual State and Local Government real productivity increase: 0.4% - 0.7% over 10 - 20 years
- Promotional & Merit: from experience study
 - Based on years of service
 - General: Currently 10.00% (0-1 years) to 1.00% (16+ years)
 - Overall minor decrease at most years of service
 - Safety: Currently 14.00% (0-1 years) to 1.00% (16+ years)
 - Overall minor increase at most years of service
- Net reduction for General and net increase for Safety in assumed future salary increases

Payroll Growth Assumption

- Active member payroll based on wage inflation
- Includes price inflation and real wage increases
 - Price inflation: maintain at 3.25%
 - Real increases: maintain at 0.50%
 - Total is maintained at 3.75%
- Currently used to project total payroll for UAAL amortization

Payroll Growth Assumption/Method for UAAL Contribution Rate

- Issue: control increases in UAAL from contribution losses when actual total payroll grows less than assumed
 - Prior discussion: change method to determine the actual UAAL contribution amount to be the greater of:
 - (a) the UAAL contribution rate times the actual total payroll for the fiscal year (current method) or
 - (b) the estimated UAAL payment amount from actuarial valuation
 - Implementation issues already discussed with County staff
 - New approach to UAAL amortization (separate presentation)
 - Assume payroll growth less than what assumed in projecting individual salary increases for members
 - » Current 3.75% combines inflation and real “across the board”
 - Lower payroll growth could be short term or over entire 20 year amortization period
 - » “Margin for adverse deviation”

Investment Earnings Assumption

- Also called the discount rate
- Used for contribution requirements
- Affects timing of Plan cost
 - Lower assumed rate means higher current cost
 - Ultimately, actual earnings determine cost
 - **C + I = B + E**
 - “Can’t pay benefits with assumed earnings!”

Setting the Earnings Assumption

- Four components
 - Inflation: consistent with salary increase assumption
 - Real returns by asset class
 - Weighted by asset allocation
 - Reduced by assumed expenses
 - Currently both investment and administrative
 - Recommend reflecting only investment expenses, with separate assumption for administrative expenses
 - Reduced by “risk adjustment”
 - Margin for adverse deviation
 - Expressed as confidence level above 50%

OCERS Earnings Assumption

Components of Preliminary Investment Return Assumption

	Current	Recommended	Alternative Recommended
Assumed Inflation	3.25%	3.25%	3.25%
Portfolio Real Rate of Return	4.94%	5.33%	5.33%
Assumed Expenses *	(0.60%)	(0.60%)	(0.60%)
Risk Adjustment	<u>(0.34%)</u>	<u>(0.48%)</u>	<u>(0.73%)</u>
Assumed Investment Return	7.25%	7.50%	7.25%
Confidence level	55%	56%	59%

* Includes both investment and administrative expenses

When to Change Earnings Assumption?

- Easy: change in asset allocation
- Hard: change in estimated future real returns for asset classes
- Source of data:
 - Investment consultants (industry)
 - Investment consultant (your Fund)
- Actuaries are neither economists nor investment consultants

Real Returns by Asset Class

- Segal uses an average of 9 investment advisory firms retained by Segal public clients
 - Used results from NEPC for asset categories unique to OCERS

OCERS Real Rate of Return

Asset Class	Target Allocation	Real Return	Weighted Return
Large Cap Equity	14.90%	5.92%	0.88%
Small/Mid Cap Equity	2.73%	6.49%	0.18%
Developed Int'l Equity	10.88%	6.90%	0.75%
Emerging Int'l Equity	6.49%	8.34%	0.54%
Core Bonds	10.00%	0.73%	0.07%
Global Bonds	2.00%	0.30%	0.01%
Emerging Market Debt	3.00%	4.00%	0.12%
Real Estate	10.00%	4.96%	0.50%
Diversified Credit (U.S.)	8.00%	4.97%	0.40%
Diversified Credit (non-U.S.)	2.00%	6.76%	0.14%
Hedge Funds	7.00%	4.13%	0.29%
GTAA	7.00%	4.22%	0.30%
Real Return	10.00%	5.86%	0.59%
Private Equity	6.00%	9.60%	0.58%
Total	100.00%		5.33%

Administrative and Investment Expenses

Administrative and Investment Expenses as a Percentage of Valuation Value of Assets (All dollars in 000's)

Plan Year	Valuation Value of Assets	Admin. Expenses	Investment Expenses	Admin. %	Investment %	Total %
2009	\$7,748,380	\$10,893	\$34,819	0.14%	0.45%	0.59%
2010	8,154,687	12,448	68,027	0.15	0.83*	0.98
2011	8,672,592	15,479	39,023	0.18	0.45	0.63
2012	9,064,355	14,295	40,992	0.16	0.45	0.61
2013	9,469,208	14,904	38,759	<u>0.16</u>	<u>0.41</u>	<u>0.57</u>
Average				0.16%	0.52%	0.68%

*Included some one-time expenses.

➤ Based on this experience, we have maintained the future expense component at 0.60%.

Risk Adjustment Model and Confidence Level

- Compares the System's risk position over time
- Confidence level is a relative, not absolute measure
 - Can be reevaluated and reset for future comparisons
- Confidence level is based on standard deviation
 - Measure of volatility based on portfolio assumptions
- Results should be evaluated for reasonableness

Risk Adjustment Model and Confidence Level

- Most useful for comparing risk position over time

Valuation (Dec. 31)	Assumed Return	Confidence Level	Risk Adjustment
2004	7.75%	56%	39 bp's
2007	7.75%	61%	80 bp's
2011 not adopted	7.25%	53%	27 bp's
2011 not adopted	7.50%	50%	2 bp's
2011 as adopted	7.75%	<50%	-23 bp's
2012 not adopted	7.50%	51%	9 bp's
2012 as adopted	7.25%	55%	34 bp's
2014 recommended	7.50%	56%	48 bp's
2014 alternative	7.25%	59%	73 bp's

Investment Earnings Assumption - 2014

- 7.50% recommendation gives slightly higher confidence level than 7.25% did in 2012
 - 56% for 7.50% in 2014 vs. 55% for 7.25% in 2012
 - Primary reason: portfolio real return up from 4.94% to 5.33%
 - With corresponding increase in risk
 - “Standard deviation” increased from 10.3% to 12.3%
 - Alternative 7.25% recommendation gives an even higher confidence level of 59%
- Comparison with other systems
 - Median is 7.90% but trending down nationwide
 - California public systems – most at 7.50% to 7.75%
 - Contra Costa County ERA and Fresno County ERA also recently adopted 7.25%

OCERS Earnings Assumption

Components of Preliminary Investment Return Assumption

	Current	Recommended	Alternative Recommended
Assumed Inflation	3.25%	3.25%	3.25%
Portfolio Real Rate of Return	4.94%	5.33%	5.33%
Assumed Expenses *	(0.60%)	(0.60%)	(0.60%)
Risk Adjustment	<u>(0.34%)</u>	<u>(0.48%)</u>	<u>(0.73%)</u>
Assumed Investment Return	7.25%	7.50%	7.25%
Confidence level	55%	56%	59%

* Includes both investment and administrative expenses

Developing an Investment Return Assumption for use in GASB 67 and 68 Financial Reporting

- For funding, current investment return assumption is net of both investment and administrative expenses
- For financial reporting, GASB 67 and 68 require this assumption to be gross of administrative expense
- Advantages to using same assumption for funding and for financial reporting
 - Take advantage of consistency between new GASB rules and current funding practices
 - Entry Age cost method
 - Discount rate based on expected investment return
 - Consistency of liability and normal cost measures
 - The only difference is in how changes in liability are recognized

Developing an Investment Return Assumption for use in GASB 67 and 68 Financial Reporting

- Complication associated with eliminating administrative expenses from this assumption
 - Administrative expense funded implicitly by employer and employees
 - Difficult to precisely reproduce current implicit cost sharing
 - Allocate explicit load to employer/employees based on portion of contributions paid by each
 - Employee NC, Employer NC, Employer UAAL payment
- Current implicit method may “overcharge” for admin expenses
 - 0.16% of assets not the same as a 0.16% change in investment return assumption
 - 0.16% of assets is about \$15 million annually or 0.9% of payroll
 - 0.16% change in return assumption costs about \$37 million annually or 2.3% of payroll

Developing an Investment Return Assumption for use in GASB 67 and 68 Financial Reporting

- Review: Advantages to using same assumption for funding and for financial reporting
 - Consistency of liability and normal cost measures
- Two ways to do this:
 - Option “A” – Set the investment return assumption for funding on a gross of administrative expenses basis
 - Use same assumption for financial reporting
 - Add and allocate explicit contribution load for admin. expenses
 - Option “B” – Continue to set investment return assumption for funding on a net of administrative expenses basis
 - Use same value for financial reporting but assumed to be gross of administrative expenses
 - » That return is assumed net of administrative expenses for funding
 - » Same return is gross of administrative expenses for financial reporting

Option A – Investment Return Assumption for Funding on a Gross of Administrative Expenses Basis: 7.50% Recom.

- Same investment return assumption for both funding and financial reporting that is gross of administrative expenses
- Introduce explicit administrative expenses loading of 0.9% of payroll or \$15 million annually (allocated 0.7% employer and 0.2% employee)

	Recommended if Used only for Funding	Recommended for both Funding and Financial Reporting
Assumed Inflation	3.25%	3.25%
Portfolio Real Rate of Return	5.33%	5.33%
Assumed Expenses	(0.60%)	(0.44%)
Risk Adjustment	<u>(0.48%)</u>	<u>(0.64%)</u>
Assumed Investment Return	7.50%	7.50%
Confidence level	56%	58%
Administrative Expense Load	Not Applicable	0.9% of pay

Option B – Investment Return Assumption for Funding on a Net of Administrative Expenses Basis: 7.50% Recom.

- “Same” investment return assumption for both funding and financial reporting
 - Recommended 7.50% return is net of administrative expenses for funding
 - Recommended 7.50% return is gross of administrative expenses for financial reporting

Recommended if

	Used only for Funding	Recommended for Financial Reporting
Assumed Inflation	3.25%	3.25%
Portfolio Real Rate of Return	5.33%	5.33%
Assumed Expenses	(0.60%)	(0.44%)
Risk Adjustment	<u>(0.48%)</u>	<u>(0.64%)</u>
Assumed Investment Return	7.50%	7.50%
Confidence level	56%	58%
Administrative Expense Load	Not Applicable	Not Applicable

Option A – Investment Return Assumption for Funding on a Gross of Administrative Expenses Basis: 7.25% Alt. Rec.

- Same investment return assumption for both funding and financial reporting that is gross of administrative expenses
- Introduce explicit administrative expenses loading of 0.9% of payroll or \$15 million annually (allocated 0.7% employer and 0.2% employee)

	Recommended if Used only for Funding	Recommended for both Funding and Financial Reporting
Assumed Inflation	3.25%	3.25%
Portfolio Real Rate of Return	5.33%	5.33%
Assumed Expenses	(0.60%)	(0.44%)
Risk Adjustment	<u>(0.73%)</u>	<u>(0.89%)</u>
Assumed Investment Return	7.25%	7.25%
Confidence level	59%	61%
Administrative Expense Load	Not Applicable	0.9% of pay

Option B – Investment Return Assumption for Funding on a Net of Administrative Expenses Basis: 7.25% Alt. Rec.

- “Same” investment return assumption for both funding and financial reporting
 - Recommended 7.25% return is net of administrative expenses for funding
 - Recommended 7.25% return is gross of administrative expenses for financial reporting

Recommended if

	Used only for Funding	Recommended for Financial Reporting
Assumed Inflation	3.25%	3.25%
Portfolio Real Rate of Return	5.33%	5.33%
Assumed Expenses	(0.60%)	(0.44%)
Risk Adjustment	<u>(0.73%)</u>	<u>(0.89%)</u>
Assumed Investment Return	7.25%	7.25%
Confidence level	59%	61%
Administrative Expense Load	Not Applicable	Not Applicable

Anticipated Impact on Valuation Results*

- Modeled as of December 31, 2013 for illustration assuming no change in the investment return assumption
 - Decrease in Actuarial Accrued Liability (-\$32 million)
 - Increase in average employer Normal Cost (0.55% of pay)
 - Decrease in average employer UAAL rate (-0.16% of pay)
 - Portion of explicit administrative expense allocated to employer (0.70% of payroll)
- Increase in average employer rate = 1.09% of payroll
 - Primarily due to explicit administrative expense load
- Increase in average member rate = 0.24% of payroll
 - Includes explicit administrative expense allocated to members (0.20% of payroll)

*Before adjustment for 18-month delay

Always remember

$$\mathbf{C + I = B + E}$$

Contributions + Investment Income
equals

Benefit Payments + Expenses

- Actuarial valuation determines the current or “measured” cost, not the ultimate cost
- Assumptions and funding methods affect only the timing of costs

Orange County Employees Retirement System

Review of Economic Assumptions - Payroll Growth Assumption Used in UAAL Amortization

July 21, 2014

*Paul Angelo, FSA, MAAA, FCA
Senior Vice President and Actuary
The Segal Group*

2013 and 2014 Review of Actuarial Funding Policy

➤ Funding policy elements approved

- Continuation of Entry Age actuarial cost method
- Continuation of 5-year asset smoothing method
- UAAL amortization policy starting with 12/31/2013 valuation
 - UAAL layers from 12/31/2012 combined and reamortized over 20 years
 - Amortization policy for changes after 12/31/2012

Source		
Actuarial gains or losses		20
Assumption or method changes		20
Plan amendments		15
ERIPs		Up to 5
Actuarial surplus		30

- Continuation of level percent of payroll amortization

Level Percent of Payroll UAAL Amortization

- UAAL payments structured to increase with total payroll
 - Payroll increases with inflation and real wage growth
 - Currently assumed at $3.25\% + 0.50\% = 3.75\%$
 - Assumes constant active head count
 - Shortfall in UAAL contributions if actual payroll increase is less than assumed (currently 3.75%)
- Short term approach: Minimum UAAL payment
 - Consider setting employer's UAAL contributions as the greater of:
 - (1) Estimated UAAL payment amount calculated in valuation and
 - (2) UAAL contribution rate times actual fiscal year payroll
 - Requires “true-up” contribution based on actual payroll
 - March 17, 2014 Board discussion
 - Report from OCERS staff on some of the administrative and implementation issues raised by the participating employers

Payroll Growth Assumption for UAAL Amortization

- Longer term approach: modify payroll growth assumption
 - Continue to use current assumption for projecting member benefits
 - Use lower assumption solely for UAAL amortization
- Could use lower assumption for entire 20 year period
 - “Margin for adverse deviation”, not necessarily “best estimate”
 - Could use inflation only, currently 3.25%
 - Could use arbitrary value less than 3.75%, e.g., 2.00%
 - Today’s illustrations use this approach
- Could use lower assumption only for a few years
 - Looks more like a specific payroll prediction than a margin
 - Need to both select lower rate and short period (fixed or rolling)
- Full 20-year period still required to amortize the entire UAAL!

Illustration of Payroll Growth Assumption

➤ \$1,000,000 initial UAAL, 7.25% investment return assumption

	20 years % of pay	20 years % of pay	20 years % of pay	20 years Flat dollar
Interest	7.25%	7.25%	7.25%	7.25%
Payroll Growth	3.75%	3.25%	2.00%	0.00%
Increase in AAL	1,000,000	1,000,000	1,000,000	1,000,000
Amortization factor	13.8568	13.3105	12.0669	10.3912
(first year)	0.072167	0.075129	0.082871	0.096235
Amortization amount				
Year 1	\$ 72,167	\$ 75,129	\$ 82,871	\$ 96,235
Year 15	\$ 120,828	\$ 117,562	\$ 109,347	\$ 96,235
Year 20	\$ 145,248	\$ 137,948	\$ 120,728	\$ 96,235
Total amount paid				
Principal	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000
Interest	1,094,084	1,070,862	1,013,550	924,697
Total	\$ 2,094,084	\$ 2,070,862	\$ 2,013,550	\$ 1,924,697

Illustration of Payroll Growth Assumption

➤ Annual payment amounts for \$1,000,000 initial UAAL

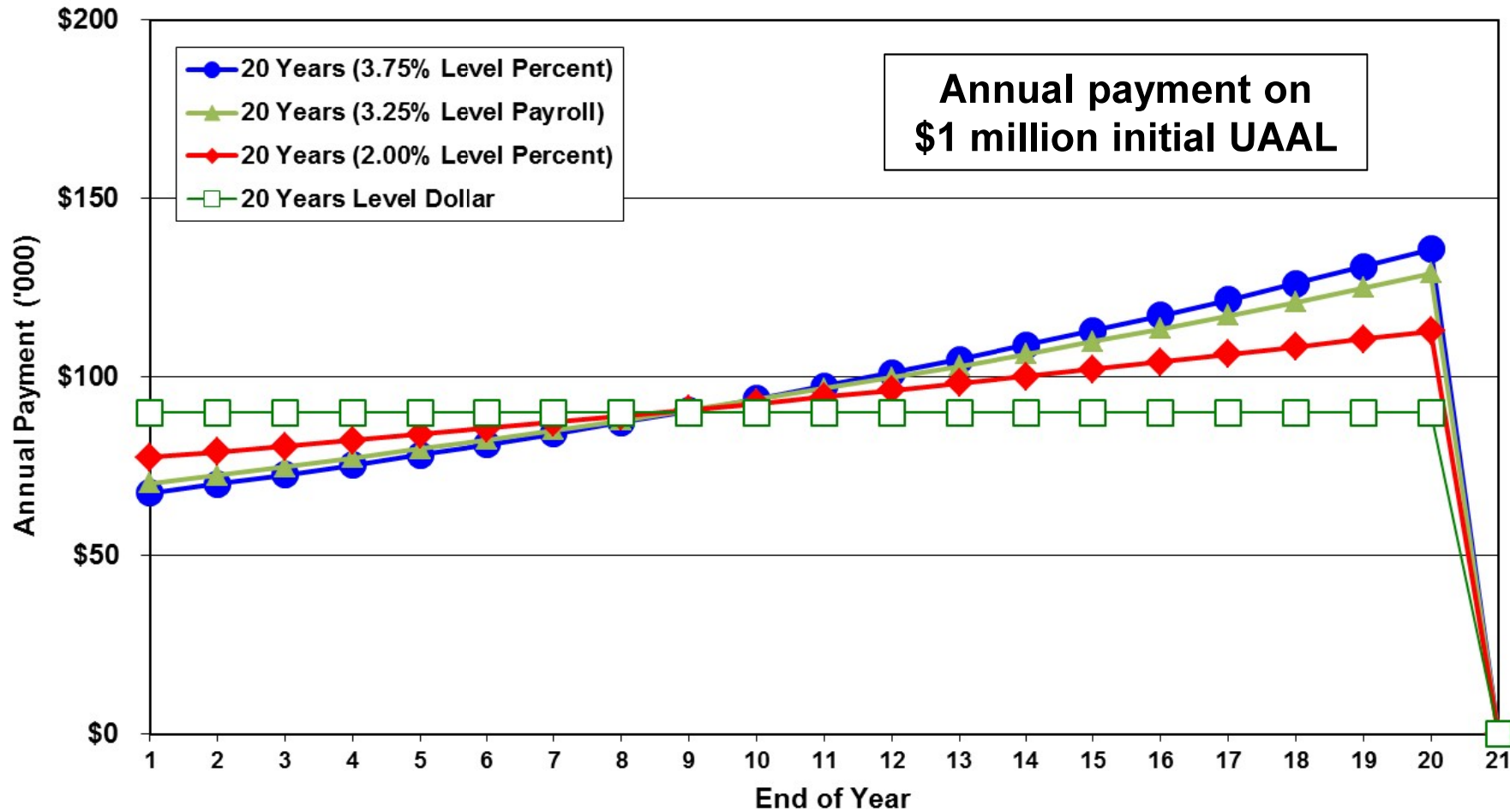
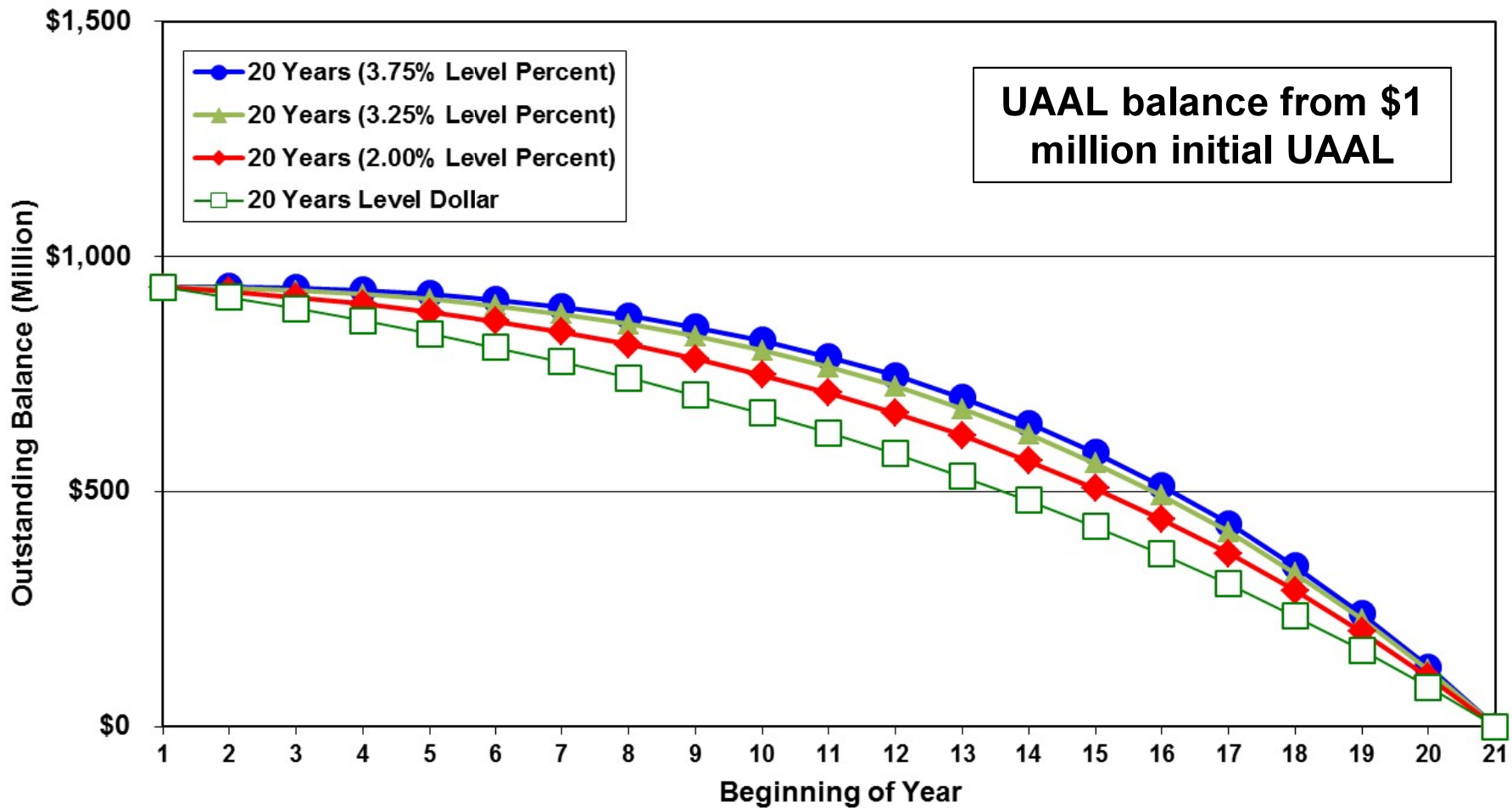


Illustration of Payroll Growth Assumption

➤ Outstanding UAAL balance for \$1,000,000 initial UAAL



Payroll Growth Assumption for UAAL Amortization

- Selecting an alternative long term payroll growth assumption
- Use past experience for the System or future budget projection from individual employers?
 - Reference: actual change in payroll over 2003-2013 provided in the next slide
- Immediate cost impact if (presumably) applied to current UAAL
 - Lower payroll growth assumption trades higher initial payments for (relatively) lower future payments
 - Lower risk of future contribution shortfalls
 - Higher risk of future contribution overpayments
 - Reference: UAAL rate impact of lower payroll growth assumption if applied to all UAAL layers in 12/31/2013 valuation
 - 3.25% and 2.00%

Level Percent of Payroll Amortization

➤ Actual growth in payroll from 2003 to 2013

Year Ended Dec 31	Active Members	Year-to-Year (Incr)/Decr	Payroll (\$000)	Year-to-Year (Incr)/Decr
2003	22,672		1,243,964	
2004	22,502	-0.7%	1,257,085	1.1%
2005	22,467	-0.2%	1,276,764	1.6%
2006	22,791	1.4%	1,322,952	3.6%
2007	23,618	3.6%	1,457,160	10.1%
2008	23,720	0.4%	1,569,765	7.7%
2009	22,633	-4.6%	1,618,493	3.1%
2010	21,742	-3.9%	1,579,239	-2.4%
2011	21,421	-1.5%	1,619,474	2.5%
2012	21,256	-0.8%	1,609,601	-0.6%
2013	21,368	0.5%	1,604,496	-0.3%
Average Change		-0.6%		2.7%

Increase in 2015/2016 Employer UAAL Contribution Rates if 3.25% or 2.00% Payroll Growth Assumptions used in 2013 Valn

Payroll Growth	Contribution Rate Increase Under Alternative Payroll Growth Assumption (% of payroll)	
	3.25% per year	2.00% per year
Rate Group #1	0.51%	1.87%
Rate Group #2	1.08%	3.92%
Rate Group #3	0.99%	3.62%
Rate Group #5	0.68%	2.51%
Rate Group #9	0.45%	1.97%
Rate Group #10	1.05%	3.85%
Rate Group #11	0.24%	1.21%
Rate Group #6	0.89%	3.26%
Rate Group #7	1.46%	5.36%
Rate Group #8	1.11%	4.00%
Total Plan	1.06%	3.88%

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

MEMORANDUM

DATE: June 30, 2014
TO: Members, Board of Retirement
FROM: Brenda Shott CPA, Assistant CEO Finance and Internal Operations and
Girard Miller CFA, Chief Investment Officer
SUBJECT: Early Payment of Contributions for Fiscal Year 2015-2016

Recommendation:

Approve the terms of a prepayment discount program for the advance payment of employer contributions, including the discount rate to be used, for contribution year July 2015 - June 2016

Background:

Government Code Section 31582 (b) and (c) (the Code) states:

(b) "The board of supervisors may authorize the county auditor to make an advance payment of all or part of the county's estimated annual contribution to the retirement fund, provided that the payment is made within 30 days after the commencement of the county's fiscal year. If the advance is only a partial payment of the county's estimated annual contribution, transfers from the appropriation to the retirement fund shall be made at the end of each month or at the end of each pay period until the total amount estimated for the year is contributed. This amount shall be adjusted at the end of the fiscal year to reflect the actual contribution required for that year."

(c) A district subject to Section 31585 may also authorize an advance payment of all or part of the district's estimated annual contribution to the retirement fund, provided that the payment is made within 30 days after the commencement of the district's fiscal year. If the advance is only a partial payment of the district's estimated annual contribution, transfers from the appropriation to the retirement fund shall be made at the end of each month or at the end of each pay period until the total amount estimated for the year is contributed. This amount shall be adjusted at the end of the fiscal year to reflect the actual contribution required for that year."

In connection with the Code, OCERS has annually offered plan sponsors the opportunity to receive a discount on their employer contributions if they paid their contributions early with a lump sum payment. The program dates back to Fiscal Year 2005-2006, and is brought back to the Board annually for consideration on whether to offer the program for the next year. Timely consideration of the program is appropriate now, in order to give plan sponsors adequate time to plan funding for a lump sum payment in January, should the plan be approved for the upcoming contribution year.

Plan sponsor interest in such a program remains high as eleven of the fifteen active plan sponsors elected to prepay contributions of over \$425M for Fiscal Year 2014-2015. An early payment program is primarily a tool for plan sponsor budget management, rather than a long-term funding

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

technique for the system. Prepaid contributions allow OCERS to deploy cash on a more concentrated basis: however, they also increase OCERS' internal cash flow and short-term cash overlay portfolio risk, and challenge the efficiency of dollar cost averaging during periods of volatile markets. While presenting this program to the Board in 2013 (for FY14-15), revised program provisions were explored to reduce the investment related risks. However, the Board decided to keep the program provisions consistent with previous years and directed staff to further explore options that would address the investment challenges and risks for consideration with the FY 2015-2016 program. Further discussion of the results of that research is presented in the attached memo from Girard Miller, Chief Investment Officer.

Discussion

Employer contributions rates are set by the System's actuary and incorporate an interest charge in recognition that contributions are collected in installments throughout the fiscal year. If instead, an employer pays all estimated employer contributions prior to the beginning of the fiscal year when installments were assumed to have begun, an interest adjustment or discount is appropriate.

The proxy used for applying a prepayment discount has been the annual assumed rate of return used in the applicable actuarial valuation for the system. This practice is consistent across most 37 Act Systems, however, there are a few systems (Kern and Tulare) that use half the assumed rate. The applicable discount provided to the plan sponsor is calculated as a function of when OCERS receives payment of the contributions (discounted cash flows). For example, payments received in July would be discounted using one-half the earnings assumption rate in the discounted cash flow calculation because from an actuarial perspective OCERS would have been assumed to earn one-half the earnings assumption rate on contributions received during the period, or on the converse side there would have been "interest charges" included in the contribution rate equal to one-half the earnings assumption rate. Prepayments of contributions made in January, six months prior to the beginning of the contribution year, would be calculated using the full assumed rate of return because the prepaid contributions would be on deposit for an additional six months and there would have been a full year of "interest charges" included in the contribution rate calculation.

From an actuarial perspective, the prepayment program, as currently designed, results in equivalent mathematical funding into the system. Attached is a previous analysis from the Segal Company on this topic. However, from an investment perspective the prepayment program presents additional risks during the later stages of a business cycle, which we are in now. Attached is a memo from Girard Miller, Chief Investment Officer, which describes the risks of the program as currently designed and lays out an option for plan design revisions to be considered by the Board that will reduce investment related risks inherent to the program.

There are several factors needed to calculate the discounted prepayment amount when contributions are paid early. Projected payroll amounts are the starting point for calculating the prepayment amount and are provided by plan sponsors for each rate group or plan they participate in and are prepaying contributions. The projected payroll amount (as estimated by the plan sponsors) is multiplied by the employer's contribution rate for the applicable rate group.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

Per the Code, only employer contributions paid by the employer and credited to the employer's account (not the employee's account) are eligible for the discount. More specifically, reverse pick up arrangements whereby employees pay a portion of the employer's required contribution and employer pick up arrangements whereby employers pay a portion of employee's required contribution are excluded from the prepayment discount program. The resulting product is then divided by one plus the discount rate.

OCERS' staff compares the projected contribution amount to actual contributions throughout the period in order to ensure that the annual required contribution is collected.

Any investment variation caused by the timing of the contributions becomes a part of the normal actuarial valuation process – i.e., rates for the future will rise and fall based on the assets in the system. Therefore, no adjustment of the early contribution payment is made on the basis of actual returns during the year.

In addition to identifying an appropriate discount factor the Board has also adopted plan provisions that define the minimum prepayment amounts and established contribution payment time frames. The previously adopted policies required that employers prepay at least 50% of the estimated annual contribution in order to be eligible for the discount and established that prepaid contributions be received prior to either January 15th or July 15th.

Conclusion:

Staff recommends that the Board approve an early payment discount on employer contributions paid by the employer for contribution year July 2015 through June 2016 with the following terms:

a) Either:

- i) Continue the program as we have in the past using the current actuarial discount rate of 7.25% when calculating the present value of discounted cash flows if payment is received by January 15, 2015 or 3.625% if payment is received after January 15, 2015 but before July 15, 2015 or
 - ii) Follow the alternative policy guidelines suggested in the CIO memo, which would offer employers a choice for 2015 prepayments of either 7.25% on half their annual contribution or 5.8% on the entire contribution if prepaid. (The CIO memo includes other policy guidelines that could apply in other years, but these numbers are the ones applicable for 2015.)
- b) Contributions not paid early must be paid pro rata over the year with no discount being credited
 - c) OCERS' staff will compare the payroll estimates used to calculate the prepayment amount for each participating plan sponsor to actual payroll each pay period. Should actual payroll be 5% greater than estimated payroll for four consecutive pay periods, the plan sponsor will be required to pay additional contributions each pay period for the additional salary above the projected salary used to calculate the prepayment (no discount would be applied to the additional amount)
 - d) Plan sponsors that have more than one plan or rate group are required to provide the estimated pensionable salary separately for each plan or group

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

- e) Only employer contributions paid by the employer are eligible for the prepaid discount program (employee pick-ups and reverse pick-ups are ineligible)
- f) The application of the prepayment of contributions will be applied to pay periods 2015-15 through 2016-14
- g) OCERS will reconcile the prepaid contributions to the actual contributions at the end of the contribution year and will

Prepared by:



Brenda Shott
Assistant CEO, Finance and Internal Operations

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

MEMORANDUM

DATE: July 21, 2014
TO: Board of Retirement
FROM: Girard Miller CFA, Chief Investment Officer
SUBJECT: **Prepayment Discount Policy Considerations**

Recommendation:

Take appropriate action.

CIO recommendation:

Continue to offer a prepayment discount plan on a sustainable basis, with the following features:

- a. During “recovery and expansion” periods following recessions or major (>20%) stock market corrections, use the long-term actuarial assumed rate of return for the prepayment discount calculation. This would be “business as usual” and should remain the prevailing policy the majority of the time, based on modern market and business cycle history.
- b. During “ripe, full-value market periods” in which most stock indexes are trading at levels materially above the prior market-cycle peak with valuation metrics above historical averages *and* the national real per capita GDP materially exceeds the prior business cycle peak on the date of board approval, OCERS should instead offer employers two options under the prepayment plan:
 - i. Limit the maximum that an employer can prepay to 50% of that year’s contribution, using the long-term actuarial assumed rate of return for the calculation *or*
 - ii. Accept a full prepayment but limit the prepayment discount rate to 4/5^{ths} (80%) of the long-term actuarial assumed rate of return, which would represent a 20% risk-reduction in the prepayment discount. (In today’s context, that would translate into a prepayment rate of 5.8%.)
 - iii. Because both conditions under this paragraph (b) are now effective at the time of this meeting, the options (i) and (ii) above would apply to the 2015 prepayment program.
- c. During national economic recessions or periods when the Board has invoked extraordinary risk controls for the investment portfolio, the prepayment discount program may be suspended prospectively until reviewed in the following year, by action of the Board following a recommendation of the CIO and the independent

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

portfolio risk advisor. This provision would not curtail a prepayment discount option already approved and offered to plan sponsors.

Background:

OCERS has permitted employers to prepay their contributions with a discount since 2005. The program has been successful in 6 years out of 8; investment returns were substantially below the discount rate in two years during this period. That track record is roughly consistent with our 28-year average, with the fund underperforming its target rate 32% of the calendar years.

In 2013, the CIO raised several concerns regarding the prudence of offering a discount on employer contributions in the later stages of a business cycle, and during recessions, suggesting at that time that a lower discount rate might be more advisable once the economy has begun a mature business-cycle expansion and the outlook for portfolio returns through the next recession would not justify continuous use of the long-term actuarial discount rate.

In 2014, investment losses were experienced by the portfolio shortly after receipt of this year's employer prepayments, highlighting the risk to the portfolio of accepting funds that cannot be invested the entire year as each ensuing month then experiences negative cash flow. Nonetheless, since receipt of prepayments, the OCERS portfolio return has since met its long-term actuarial target so far, with the domestic stock indexes returning approximately 6% to the date of this memo, as the typical driver of overall portfolio returns.

Analysis:

We have now entered the sixth year of the U.S. economy's recovery from the Great Recession, and stock indexes are now trading at levels 190% above their cycle lows. Historically, the ensuing returns on investment after markets have reached such a recovery level have been weak at best. Our general consultant NEPC has observed that following the 2012-13 run-up in stock prices, the historical expected return for our equity portfolio for the next five years is essentially nil or negative in this context. (See page 16 of NEPC's report for the January, 2014 meeting of the Investment Committee.) The revised asset allocation target returns modeled by NEPC for the 5-7 year horizon, which would likely include a recovery period from the next cyclical recession, was 7.1%. Based on current market valuations, projected GDP growth rates and peak profitability in the corporate sector, a prominent Goldman Sachs macro strategist has projected U.S. equity returns of 13% cumulative over the next 30 months, which translates into annualized returns on stocks of 5-6%. JP Morgan's chief strategist projects annual returns of 4-6% over the next 5 years. Very few credible strategists now anticipate equity returns exceeding 10% annually in the near future, the level necessary to sustain our actuarial discount rate. Generally, these independent forecasts could not support continuation of a short-term 7.25% discount rate for prepayments now that market levels have enjoyed this level of price appreciation without a major correction.

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

(As a side-note for the record, I want to make it clear that these shorter-term forecasts are distinguished from longer-term views on the portfolio's expected returns over a 30-year horizon. With that multi-decade perspective, I continue to agree with the most recent NEPC projections of long-term expected returns meeting or even exceeding our actuarial discount rate gross of fees. Recent research on periods following "lost decades" by Brian Belski of BMO, who forecasts a 10-year future return on stocks averaging 10.5%, would support the longer view that OCERS' discount rate is sensible for the extended run. My independent [2011] historical market research using data from the 1932-1945 era supports those conclusions using rolling multi-decade returns from analogue periods beginning during the Great Depression -- including the worst possible year to buy stocks during that era, 1937. That said, a short-term prepayment discount rate can rationally be set lower than the long-term actuarial discount rate, which is exactly my point in this memo.)

As we learned earlier this year, the OCERS portfolio includes significant levels of un-deployed capital for private equity and direct lending commitments that cannot be called into use promptly and effectively during a cash-flow spike -- which thus results in short-term surplus cash from prepayments becoming invested in the cash overlay program which is subject to market price volatility for public securities. As noted in February this year, early losses on prepayments cannot be recovered by subsequent market recovery once cash is then disbursed for benefits, so there is an asymmetrical risk element in play here.

The prepayment program is a riskless arbitrage to plan sponsors, who enjoy an above-market risk-free rate of interest that is double the long-term risk-free rate on Treasury bonds. OCERS' portfolio bears the entire short-term risk of underperformance, which would then be passed along to stakeholders in the form of higher contribution rates to fund incrementally higher UAAL.

If investment returns were either totally consistent at the discount rate, or if returns were totally random, a long-term policy offering discounts to the plan's own sponsors would be a "good bet for everybody." But stock returns are cyclical, not linear or random, as 88 years of market history has shown. Stock market downturns tend to be steep and sharp, which results in significant underperformance in down years which is aggravated by the prepayments which earn a positive return while the portfolio is suffering. Leverage is wonderful on the upside but it's miserable on the downside. Even when the shortfall is modest, and the portfolio earns a positive return but less than the discount rate, the subsidy given to employers is a performance reduction for the portfolio.

Ultimately, this is a board decision which requires assessment of a complex array of factors and considerations. In this case it is reasonable for trustees to consider the long-term benefits to plan sponsors of the risk-free arbitrage they enjoy over multiple years. As your investment fiduciary, however, I am obligated to address the risks and challenges this presents to the investment portfolio and its achievement of target returns *in the sole interest of beneficiaries, not necessarily the plan sponsors*. Where possible, I strive to suggest sensible, defensible policies that can mitigate that risk while enabling plan sponsors to benefit from the program where prudent, and also to plan their budgets. My recommendation is therefore to constrain the free ride during years when the economy has surpassed the point of economic expansion and stocks are trading at

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

record levels, and to either shave the prepayment discount rate or the prepayment levels until the next business up-cycle resumes, at which point a return to the actuarial assumed rate of return and full prepayments would again be justifiable. Over time and over business cycles, this approach should systematically result in higher portfolio returns and lower UAAL for all plan sponsors than a practice of granting the full actuarial assumed rate of return as a discount rate for prepayments every year.

At OCERS' May staff meeting with plan sponsors (predominantly Finance Executives or Managers) I reported my general concerns in order that they could be forewarned of this issue well in advance of your meeting today, and ahead of next year's policy implementation timetable. At that briefing I stated that I would not recommend a lower prepayment discount rate than 7% this coming year, if that rate were coupled with the 50% prepayment limitation. I also suggested then that it would seem prudent to me that the discount rate would be set lower in the later years of the business cycle in a systematic fashion.

On June 18, Mr. Delaney, Ms. Shott and I met with several county financial officials to discuss prepayment policy options from an administrative and operational standpoint. Although they obviously and generally would prefer to maintain a continuous program to maximize the county's short-term budgetary interests, a minority acknowledged the legitimacy of the investment issues raised above. Their strongest, and universal, suggestion was that if the program must be modified, that the policy structure should be long-term and have an element of predictability and consistency rather than unpredictable, episodic annual *ad hoc* "tinkering" with different formulas, so that they can better anticipate changes -- even if those are responsive to market or economic conditions which the plan sponsors can monitor and measure objectively. The CIO recommendations above have been refined with that thought in mind: There would always be a prepayment option for the Board to consider each year, and there would be a choice for the employers during "late-cycle years" to elect between a reduced prepayment discount rate vs a smaller prepayment level that continues to enjoy the long-term discount rate. This would facilitate longer-term financial planning and optimal treasury management through all phases of the business and market cycles, while systematically reducing the risk of short-term underperformance by OCERS that would increase UAAL.

In another decade, when OCERS' cash flows turn negative and disbursements to retirees exceed incoming contributions, the disadvantage of prepayments during recessions may be different. In that scenario, I believe there could be value in having positive cash infusions during investment drawdown periods although I have not yet done the math. My point here is that our positive cash flow status through 2021 is one reason a full-cycle prepayment strategy requires a closer look until then.

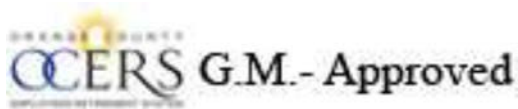
My recommendation is not failsafe and certainly does not eliminate market risks from the prepayment program, but I do believe it provides a prudent, defensible and sound multi-year fiduciary policy approach that will look far wiser in retrospect in periods when our investment returns fall short of the long-term actuarial rate. Over time, the recommended policy above would be expected to produce enhanced and positive actuarial results by encouraging full prepayments during opportune phases of the business cycle, and trimming or disincentivizing

ORANGE COUNTY EMPLOYEES RETIREMENT SYSTEM

them in less-favorable periods. Only in the most extreme market cycle conditions (either a recession underway or when the board has invoked extraordinary portfolio risk controls) would the recommended policy anticipate suspending the program on a prospective basis for one year, if the Board were to make that fiduciary determination *in extremis*. Plan sponsors should be appreciative of these measures to optimize the value of the OCERS portfolio and reduce UAAL, even if it reduces their opportunity for risk-free arbitrage during periods of heightened portfolio risk. The time frames and policy framework I have suggested will also be consistent with our Investment Committee's inevitable cyclical portfolio risk management dialogue in coming years.

Prepared by:

Approved:



A handwritten signature in blue ink that reads 'Steve Delaney'. The signature is written in a cursive style and is positioned above a horizontal line.

Girard Miller CFA
Chief Investment Officer

Steve Delaney
Chief Executive Officer



THE SEGAL COMPANY

100 Montgomery Street Suite 500 San Francisco, CA 94104-4308

T 415.263.8200 F 415.263.8290 www.segalco.com

July 10, 2013

Ms. Brenda Shott
Assistant CEO -Internal Operations
Orange County Employees Retirement System
2223 Wellington Avenue
Santa Ana, CA 92701-3101

Re: Early Payment of Employer Contributions Program

Dear Brenda:

As we discussed, we are providing some discussion points on what discount factor to apply when an employer chooses to prepay its contributions. We start with some actuarial background and then consider the issue from a policy perspective.

ACTUARIAL CONSIDERATIONS FOR SELECTING DISCOUNT FACTOR

Normally, the employer and the members make their contributions to the System at the end of every pay period. However, our valuation software (like most such programs) produces annual contributions as if payable on the valuation date, i.e., in a single payment at the beginning of the year. For that reason, in the actuarial valuation, we have adjusted the contribution rates by adding about one-half year of interest at the same rate as the long-term investment return assumption (currently 7.25% per year) to account for the collection of the contributions, on the average, at around the middle of the year.

That is why, if the employer were to make its contributions at the beginning of the fiscal year, it would usually be thought appropriate to remove the interest adjustment (calculated at 7.25% per year) built into our contribution rates. In other words, we are not so much giving an interest credit for early payment as we are removing the interest charge for paying after the beginning of the year.

Note that even if the System were to earn an average of exactly 7.25% per year in the long-run, there would be some years where the actual returns would be higher than 7.25% while in other years they would be lower than 7.25%. For those retirement systems with only a single employer, this simply means that there would be some short-term actuarial gains/losses that would result in lower/higher contributions to that employer when that actuarial experience is recognized in subsequent valuations. The point is that the employer ends up paying for these short-term gains/losses over the amortization period so the only effect on the plan is the timing

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of when payments are made. The employer does not win or lose relative to the plan since ultimately the employer pays for the gains/losses.

However, because OCERS is multiple employer plan and not every employer participates in the prepayment, it is true that those short term actuarial gains/losses would be pooled and the contribution rate impact would be shared with all employers (including those that are not participating in the prepayment). Still, that risk (of paying lower or higher contributions in subsequent valuations) is borne by the employers and not by OCERS. Therefore, from an actuarial perspective this is not about protecting the plan from contribution timing decisions by the pre-paying employer; rather it is about how short-term investment risk is shared between the pre-paying employers and those who do not pre-pay.

POLICY CONSIDERATIONS FOR SELECTING DISCOUNT FACTOR

The Board may find it desirable to reduce the short-term investment risk that is pooled among the employers by using a lower short-term discount rate for the prepayment calculation. However, we suggest that the Board should consider the following factors as part of its deliberations:

1. As it was pointed out by Girard Miller in his email to other OCERS management staff dated June 25, 2013, there is no single rate that may be suitable for use in determining the prepayment amount in all future circumstances. Therefore, any particular method for selecting that rate may be viewed by some as being somewhat arbitrary, and lacking in the sort of experience and standards that are available when selecting the long-term earnings assumption. This could be a particular concern going forward as short term rates can be much more volatile than the long-term earnings assumption.
2. There should be a clear understanding of what problems or concerns are being addressed and who is raising them. As discussed above, we question whether it is entirely correct to say (quoting from the end of Girard's e-mail) "we do need to protect ourselves from the performance risk to OCERS". Unless there are cash flow issues, generally, the performance risk is on the employers, not on OCERS, and so the main policy issue here is risk sharing among the employers, and not between the employers and OCERS.
3. Using a short-term discount rate introduces another economic assumption into the operation of the plan. Consider that, before the Board approved the 7.25% as the long-term investment return assumption, it had lengthy discussions with its advisors and all the stakeholders. If the Board wishes to adopt a different rate for the short term, would that mean that OCERS should go through another similar process of exposure and discussion?
4. Beside the prepayment, there may be other OCERS procedures that also use the 7.25% investment return assumption, e.g., members may be permitted to redeposit their contributions in installments by paying interest at 7.25%. If that is the case, should any

Ms. Brenda Shott
July 10, 2013
Page 3

of those procedures be changed to use a more short-term rate? We do not necessarily believe so but the question could be raised – if we think we will earn less in the short run then why are we charging members at the higher long-term rate?

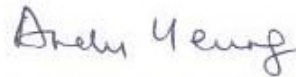
In conclusion, while this is not an issue we would have raised, Segal believes that the Board may adopt a lower discount rate for determining the prepayment amount after careful considerations of the above and any other relevant policy ramifications. If the Board decides to do so then, as Segal is not expert in the selection of short term discount rates, we would defer to the opinion of OCERS investment staff (and any other outside expert staff chooses to consult) on the method of selecting a short-term discount rate.

We look forward to discussing this letter at your next meeting and to answering any questions.

Sincerely,



Paul Angelo, FSA, MAAA, FCA, EA
Senior Vice President and Actuary



Andy Yeung, ASA, MAAA, FCA, EA
Vice President & Associate Actuary

MYM/bqb

cc: Steve Delaney
Girard Miller
Julie Wyne

Attachment Nos. 4-5

On file in the Office of the Clerk

The New York Times

A Fired Banker and Monroe Capital's Public Suit

By MICHAEL J. DE LA MERCED

June 23, 2014 8:28 pm

When Warren Woo, a deal maker at UBS, left the Swiss bank in 2007 to start his own firm, he named his family office Breakaway Capital.

Years later, that choice of name has proved prescient.

Since decamping from UBS, Mr. Woo — who subsequently jumped to two other firms — now finds himself defending accusations by his most recent employer, the lender Monroe Capital, that he stole confidential information to help start a competitor.

It's unusual that any company, let alone a risk-averse financial firm, would want to publicize firing an employee for cause. But Monroe Capital hasn't been shy in letting the world know that it fired Mr. Woo for what its chief executive, Theodore L. Koenig, called "serious violations of company policies."

The firm's lawsuit against its onetime employee tells a tale of deceit in which the banker forwarded over 300 messages of confidential information to his Breakaway email address over the past year and a half. Among the data were analyses of incoming deals and financial information of Monroe Capital clients.

Mr. Woo regularly deleted the messages from his sent folder after forwarding them.

The lender became aware of Mr. Woo's email habits only this month when the Securities and Exchange Commission sent a subpoena requesting information about Breakaway Capital, according to the lawsuit.

Within a week of receiving the S.E.C.'s request, Monroe Capital's management decided to fire the executive for cause. It then filed suit against Mr. Woo in a state court in Illinois, where Monroe Capital is based.

"Right now, our focus is to recover the information which he took and to prevent its use for anything but Monroe Capital purposes," said Michael Dockterman, a lawyer for the firm.

Neither Mr. Woo nor his lawyer returned calls or emails seeking comment. But in court filings, the banker is seeking to relocate the case to Federal District Court in Chicago.

The lawsuit is the latest strange turn in the career of Mr. Woo, a Los Angeles native who climbed the ranks of investment banking at a number of firms before he joined UBS in 2000 as a specialist in lending and advising private equity firms.

After leaving the Swiss bank in 2007, he spent roughly a year at Moelis & Company, the boutique investment bank run by his former UBS supervisor, Kenneth D. Moelis. Around the same time, he joined a group to buy the Nashville Predators hockey team.

And after he left UBS, Mr. Woo set up Breakaway Capital, initially to become a full-service advisory firm. But his efforts initially led nowhere.

Mr. Woo resurfaced in 2011, when Monroe Capital announced that it had hired him to lead its nascent Los Angeles office and run its West Coast operations.

At the time, Mr. Koenig praised his newest hire as "one of the most successful and respected bankers on the West Coast over his 22-year career." He was, the firm said, a rain maker who had advised on more than \$25 billion worth of deals.

At Monroe Capital, Mr. Woo became a prominent overseer of the firm's main lending fund. And he was allowed to make some investments for his own account — provided that he give his employer the chance to participate in relevant deals.

But within two years of joining, according to the lawsuit, he began forwarding trade secrets to his Breakaway Capital email. In some messages, Mr. Woo told at

least one potential client to send all future communications to the Breakaway Capital email, the suit says.

This spring, Mr. Woo filed papers in Delaware and California to do business as Breakaway Capital, working with a former private equity executive. And on Breakaway's website, the new firm claims to be a private investment firm with \$50 million in capital to invest.

Not until receiving the S.E.C.'s subpoena on June 9 did Monroe Capital begin looking into the executive's behavior. An investigation concluded that he "actively intends to use this information to compete with Monroe Capital by taking deal source leads generated by Monroe Capital."

During an emergency special meeting convened last Monday, Monroe Capital's other senior executives digested the inquiry's findings. They ultimately decided to fire Mr. Woo.

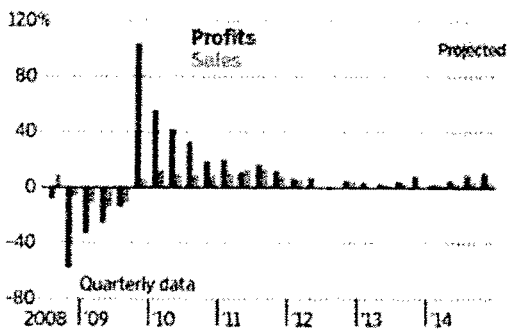
tells us we're at or above full value now. Profits must meet expectations (left chart) to sustain current index levels to avoid a meaningful correction. And if they do meet those expectations, it would set up a classic "goldilocks" third leg of a bull market, so long-term investors are damned if we do and damned if we don't. (You can each read that whatever way you want ☺ but this is clearly NOT a value investor's market now)

<http://online.wsj.com/articles/stock-investors-count-on-u-s-firms-to-earn-their-faith-1404679156>

Profit Pickup

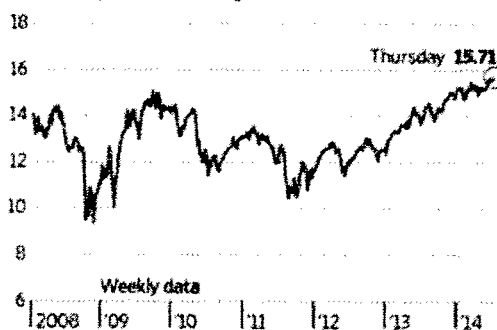
Corporate-earnings growth is forecast to accelerate this year, reassuring investors worried about lofty stock valuations.

Change from a year earlier



Source: FactSet

S&P 500 price-to-earnings ratio*



*Based on earnings forecasts for the next year. The Wall Street Journal

Girard Miller

Monroe Capital, one of our direct lenders, has filed a lawsuit against a former senior employee, as described in the article below. Staff and NEPC will monitor developments there, but do not recommend action immediately. Given the breadth of their team, and the limited level of involvement of this individual in the fund through which we invest, there is not an obvious nexus of concern unless it were to adversely impact their ability to source transactions on advantageous terms or reveal a more systemic internal control weakness. Yesterday Monroe's publicly held business development company's (MRCC) stock gained 0.42%, and this morning it's up another 0.80%, actually outperforming the industry ETF, so we do not see any conspicuous or widespread evidence of adverse capital markets reaction or a sell-off on that side of their business. Presently, Monroe has called cumulatively about 37% of their \$70 million OCERS commitments made in 2013-4; this is an illiquid strategy with an investment in their closed end fund, not a separate account, thus there are limited actions OCERS could take barring a major fiasco.

CONSENT CALENDAR - AGENDA ITEM NO. 4
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Jon Jones, Interim Assistant Chief
Operations Department

SUBJECT: **Acceptance of DHS/FEMA Administrative Preparedness Grant**

Summary:

This item is submitted for approval for acceptance of a 2014 grant award from the Department of Homeland Security/Federal Emergency Management Agency's (DHS/FEMA) National Urban Search and Rescue (US&R) Program. This request is being submitted in the anticipation of the grant being awarded on September 1, 2014.

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Adopt the submitted resolution to accept the Department of Homeland Security/Federal Emergency Management Agency's (DHS/FEMA) Administrative Preparedness Grant.
2. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) revenues and appropriations in the amount of \$1,164,131 for the US&R Program.

Background:

California Task Force Five (CA TF-5), located in Orange County and sponsored by the Orange County Fire Authority, is one of 28 National US&R Task Forces. CA TF-5 has used past grant funds and activation reimbursements to equip and train the task force members for the mission of rescuing victims in collapsed structures and for weapons of mass destruction/terrorist responses.

Currently, CA TF5 maintains a response capability that includes apparatus and equipment supply inventory worth approximately \$8 million. There is also a personnel cadre of over 210 members, composed of a civilian element of structural engineers, disaster canines, and physicians, as well as firefighters from the participating agencies of Anaheim, Orange and the OCFA.

DHS/FEMA has authorized a grant award of \$1,150,631 to each US&R Task Force for the administration of an approved National Urban Search and Rescue Response System. CA TF-5 will receive an additional \$12,000 for Chief Richter's position of Western Region Sponsoring Agency Chief Representative and \$1,500 to support the Incident Support Team Medical cache. This brings us to the final grant total of \$1,164,131. This grant money is available for use beginning September 1, 2014, through February 28, 2016.

The fiscal year of 2014/2015 is the 12th year that the US&R grant funds have covered a more realistic share of the costs of the program. This year's grant funds are divided into four major categories, and the DHS/FEMA/US&R Program is allocating funds in the following amounts to our Task Force for these specific categories:

- q *Administration*
 - \$369,887 for administration of the program
- q *Training*
 - \$268,200 for training delivery (including travel expenses)
- q *Equipment/Cache*
 - \$171,935 for equipment acquisition, HazMat, water rescue equipment and other Task Force expenses
- q *Storage and Maintenance*
 - \$354,109 for storage and maintenance of cache equipment

The purpose of this agreement is to continue the development and maintenance of the National US&R Response System resources to be prepared to provide qualified, competent US&R personnel in support of all US&R activities/incidents under the Federal Response Plan.

Impact to Cities/County:

Not applicable.

Fiscal Impact:

\$1,164,131 increase in General Fund (Fund 121) revenue and appropriations in the FY 2014/15 budget.

Staff Contacts for Further Information:

Jon Jones, Interim Assistant Chief/Operations Department
jonjones@ocfa.org
(714) 573-6012

Jeff Adams, Battalion Chief, Program Manager
Jeffadams@ocfa.org
(714) 323-2061

Attachment:

Proposed Resolution for Acceptance of FEMA US&R Grant

RESOLUTION NO. 2014-XX

**A RESOLUTION OF THE ORANGE COUNTY FIRE AUTHORITY
ACCEPTING THE FEMA NATIONAL URBAN SEARCH AND RESCUE
(US&R) PROGRAM GRANT TO PURCHASE US&R EQUIPMENT AND
SUPPLIES, MAINTENANCE AND REPAIR OF US&R EQUIPMENT,
TRAINING AND PROGRAM ADMINISTRATION**

WHEREAS, the Orange County Fire Authority is one of only 28 agencies in the country selected to participate in the FEMA's National US&R Response System; and

WHEREAS, OCFA entered into a tri-party agreement with FEMA and Cal-OES, who provides oversight and additional support for the program; and

WHEREAS, currently Orange County US&R Task Force 5 maintains a response capability including apparatus and equipment supply inventory worth approximately \$8 million; and

WHEREAS, Orange County US&R Task Force 5 maintains a personnel cadre of over 210 members that includes a civilian element of structural engineers, disaster search canines, physicians, as well as firefighters from the participating agencies of Anaheim, Orange and the OCFA; and

WHEREAS, FEMA has authorized a grant award of \$1,164,131 which is available for use beginning September 1, 2014, through February 28, 2016, for preparedness issues related to the Urban Search and Rescue Program.

NOW, THEREFORE, the Board of Directors of the Orange County Fire Authority does hereby resolve to accept the FEMA US&R grant to be utilized for such things as procurement of US&R equipment and supplies, maintenance and repair of US&R equipment, training and program administration. Additionally, these funds can be used for associated travel expenses for task force personnel to attend US&R related training courses, exercises, meetings, and for the management and administration of US&R activities. This includes expenses relating to task force maintenance, development, record-keeping, and correspondence.

PASSED, APPROVED, AND ADOPTED this 28th day of August 2014.

ELWYN A. MURRAY, CHAIR
Board of Directors

ATTEST:

SHERRY A. F. WENTZ, CMC
Clerk of the Authority

CONSENT CALENDAR - AGENDA ITEM NO. 5
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Jon Jones, Interim Assistant Chief
Operations Department

SUBJECT: **Acceptance of California Fire and Rescue Training Authority Urban Search
& Rescue Mobilization Exercise and Training Grant**

Summary:

This item is submitted for acceptance of a 2014 grant agreement from the California Fire and Rescue Training Authority (CFRTA). This grant agreement providing the OCFA with \$100,000 is made available for the Urban Search & Rescue (US&R) Task Force directly from the California Office of Emergency Services (CAL-OES). The grant is intended to help support the performance of a US&R Task Force mobilization and deployment exercise (MOBEX).

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Adopt the proposed resolution to accept the California Fire and Rescue Training Authority Agreement for a grant in the amount of \$100,000.
2. Approve and authorize the Fire Chief or his designee to execute the proposed grant agreement.
3. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) revenues and appropriations in the amount of \$100,000 for the US&R mobilization and deployment exercise.

Background:

California Task Force Five (CA TF-5), located in Orange County and sponsored by the Orange County Fire Authority, is one of 28 National Urban Search and Rescue (US&R) Task Forces. CA TF-5 has used past grant funds and activation reimbursements to equip and train the task force members for the mission of rescuing victims as a result of a natural disaster, man-made disaster or weapons of mass destruction/terrorist responses.

Currently, CA TF5 maintains a response capability that includes apparatus and equipment supply inventory worth approximately \$8 million. There is also a personnel cadre of over 210 members, composed of a civilian element of structural engineers, disaster canines, and physicians, as well as firefighters from the participating agencies of Anaheim, Orange and the OCFA.

California Fire and Rescue Training Authority (CFRTA) has authorized a grant award of \$100,000 to each US&R Task Force for the administration of an approved National US&R Task Force mobilization and deployment exercises. Of this grant money, \$25,000 is available for use immediately for planning and preparation expenses, and the other \$75,000 is available for reimbursable cost after the completion of the exercise.

The purpose of this agreement is to continue the development and maintenance of the National US&R response system resources to be prepared to provide qualified, competent US&R personnel in support of all US&R activities/incidents under the Federal, State and local Response Plans.

Impact to Cities/County:

Not applicable.

Fiscal Impact:

\$100,000 increase in General Fund (Fund 121) revenue and appropriations in the FY 2014/15 budget.

Staff Contacts for Further Information:

Jon Jones, Interim Assistant Chief, Operations

jonjones@ocfa.org

(714) 573-6012

Jeff Adams, Battalion Chief, US&R Program Manager

Jeffadams@ocfa.org

(714) 323-2061

Attachments:

1. Proposed Resolution for Acceptance of CFRTA US&R MOBEX Grant
2. Proposed Agreement for Task Force Deployment Exercise and Training

RESOLUTION NO. 2014-XX

**A RESOLUTION OF THE ORANGE COUNTY FIRE AUTHORITY
ACCEPTING THE CALIFORNIA FIRE AND RESCUE TRAINING
AUTHORITY AGREEMENT TO PROVIDE FUNDING FOR A
MOBILIZATION AND DEPLOYMENT EXERCISE (MOBEX) FOR THE
URBAN SEARCH AND RESCUE (US&R) PROGRAM**

WHEREAS, the Orange County Fire Authority is one of only 28 agencies in the country selected to participate in the FEMA's National US&R Response System; and

WHEREAS, currently Orange County US&R Task Force 5 (CA-TF5) maintains a response capability including apparatus and equipment supply inventory worth approximately \$8 million; and

WHEREAS, Orange County US&R Task Force 5 maintains a personnel cadre of over 210 members that includes a civilian element of structural engineers, disaster search canines, physicians, as well as firefighters from the participating agencies of Anaheim, Orange, and the OCFA; and

WHEREAS, The California Fire and Rescue Training Authority has authorized a grant award of \$100,000 to CA-TF5 which is available for use beginning July 1, 2014, through June 30, 2015, for a Mobilization and Deployment exercise.

NOW, THEREFORE, the Board of Directors of the Orange County Fire Authority does hereby resolve to accept the California Fire and Rescue Training Authority grant to be utilized for the development and implementation of an Urban Search and Rescue Mobilization and Deployment exercise in April/May of 2015.

PASSED, APPROVED, AND ADOPTED this 28th day of August 2014.

ELWYN A. MURRAY, CHAIR
Board of Directors

ATTEST:

SHERRY A. F. WENTZ, CMC
Clerk of the Authority

**AGREEMENT FOR TASK FORCE DEPLOYMENT EXERCISE
AND TRAINING**

This Agreement for Task Force Deployment Exercise and Training ("Agreement") is made on the last date written below between the California Fire and Rescue Training Authority (hereafter "CFRTA"), a California Joint Powers Authority duly formed pursuant to Government Code §§6500 et seq., and **Orange County Fire Authority**, a California Joint Powers Authority duly formed pursuant to Government Code §§6500 et seq. (hereafter "DEPARTMENT").

Recitals

1. CFRTA is desirous of having an exercise for the Urban Search and Rescue (hereafter "US&R") Task Force sponsored by DEPARTMENT.
2. DEPARTMENT has the wherewithal and has arranged to conduct training exercises during the period of *April - May 2015* at facilities selected by them.
3. The State of California Governor's Office of Emergency Services (CalOES), as a member agency of CFRTA, has allocated specific funding to CFRTA for the purposes of conducting these deployment exercises.

Terms and Conditions

1. DEPARTMENT will conduct a deployment exercise for the US&R Task Force consistent with the Deployment Exercise Drill Plans previously submitted to the CFRTA, attached hereto, and incorporated herein by reference.
2. At a minimum, the exercises will train and be evaluated on the following areas:
 - Task force leadership
 - Task Force movement by ground/air transportation
 - Local government interface
 - Hasty search evaluation
 - Base of Operations
 - Decontamination of search & rescue personnel
 - Food and water provisioning
 - Communications section operations
 - Evaluation of administrative section
 - Planning section
 - PIO
 - Safety Officer
 - Evaluation of
 - Technical information section
 - Operation section
 - Technical search
 - Canine search
 - Rescue
 - Medical section
3. DEPARTMENT will submit any changes to the Deployment Exercise Drill Plans to the designated representative of the CFRTA for approval prior to implementing the change.
4. DEPARTMENT will submit a budget for the exercise to the CFRTA at least 30-days prior to commencement of the exercise for approval by the CFRTA.

5. Exercise budgets submitted by the DEPARTMENT pursuant to paragraph 4, above, may include expenditures for: personnel, expendable or consumable items, transportation of task force personnel, sanitation facilities, fuel, food, potable water, and communications.
6. Any costs incurred and contracts entered into to fulfill this agreement must be consistent with the federal, state, and local laws applicable to the DEPARTMENT.
7. All approvals by the CFRTA must be in writing.
8. A total sum of One Hundred Thousand dollars (\$100,000) has been allocated for use by the DEPARTMENT for accomplishing the objectives identified in Paragraphs 1 and 2 of this section.
9. DEPARTMENT may spend, in advance, and be reimbursed for up to Twenty Five Thousand dollars (\$25,000) of the total sum allocated to DEPARTMENT and consistent with Paragraphs 4 and 5 herein, for Administrative Costs as defined in Paragraph 10, below. The DEPARTMENT may invoice CFRTA for these funds.
10. For the purposes of this agreement, "Administrative Costs" mean those expenses incurred by the DEPARTMENT for personnel expenditures that are associated with the planning, preparation, and managing of the exercise.
11. DEPARTMENT agrees to invoice CFRTA for costs associated with providing deployment exercise as specified in Paragraphs 5, 6, and 9 of this Agreement within sixty (60) days of the commencement of the exercise.
12. CFRTA agrees to pay the DEPARTMENT for all costs incurred consistent with this Agreement not to exceed the \$100,000 identified in Paragraph 8.
13. No amendment or variation of the terms of this Agreement shall be valid unless made in writing, signed by the parties, and approved as required. No oral understanding or agreement not incorporated in the Agreement is binding on any of the parties.

The undersigned agree to be bound by the terms of this agreement and are authorized to sign this agreement on behalf of their respective DEPARTMENT or agency.

Approved and Reviewed by:

By: _____ Date: _____
Legal Counsel, California Fire and Rescue Training Authority

By: _____ Date: _____
California Fire and Rescue Training Authority

By: _____ Date: _____
General Counsel, Orange County Fire Authority

By: _____ Date: _____
Fire Chief, Orange County Fire Authority

DISCUSSION CALENDAR - AGENDA ITEM NO. 6
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Patricia Jakubiak, Treasurer

SUBJECT: **Annual Investment Report**

Summary:

This agenda item is submitted to the Budget and Finance Committee in compliance with Section 18.2 of the Orange County Fire Authority's Investment Policy.

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of August 21, 2014, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the report.

Background:

Section 18.2 of OCFA's Investment Policy requires that the Treasurer submit an annual report to the Budget and Finance Committee and the Executive Committee following the close of the fiscal year. The attached report certifies that the Treasurer has complied with OCFA's investment policies and procedures and details the following:

- .. Portfolio performance and comparison to benchmarks
- .. A review of trends regarding the size of the portfolio
- .. Discussion of investment risk in the portfolio
- .. Analysis of the composition of the portfolio
- .. GASB 31 impacts
- .. Investment income
- .. A statement of anticipated investment fund activity in the next fiscal year

Impact on Cities/County:

Not applicable.

Fiscal Impact:

Not applicable.

Staff Contacts for Further Information:

Jane Wong, Assistant Treasurer

jane Wong@ocfa.org

(714) 573-6305

Discussion Calendar - Agenda Item No. 6
Budget and Finance Committee Meeting
August 13, 2014 Page 2

Patricia Jakubiak, Treasurer
triciajakubiak@ocfa.org
(714) 573-6301

Attachment:
Annual Investment Report for Fiscal Year 2013/14

Treasury and Financial Planning



Annual Investment Report – FY 2013/14

Orange County Fire Authority Annual Investment Report

Fiscal Year 2013/14

The Annual Investment Report for the fiscal year ended June 30, 2014 fulfills the requirements of Section 18.2 of the Authority's Investment Policy ("the Policy"). The Annual Report is a review of the last twelve months of investment activity by the Treasurer.



Annual Investment Report

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**PORTFOLIO PERFORMANCE AND
COMPARISON TO BENCHMARK**

OCFA’s portfolio performance slightly exceeded the benchmark comparisons listed below for FY 2013/14.

During FY 2013/14, the Federal Reserve Board maintained the federal funds rate, the overnight bank lending rate, at a target range of 0.0% to 0.25%, where it has been since December 2008. The economic recovery improved moderately during the year, and employment conditions continued to improve. The unemployment rate also improved, declining from 7.4% at the beginning of the fiscal year to 6.1% at the end of the fiscal year, though the rate remained elevated. The housing market continued to pick up from its lows, but both new and existing home sales were slower than a year ago, while home prices increased. OCFA’s portfolio started the year with a maturity of 289 days and an effective rate of return of 0.32%. As higher yielding investments matured and new investments yielded lower rates due to the persistently low interest rate environment, the return on the portfolio declined throughout the year. As a result, OCFA’s portfolio ended in June with a return of 0.24% on a portfolio balance of \$159 million, with 185 days to maturity. However, the portfolio performance exceeded the benchmarks, as shown below, and slightly exceeded the approved revised budget projection.

	<i>OCFA Portfolio</i>			<i>Benchmark Comparisons</i>			
	<i>Market Value</i>	<i>Days to Maturity</i>	<i>Effective Yield</i>	<i>3 Month Treasury</i>	<i>6 Month Treasury</i>	<i>1 Year Treasury</i>	<i>LAIF</i>
<i>July</i>	143,622,094	289	0.32%	0.04%	0.07%	0.12%	0.27%
<i>August</i>	121,225,361	321	0.35%	0.04%	0.07%	0.13%	0.27%
<i>September</i>	120,299,648	283	0.36%	0.02%	0.04%	0.12%	0.26%
<i>October</i>	105,949,618	308	0.35%	0.05%	0.08%	0.12%	0.27%
<i>November</i>	103,368,721	298	0.39%	0.07%	0.10%	0.12%	0.26%
<i>December</i>	180,095,611	187	0.29%	0.07%	0.10%	0.13%	0.26%
<i>January</i>	135,503,250	223	0.27%	0.04%	0.07%	0.12%	0.24%
<i>February</i>	121,167,391	232	0.32%	0.05%	0.08%	0.12%	0.24%
<i>March</i>	122,642,674	164	0.30%	0.05%	0.08%	0.13%	0.24%
<i>April</i>	170,041,794	200	0.28%	0.03%	0.05%	0.11%	0.23%
<i>May</i>	159,812,738	196	0.24%	0.03%	0.05%	0.10%	0.23%
<i>June</i>	159,315,564	185	0.24%	0.04%	0.06%	0.10%	0.23%
<i>Fiscal Year</i>	136,920,372	241	0.31%	0.04%	0.07%	0.12%	0.25%

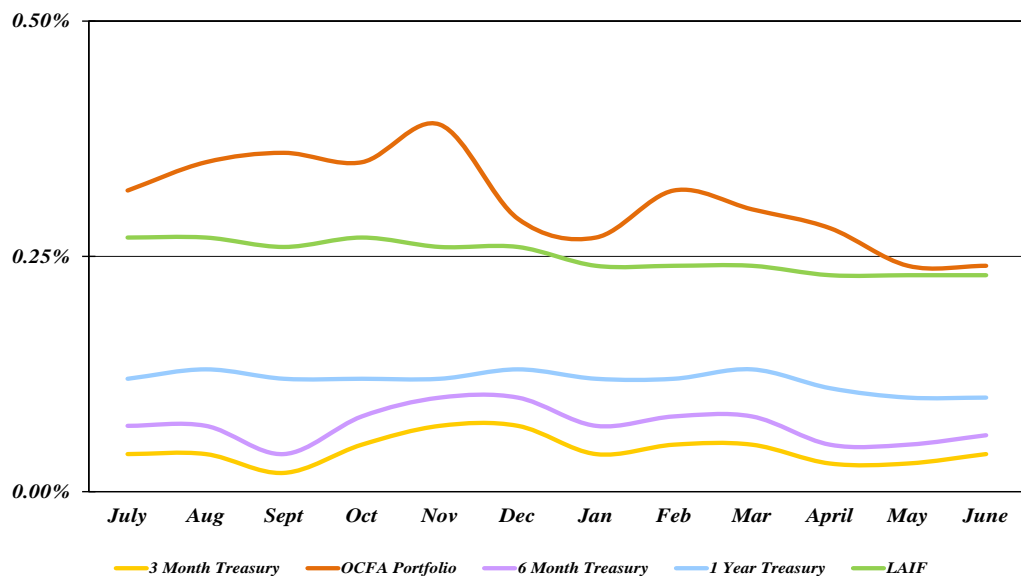


PORTFOLIO PERFORMANCE AND COMPARISON TO BENCHMARKS

The following chart compares the Authority’s monthly portfolio performance with monthly benchmarks including 3-month, 6-month, and 1-year Treasuries and LAIF. OCFA’s portfolio yield exceeded the LAIF and Treasury benchmarks during FY 2013/14.

- During FY 2013/14, Treasury yields (which move inversely to prices) stayed historically low due to the low federal funds rate set by the Fed, coupled with its asset/bonds purchasing program and consistent demand for U.S. Treasuries.
- In a declining interest rate environment, LAIF’s return tends to decline slower than the market because of their maturity structure. However, as higher yielding securities matured, LAIF also had to reinvest at lower yields, which caused its return to gradually decline throughout the year.
- OCFA kept investments primarily in Federal Agency securities, commercial paper, and LAIF which yielded higher returns compared to Treasuries. However, OCFA remains somewhat restrained due to the timing of cashflow needs. If interest rates remain at their current low levels, OCFA’s portfolio rate of return could decline further in FY 2014/15.

Comparison to Benchmarks - FY 2013/14

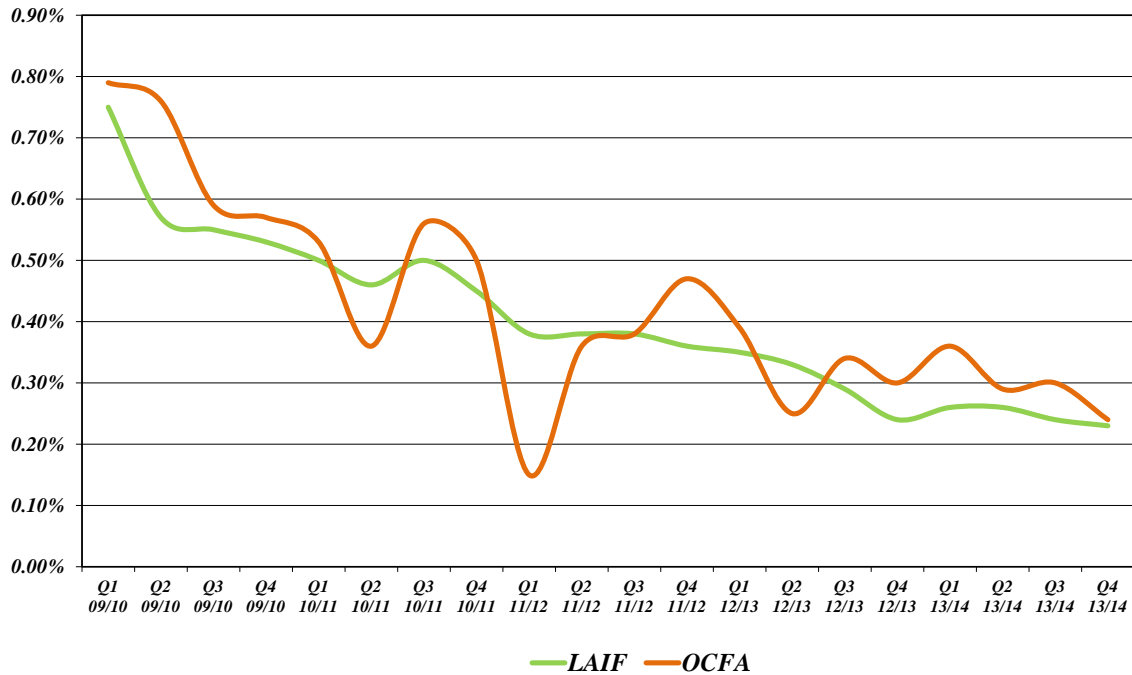




**PORTFOLIO PERFORMANCE AND
COMPARISON TO BENCHMARKS**

The following chart provides a 5-year history of the Authority’s portfolio yield from fiscal year 2009/10 through fiscal year 2013/14 compared to a 5-year history of the Local Agency Investment Fund’s yield. As demonstrated with this historical view, OCFA’s portfolio yield consistently performs very similarly to LAIF.

OCFA & LAIF Portfolio Yields - 5 Year History





**REVIEW OF TRENDS REGARDING THE SIZE OF
THE PORTFOLIO**

Portfolio balances during FY 2013/14 were slightly higher than FY 2012/13.

The size of the Authority's portfolio fluctuates over the course of a fiscal year due to timing differences between cash receipts and disbursements. Excluding financing proceeds, OCFA's largest cash receipts are from secured property taxes received in December and April and from cash contract payments received quarterly, except for the City of Santa Ana which pays monthly. Cash disbursements occur more evenly with biweekly payroll expenditures representing the largest component. These timing differences cause the General Fund to experience temporary cash shortages from August through mid-December.

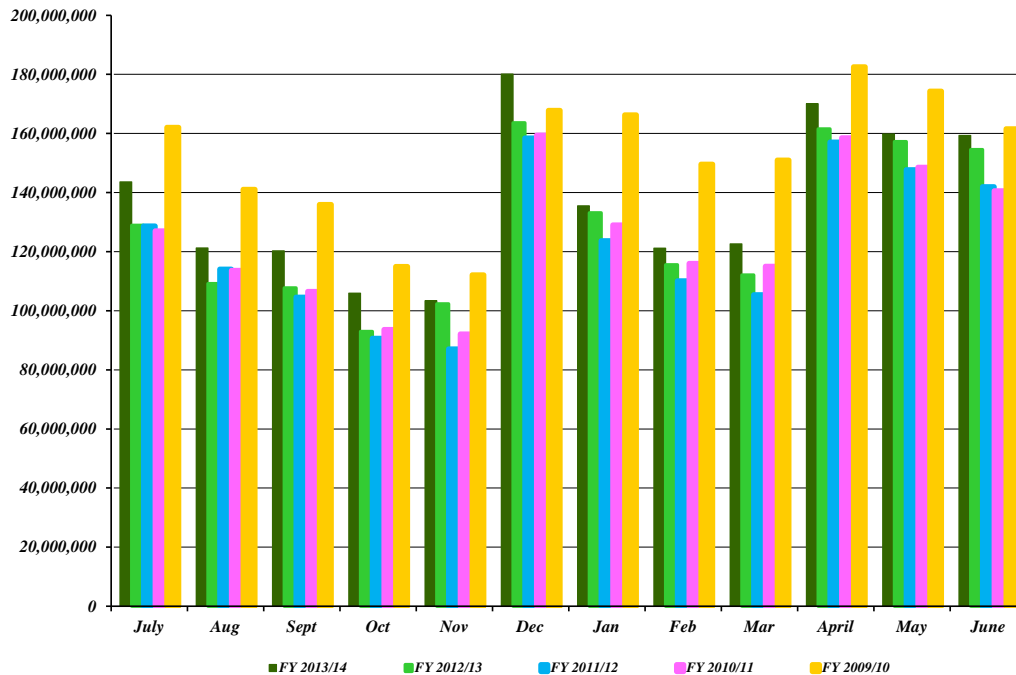
To resolve the temporary cash shortages in the General Fund, OCFA has in the past issued Tax and Revenue Anticipation Notes (TRANs). When issued, TRAN proceeds are received in July and are repaid annually in June; therefore, the ending portfolio balance at June 30th excludes TRAN proceeds. In the past few years, including FY 2013/14, OCFA did not need to issue TRANs since it was able to meet its temporary cash shortages through use of a General Fund cashflow reserve, combined with interfund borrowing. OCFA has also used lease purchase financing to fund certain capital expenditures including helicopters, vehicles, communication equipment, and information systems.



REVIEW OF TRENDS REGARDING THE SIZE OF THE PORTFOLIO

The following chart provides a 5-year history of the size of the Authority’s portfolio. During FY 2009/10, portfolio balances were higher than more recent years due to higher property taxes and the addition of lease purchase proceeds. Thereafter, the portfolio balance decreased due to lower revenues and significant expenditure increases. The declining trend reversed slightly beginning in FY 2012/13, and continued to improve in FY 2013/14. It should be noted that the balances shown below represent total portfolio balance as opposed to fund balance available. Portfolio balance is always higher than fund balance because the portfolio includes cash and investments that are already committed to various contracts and purchase orders or that are reserved for future obligations.

Size of the Portfolio - 5 Year Historical Trend





***INVESTMENT RISK IN
THE PORTFOLIO***

Although all investments contain an element of risk, OCFA's Investment Policy, procedures, and investment strategies are designed to limit exposure to risk. The different types of risk are discussed below, as they pertain to the portfolio.

Credit (Default) Risk

Credit risk is defined as the risk to an investor that an issuer will default in the payment of interest and/or principal on a security. OCFA's investment policies and practices limit credit risk by:

- Ø Limiting investments to the safest types of securities and highest quality issuers.
- Ø Specifically excluding investments in equities, corporate bonds, derivatives, reverse repurchase agreements and financial futures or options.
- Ø Avoiding investment in issuers placed on negative credit watch or with current events that involve negative financial implications.
- Ø Pre-qualifying financial institutions and broker/dealers for competitive bidding of individual investment transactions.
- Ø Diversifying investments so that potential losses on individual securities will be minimized.
- Ø Reviewing monthly reports from the State Treasurer's Office regarding the Local Agency Investment Fund.
- Ø Requiring collateralization of demand deposits, certificates of deposit and repurchase agreements. MUFG Union Bank (formerly Union Bank), as OCFA's bank, complies with all collateralization requirements for demand deposits.
- Ø Safekeeping investments by separate agreement with MUFG Union Bank's Trust Department.



***INVESTMENT RISK IN
THE PORTFOLIO***

Market Risk

Market risk is defined as the risk that the value of a security may fall as a result of changes in the financial markets, such as increases in interest rates. In periods of rising interest rates, the market value of a security can fall below the amount of principal invested. If an investor sells the security before maturity, part of the principal will be lost. OCFA reduces market risk by matching investment maturities with cash flow needs to minimize investments that may need to be sold prematurely.

Interest Rate Risk

Interest rate risk is defined as the risk that an investor will under-perform the market, as a result of holding an investment with a lower yield than the current market rate. For example, if an investor holds a one-year certificate of deposit earning 2%, and interest rates rise to 4%, the investor would incur an opportunity cost of 2%. Investors can avoid interest rate risk by keeping maturities fairly short if interest rates are expected to rise.

OCFA's portfolio reflected an average maturity under one year throughout 2013/14 due to continued low yields offered for longer-term maturities, many callable securities, and based on market uncertainty as to the future direction of interest rates.

Liquidity Risk

Liquidity risk involves the ability to sell an investment before maturity. Some short-term investments are fairly illiquid. For example, a non-negotiable certificate of deposit is an illiquid asset that carries an interest penalty for early redemption. OCFA minimizes liquidity risk by maintaining a significant portion of its portfolio in very liquid instruments, such as LAIF where funds are immediately available, or Treasury and Agency securities, which have active secondary markets.



**COMPOSITION OF THE
PORTFOLIO**

Authorized Investments

Section 10 of OCFA’s Investment Policy lists the types of securities allowable for investment. Subject to stipulated restrictions, these include Treasury and Federal Agency securities, collateralized or insured passbook savings accounts and demand deposits, collateralized or insured certificates of deposit, bankers’ acceptances, money market funds of short-term treasury securities, repurchase agreements, the Local Agency Investment Fund (LAIF), and commercial paper (rated A1/ P1/F1) by the credit rating agencies Moody’s Investors Service, Standard & Poor’s Ratings Services and Fitch Ratings, respectively.

***OCFA’s portfolio only included those investments authorized in
Section 10 of the Policy in FY 2013/14.***

Portfolio Diversification

Section 15.1 of the Policy sets parameters for portfolio diversification. OCFA’s portfolio shall not be invested in a single security type or in a single financial institution/pool in excess of 15% of the total investment portfolio, with the exception of the following:

Ø US Treasury Securities	100%
Ø Local Agency Investment Fund	75%
Ø Federal Agency Securities	75%
Ø Bankers’ Acceptances	25%
Ø Negotiable CD’s	25%



**COMPOSITION OF THE
PORTFOLIO**

Portfolio Diversification

	<i>US Treasury Securities</i>	<i>LAIF</i>	<i>Federal Agencies</i>	<i>Commercial Paper</i>	<i>Money Market Mutual Funds</i>	<i>Total Portfolio</i>
Maximum	100%	75%	75%	15%	15%	100%
FY Average	0.00%	36.36 %	52.13 %	3.77%	7.74%	100%
July	0.00%	34.98%	48.28%	6.30%	10.44%	100%
August	0.00%	37.65%	56.47%	0.00%	5.88%	100%
September	0.00%	42.33%	45.72%	0.00%	11.95%	100%
October	0.00%	47.45%	42.70%	3.80%	6.05%	100%
November	0.00%	47.59%	42.83%	3.81%	5.77%	100%
December	0.00%	27.87%	62.98%	2.23%	6.92%	100%
January	0.00%	32.06%	64.12%	0.00%	3.82%	100%
February	0.00%	33.30%	58.48%	0.00%	8.22%	100%
March	0.00%	41.10%	46.31%	6.58%	6.01%	100%
April	0.00%	29.10%	53.46%	8.73%	8.71%	100%
May	0.00%	31.35%	51.95%	9.41%	7.29%	100%
June	0.00%	31.52%	52.23%	4.41%	11.84%	100%



**COMPOSITION OF THE
PORTFOLIO**

Maturity Diversification

In order to ensure sufficient liquidity and reduce market risk, Section 15.3 of the Policy requires that at least half of the portfolio be invested for a period of one year or less. An additional 25% of the portfolio is restricted to maturities of three years or less and the remaining 25% to five years or less. The Executive Committee and Board of Directors must approve investments with maturities of greater than five years from the date of investment. In 2014, Section 15.3 of the Investment Policy was revised to “at least 50% of the portfolio is limited to a period of one year or less,” and “unless matched to a specific requirement and approved by the Executive Committee and the Board of Directors, no portion of the portfolio may exceed five years.”

OCFA’s portfolio complied with maturity diversification requirements as stated in Section 15.3 of the Policy throughout FY 2013/14, except for the months of August, October and November when investment maturities, combined with a declining portfolio balance, caused a temporary and technical non-compliance. The portfolio was brought back into compliance once its balance increased with the first large property tax receipt in December.

Market Value

Section 18.1.3 of OCFA’s Investment Policy requires monthly reporting of the current market value of the securities in the portfolio. The Treasurer reports current market values of the portfolio in both the Portfolio Summary and the Portfolio Detail sections of the Monthly Investment Report. Market values are provided monthly by MUFG Union Bank and quarterly by the State Treasurer’s Office for the LAIF investment.



GASB 31 IMPACTS

What is GASB 31?

The Governmental Accounting Standards Board’s Statement 31, titled “Accounting and Financial Reporting for Certain Investments and for External Investment Pools,” establishes rules for reporting investment valuation. The Statement generally requires governmental entities to report investments at fair value in the financial statements and to reflect the related unrealized gains and losses as a component of investment income. Different rules apply to an *internal investment pool* (consisting *only* of the governmental entity’s own funds) versus an *external investment pool* (consisting of combined funds from other legally separate entities, such as a state or county investment pool).

How Does GASB 31 Impact OCFA’s Portfolio?

At June 30, 2014, all of the Authority’s investments were reported at fair value in compliance with GASB 31 guidelines. The fair value reporting of OCFA’s investments resulted in a decrease of \$(94,166) to book value. This fair value adjustment is for financial statement reporting only.

Under GASB 31 guidelines, investment income is similarly increased/decreased for financial statement purposes. Investment income is impacted by the change in fair value of the investments from the beginning to the end of the reporting period. OCFA previously reported a decrease to investment valuation at June 2013 of \$(480,699); therefore, a gain of \$386,533 was recorded to investment earnings at June 2014 to reflect the change in fair value.

<i>GASB 31 Adjustment to Books – Beginning of year</i>	\$ (480,699.00)
<i>Net Change in Fair Value (increase to earnings)</i>	\$ 386,533.00
<i>GASB 31 Adjustment to Books – End of year loss</i>	\$ (94,166.00)



INVESTMENT INCOME

Portfolio investment income in FY 2013/14 amounted to \$411,051 (pre-GASB 31 adjustment) compared to \$389,865 in FY 2012/13. The increase in investment income was primarily due to higher average portfolio balances in FY 2013/14 as interest rates continued to remain low resulting from the low federal funds rate set by the Fed. The effective yield for the portfolio was 0.30% in FY 2013/14 compared to 0.31% in FY 2012/13. This decrease in yield was consistent with the overall bond market performance.

***ANTICIPATED INVESTMENT ACTIVITY
IN THE NEXT FISCAL YEAR***

Cash forecasts for FY 2014/15 are based primarily on the 2014/15 Adopted Budget. OCFA's Adopted Budget reflects revenues which are in balance with expenditures for the year, and the Budget will enable OCFA to sustain its reserves at the Board-mandated policy level. It is anticipated that the CIP Reserves will continue to be spent down this year on planned projects. Due to a projected short-term cashflow deficit in FY 2014/15 and insufficient interfund borrowing capacity to cover the projected cashflow deficit, OCFA issued \$44 million of Tax and Revenue Anticipation Notes (TRANs) on July 1, 2014. As a result, the portfolio's balance is expected to increase throughout the year but will decline at the end of the fiscal year when the TRAN is repaid on June 30, 2015.

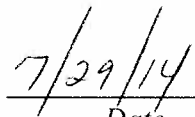
In addition, based on the Fed's latest slower growth rate forecast for 2014, market expectations are that the first possible rate increase by the Fed will likely take place in mid-2015. Thus, interest rates are expected to remain low during FY 2014/15 which may result in a decline in investment income (net of TRANs) over last year.



TREASURER'S CERTIFICATION

“As Treasurer of the Orange County Fire Authority, I certify that I have complied with the annual Investment Policies adopted by the Board of Directors and effective January 1, 2013 and January 1, 2014.”


Patricia Jakubiak
Treasurer


Date

DISCUSSION CALENDAR - AGENDA ITEM NO. 7
BUDGET AND FINANCE COMMITTEE MEETING
August 13, 2014

TO: Budget and Finance Committee, Orange County Fire Authority

FROM: Lori Zeller, Assistant Chief
Business Services Department

SUBJECT: **Implementation of Internal Control Audit Recommendations - Community Risk Reduction Department**

Summary:

This agenda item is submitted to receive and file the status update on the implementation of the internal control audit recommendations in the Community Risk Reduction (formerly Fire Prevention) Department.

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of August 28, 2014, with the Budget and Finance Committee's recommendation that the Board of Directors:

1. Receive and file the report.
2. Approve continuation of the professional services provided by Mr. Irwin Bornstein, on a part-time basis and at six-month intervals, for an estimated cost of \$10,000 at each six-month interval through calendar year 2015.
3. Authorize a budget adjustment increasing the FY 2014/15 General Fund (121) appropriations by \$10,000 to fund the cost of continued-intermittent services provided by Mr. Bornstein, with one six-month review scheduled to occur during 2014/15 (January 2015).

Background

In March 2013, the audit firm of Lance Soll and Lunghard (LSL) reviewed the internal controls over fee-related activities in the Community Risk Reduction Department (CRR) and offered 22 recommendations for improvements. In August 2013, OCFA hired Irwin Bornstein (retired Assistant City Manager/Director of Administrative Services from the City of Mission Viejo) as a Part-Time and Limited-Term Finance Manager, specifically to assist CRR with implementation of the recommendations. During the course of Mr. Bornstein's work, he identified an additional 14 recommendations for improvements, resulting in a combined total of 36 recommendations for implementation.

Status of the Recommendations from the Consultant Report - Summary

As of June 23, 2014, 13 of the 36 audit recommendations were fully implemented and operational. Some action has been taken on an additional 19 recommendations. No action has been taken on two; two are no longer applicable and two require no further action. The approach taken by staff to address many of the audit recommendations has been to formalize and expand upon existing Quality Control (QC) procedures. Attachment 1 was provided by Mr. Bornstein

and reflects a summary of his work at OCFA, and detailed status updates of the audit recommendations.

Because a large number of the audit recommendations are still in the process of being implemented, many of the new controls are not yet fully in place. For some of the new procedures that have been implemented, it is too early to determine the full extent of the effectiveness, because they have been operational for a relatively short period of time. However, improvements in internal controls have resulted from the work that has been implemented. Department management has reported improvements in the quality of work products, and they have noted a better understanding among staff of the need for change and why new review practices are important.

During the seven-month vacancy period in the Fire Marshal position, the four Deputy Fire Marshals in the Department continued to give a high level of attention to the implementation of the audit recommendations. Thirty-three of the 36 recommendations pertain to the Planning and Development (P&D) and Safety and Environmental Services (S&ES) Sections of the Department, with roughly an equal amount in each of these two sections. The S&ES Section has been able to fully implement and make operational the majority of their audit recommendations. Their expanded QC procedures have been in place for 60 days. A major hindrance for P&D has been the heavy workload of plans to review and inspections to conduct, as a result of the major development activity occurring in the county. New QC procedures have been developed in P&D, but the workload has hindered their progress in making the new procedures operational. The staff's efforts to date have had positive impacts on four of the five components of internal controls described by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) Internal Control Framework – control activities, control environment, risk assessment and information and communication.

While the department has made substantial progress in implementing the audit recommendations, a significant amount of work remains to be done. The challenge will be to identify and devote sufficient resources to support both the timely processing of peak workloads as well as the implementation of the audit recommendations and continued execution of the new control procedures going forward. Recent hiring and promotional activity to fill the Fire Marshal vacancy, and many other vacant positions throughout the Department, is anticipated to provide a positive impact.

In the long term, sustainability of the improvements to CRR internal controls will require a modern and efficient information system, sufficient staffing resources and continued management focus. Additional training on internal controls will be important as will the ongoing monitoring of internal controls. Monitoring can take the form of both “built-in” monitoring that is integrated into department operations as well as periodic external reviews.

OCFA Response to Consultants Report

Since the June 23 report, 10 additional recommendations have been implemented and are operational. No action has been taken on two of the recommendations; two of the recommendations are no longer applicable and two require no further action.

OCFA management and staff remain committed to implementing the remaining audit recommendations. Recently, CRR has hired additional personnel to handle the increased workload, implement the audit recommendations and continue carrying out the new internal control procedures. In addition, the Information Technology Section is continuing its effort to identify a feasible technology solution to serve the needs of the Department and further enhance controls.

In order to continue building on these initial successes, and further enhance the internal control environment, staff is recommending continued services from Mr. Bornstein at six-month intervals. Ideally, Mr. Bornstein could return each six-months, perform updated independent reviews of progress, and measure the effectiveness of new internal controls. With the baseline understanding that he has gained during his work at OCFA over the past year, we anticipate that it would require approximately one month of part-time work (roughly 100 hours) by Mr. Bornstein at each six-month interval, to refresh the status and provide updated input and guidance to staff, management, and the Board. For calendar year 2015, we'd anticipate his return in January and July, for an estimated cost of \$10,000 at each six-month interval. Staff would then return to the Budget & Finance Committee and Board in August 2015 with an update, including a timeline outlining any remaining recommendations to be implemented.

Impact to Cities/County:

Not Applicable.

Fiscal Impact:

An approximate cost of \$100,000 was estimated for services provided by Mr. Bornstein during FY 2013/14; however, actual costs incurred only totaled \$62,000. The additional hours of intermittent work at six-month intervals, as recommended, would cost approximately \$10,000 every six months.

Staff Contacts for Further Information:

Lori Smith, Assistant Chief/Fire Marshal
Community Risk Reduction

lorismith@ocfa.org

(714) 573-6016

Lori Zeller, Assistant Chief
Business Services Department

lorizeller@ocfa.org

(714) 573-6018

Attachment:

Report on the Implementation of Internal Control Audit Recommendations - Community Risk Reduction Department

Report on the Implementation of Internal Control Audit Recommendations in the Community Risk Reduction Department

Irwin Bornstein, Finance Manager
Orange County Fire Authority
June 23, 2014

Background:

In August of 2013, I was hired by OCFA to assist the Community Risk Reduction (CRR) Department with their implementation of recommendations made by the auditing firm of Lance Soll & Lunghard in March 2013 to improve internal controls over the fee-related activities within the department. I am a CPA and a retired Assistant City Manager/Finance Director with over 35 years of experience working with California municipalities.

My assignment was to work closely with CRR department management and to assist them by enhancing their understanding of the audit recommendations and providing onsite expertise in standard internal control practices. At the same time, my role involved getting an in-depth understanding of department operations in order to provide the most effective guidance on the best methods for implementing the auditors' recommendations. I envisioned my role as a "bridge" between the auditors and staff, to be both a translator and facilitator. While working directly with CRR department management, I reported directly to the Fire Chief.

The duration of the assignment was estimated at between six months and one year. My work was divided into four phases. Phase I was the initial "learning" phase, covering the documentation and assessment of current department work processes involving fee-related activities. Phase II was the "recommendations" phase, the product of which was my evaluation of the auditor's 20 specific recommendations, suggested modifications to certain of their recommendations and the making of 14 additional recommendations to improve internal controls within the department. During these two phases, department staff initiated a number of efforts to implement the auditors' recommendations, and I was involved with assisting them by answering questions and providing technical expertise when needed. Phases I and II were completed in early February 2014.

Phase III occurred during the period February through May, 2014. This was the "staff evaluation and implementation" phase, during which CRR department management was to further evaluate the auditors' recommendations as well as my additional recommendations, continue with and complete implementation, and to commence functioning with the new internal control procedures. Phase IV, the "evaluation" phase, occurred during late May and June, and was recently completed. This phase assessed staff's implementation efforts to date, the effectiveness of the new procedures, the need for any "course corrections" and the sustainability of the strengthened internal control environment going forward.

The approach that was followed to conduct the assignment relied on the review of existing department policies and procedures related to fee-supported activities, interviews with the auditors and key department staff, participation in group discussions and observation of work practices. Process narratives and flowcharts were prepared for the major business processes in the department, which can serve as reference and orientation material for current and future employees, respectively.

Internal Controls and the Audit Recommendations:

In their audit report, the Lance Soll & Lunghard auditors enumerated the four major objectives of internal controls as they relate to financial activities: to ensure that transactions are recorded properly, accounted for correctly, executed in accordance with laws and regulations and funds are properly safeguarded against potential risks of loss. They referenced the Internal Control – Integrated Framework (COSO Report), published by the Committee of Sponsoring Organizations of the Treadway Commission. COSO is a joint venture of five accounting, auditing and financial executive organizations dedicated to providing guidance and leadership on the issues of enterprise risk management, internal controls and fraud deterrence. COSO's Internal Control – Integrated Framework has become a standard reference in the field. The Framework divides internal controls into five components:

- The Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring

The Lance Soll & Lunghard review focused on the third Framework component, Control Activities, and involved 41 audit procedures to evaluate various control activities for the fee-related activities within the CRR department. Those 41 audit procedures resulted in 22 specific recommendations for improvement, covering the areas of Front Counter Procedures, Plan Review, Scheduling, Code Enforcement (Annual Inspections/Permits), Hazardous Materials Disclosure, CalARP (the California Accidental Release Prevention program), False Alarms, Special Events and Information Technology.

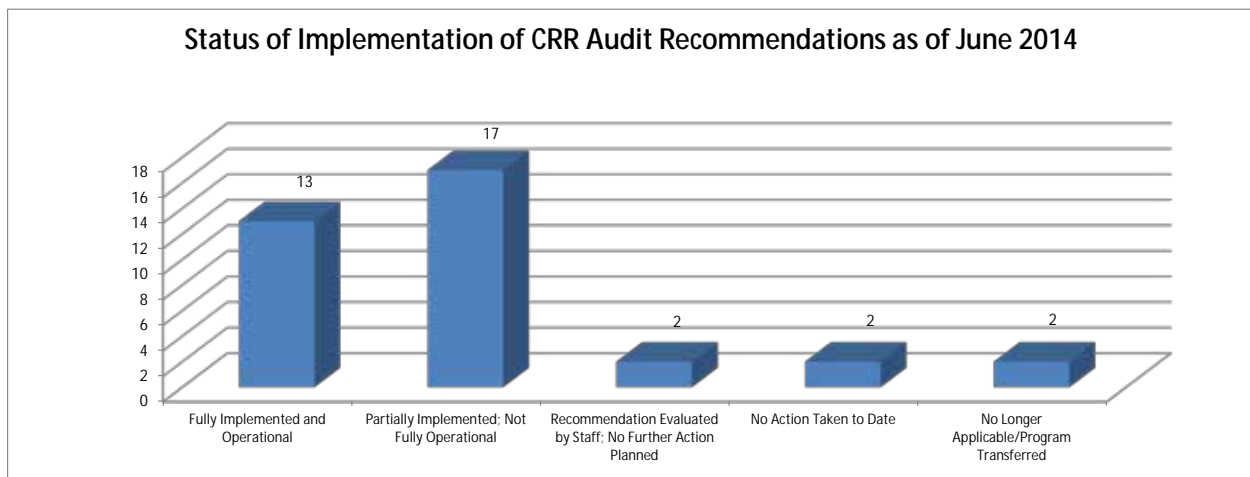
As part of my further study of both the auditors' recommendations and the department's business practices, I identified and reviewed additional control activities within these same areas, as well as control activities related to five other fee-related functions within the department (New Construction Inspections, Property Public Records Requests, Care Facilities, Wildland/State Responsibility Areas and Restitution Fees). This resulted in 14 additional recommendations for internal control improvements, for a grand total of 36 recommendations.

All of the recommendations are listed on the attached Community Risk Reduction Department Internal Control Audit – Summary of Recommendations spreadsheet (Attachment 1a). The spreadsheet includes, for each of the 22 recommendations made by the auditors: the auditors' observations and recommendations, management's response that was included in the audit report, process changes initiated or completed by staff through January 2014, additional management comments, my analysis and recommendations related to the auditors' findings and staff's implementation efforts, and the current status of implementation as of June 2014. (The auditors' recommendations are numbered using the numbers that appeared in their March 2013 audit report. Since not all of their 40 audit procedures resulted in recommendations, these recommendations are not consecutively numbered.) For the additional 14 recommendations that I added as a result of my study (items (a) through (n)), the attachment denotes my observation, analysis and recommendation, process changes initiated or completed by staff through January 2014, management comments, and the current status of implementation as of June 2014.

Status of Implementation Efforts

The final set of 36 recommendations was provided to CRR department management in February 2014 for their follow-up. As noted earlier, department management had already begun to take action on a number of the recommendations prior to February. During the February – June time period, management was to continue with implementation efforts already begun and to make final decisions on which remaining recommendations to implement and to commence implementation on those recommendations.

The following chart summarizes the current status of implementation for the 36 audit recommendations.



As of June 2014, CRR Department management has taken at least some action on 32 of the 36 audit recommendations (see Attachment 1b). No action has been taken yet on two of the recommendations and two of the recommendations are no longer applicable because responsibilities for the referenced programs have been transferred to agencies other than OCFA.

Thirteen of the 36 recommendations have been fully implemented and the new policies and procedures are fully operational. The majority of the fully implemented recommendations are in the Code Enforcement/Annual Inspection area. In summary, they are:

Table 1. CRR Audit Recommendations – Fully Implemented and Operational		
No.	Area	Recommendation
1	Front Counter	Supervision of Front Counter
20	Code Enforcement/Annual Inspections	Inputting of inspection status and results into IFP
21	Code Enforcement/Annual Inspections	Weekly reports from IFP on annual inspection status
22	Code Enforcement/Annual Inspections	Daily review by management to ensure completed inspections are updated in IFP (timely inspections)
24	Code Enforcement/Annual Inspections	Comparison of permit issuance dates to IFP data entry dates
26	Code Enforcement/Annual Inspections	Periodic review of IFP information to ensure accuracy
27	Code Enforcement/Annual Inspections	Daily review by management to ensure completed inspections are updated in IFP (timely permit issuance)
28	Code Enforcement/Annual Inspections	Review of outstanding annual inspections; inspections completed prior to billing
38 (1)	Malfunctioning Alarms	Coding review ahead of billing transmittal to Finance
39	Special Activities	Second level of approval; additional segregation of duties
(k)	Care Facilities Inspections	Charging of fees for actual time spent
(l)	Wildland Fire Prevention for State Responsibility Areas	Clarification of program responsibilities
(n)	Investigations	Outdated policy documents regarding Restitution Fees

Some actions have been taken to date to implement the following 17 recommendations. Actions taken include policy decisions, development and approval of revised procedures and ordering of new equipment. Remaining actions to be taken on these recommendations include putting new procedures into operation, receipt and installation of equipment, and/or taking action on the remaining portion of the recommendation not yet addressed. The 17 recommendations are in various stages of implementation, as more fully described in Attachment 1a.

Table 2. CRR Audit Recommendations – Partially Implemented; Not Fully Operational		
No.	Area	Recommendation
2 (1)	Front Counter	Review of Service Request (SR) forms
2 (2)	Front Counter	Daily review of starting and ending SR #s
5	Front Counter	Review of complete and closed plan reviews; proper archiving
6, 40	Front Counter/Information Technology	Controls over edits and adjustments to SR records
(a)	Front Counter	Locked cash drawer
(b)	Front Counter	SR #s affixed to plans prior to plan approval
7	Plan Review	Second level of review for plan reviews and fee code adjustments
10	Plan Review	Approval of Plan Review (PR) fee code changes/reversals
13	Scheduling	Follow-up of aging SRs
(d)	Scheduling	Development of Quality Control (QC) process for Scheduling
(e)	Scheduling	Charging for late-cancel inspections
(g)	New Construction Inspections	Rotation of inspectors
(h)	New Construction Inspections	Remote access into IFP for inspectors
25	Code Enforcement/Annual Inspections	Automatic interface between modules in new ERP system; management review of input into each module
(i)	Code Enforcement/Annual Inspections	Lack of consistency in assessing re-inspection fees
(j)	Property Public Record Requests	Segregation of duties, rotation policy; fee review
(m)	Wildland Fire Prevention for State Responsibility Areas	Contact with State officials re program compliance

The timeframes needed to fully implement and make operational these 17 recommendations will vary. Some are very close to completion (for example, Recommendations # (a), (b), 13 and (e)) while others require more long-term work and/or implementation of a new information system (for example, Recommendations # 2(1), (h) and 25).

Two recommendations asked for department management's evaluation of two policy issues, rather than for specific action. Staff has reviewed these two issues and is currently planning on taking no further action to change existing practices in these areas.

Table 3. CRR Audit Recommendations – Recommendations Evaluated; No Further Action Planned		
No.	Area	Recommendation
(c)	Front Counter	Evaluate requiring or encouraging greater plan submittals at OCFA, rather than at cities, to enhance OCFA efficiency
(f)	New Construction Inspections	Evaluate staffing approach for inspection workload

Regarding finding (c), staff believes the values of customer service and customer convenience and deferring to the preferences of member agencies outweigh the potential time savings and other advantages of having a greater number of plans submitted directly at Fire Authority headquarters. Regarding how best to address staffing needs to complete new construction inspections in a timely manner, the current approach of relying primarily on overtime and the use of inspectors from the Safety and Environmental Services division to supplement new construction inspectors is still believed to be a better approach than the use of contract inspectors. Staff believes that contracting for additional inspectors is problematic due to the limited supply and high cost of qualified contract service providers, knowledge requirements and control issues. However, regular staffing is being enhanced with the addition of one new inspector position.

No action has been taken to date on the following two audit recommendations:

Table 4. CRR Audit Recommendations – No Action Taken to Date		
Finding No.	Area	Recommendation
37	Malfunctioning Alarms	Additional staff training; review of open alarm codes
38 (2)	Malfunctioning Alarms	Obtaining correct business names and addresses; additional training

Actions to implement the above two recommendations, both of which are related to additional training of Operations personnel, have not yet proceeded, pending further Executive Management direction regarding the roles and responsibilities of both Community Risk Reduction and Operations staff for the Malfunctioning Alarm program.

The auditors' recommendations regarding the Hazardous Materials Disclosure and CalARP programs, as noted on Attachment 1a, Findings #s 32 and 33, were deemed by staff to be no longer applicable, due to the transfer of program responsibilities for these two programs, effective July 1, 2013.

The approach taken by staff to address many of the above audit recommendations has been to formalize and expand upon existing Quality Control (QC) review procedures. New QC procedures have been developed and published on SharePoint. They include reviews of random samples of completed transactions, observations, site visits, follow-up calls to customers, and regular meetings with subordinate staff. The new QC procedures were implemented and became operational in April in the Safety and Environmental Services (S&ES) division of the CRR Department. In the Planning and Development (P&D) division, the updated QC procedures have been implemented and are operational for New Construction inspections, but they are not yet operational in the Front Counter, Plan Review and Scheduling sections, due to current workloads and the priorities given to customer service and plan turnaround times.

Effectiveness of New Controls

Because a large number of the audit recommendations are still in the process of being implemented, many of the new controls are not yet fully in place. For some of the new procedures that have been implemented, it is too early to determine the full extent of their effectiveness, because they have been operational for a relatively short period of time. However, improvements in internal controls in the department have resulted from the degree to which the recommendations have been implemented.

Regarding some of the specific audit recommendations: effective management oversight of Front Counter operations is now in place; approved plans are being archived more timely; and data entry errors and backlogs have been reduced for both plan archiving and false alarm billings. In the areas in which additional segregation of duties has taken place, risk has been reduced. And where improvements to computer access controls have been implemented, accountability has been enhanced.

Department management has reported that they have already begun to notice improvements in the quality of work products in general, as a result of their new review practices. They also have seen that lower level staff has a better understanding of the need for change and why the new review practices are important.

Evaluation of Department Management's Level of Support to Date

From my perspective, CRR Department management has been very receptive to the audit recommendations and they understand the need to improve controls over fee-related activities. They have been extremely cooperative during the course of my project work, helpful in providing me the information I have requested, and open and honest in their responses to my questions.

During the seven-month vacancy period in the Fire Marshal position, the four Deputy Fire Marshals in the department continued to give a high level of attention to the implementation of the audit recommendations. Table 5 displays the audit recommendations by functional area within the CRR Department.

Functional Area	Fully Implemented and Operational	Partially Implemented; Not Fully Operational	Recommendation Evaluated by Staff; No Further Action Planned	No Action Taken to Date	No Longer Applicable/ Program Transferred	Totals
<u>Planning and Development:</u>						
Front Counter	1	6	1			8
Plan Review		2				2
Scheduling		3				3
New Construction Inspection		2	1			3
	1	13	2			16
<u>Safety and Environmental Services:</u>						
Code Enforcement /Annual Inspections	7	2				9
Discontinued Programs (Haz Mat Disclosure/CalARP)					2	2
Malfunctioning Alarms	1			2		3
Special Activities	1					1
Property Public Record Requests		1				1
Care Facility Inspections (State Form 850)	1					1
	10	3		2	2	17
<u>Pre-Fire:</u>						
Wildland Fire Prevention for State Responsibility Areas	1	1				2
<u>Investigations:</u>						
Restitution Fees	1					1
Totals	13	17	2	2	2	36

As can be seen in the above chart, 33 of the 36 recommendations pertain to the P&D and S&ES divisions, with roughly an equal amount in each of these two divisions. The S&ES division has been to fully implement and make operational the majority of their audit recommendations. Their expanded QC procedures have been in place for 60 days. As noted earlier, the challenge for P&D staff has been to both implement the audit recommendations and successfully address the current workloads of plans to review and inspections to conduct resulting from the major development activity occurring in the county. New QC procedures have been developed in P&D, but the heavy workload has hindered staff's progress in making the new procedures operational.

Staff's efforts to date have had positive impacts on many of the components of internal controls described by the COSO Internal Control Framework, not just the control activities. Improvements to the control environment have been clearly noted, in terms of the enhanced documentation of business processes and a renewed emphasis on employee training. A strong "tone at the top" of the department emphasizing the importance of the audit recommendations and improved internal controls has also strengthened the control environment. Business process analyses and staff discussions during the audit recommendation implementation process, as well as the closer supervision of staff resulting from the new QC procedures, have positively impacted the department's risk assessment efforts. The auditors cited improvements in source documentation and reports as ways to enhance the information and communication component of internal controls. Additional source documents have been designed and implemented to substantiate decision-making processes, and new reports have been designed to provide management more of the information necessary for managing and implementing changes to their operations.

The fifth component, monitoring, will become a greater part of the department's operations in the future, once all of the internal control improvements have been implemented and operational for a period of time and results of QC efforts begin to be analyzed.

Conclusions and Next Steps

The Community Risk Reduction Department has made substantial progress in implementing the 36 recommendations from the internal controls audit. However, a significant amount of work remains to be done. For the 13 recommendations that are fully operational, staff should continue to follow the new procedures and monitor results. Efforts should continue on the 17 recommendations that have been partially implemented and are not fully operational. Work should commence on the two recommendations for which no action has yet been taken as soon as it is appropriate.

While all of the audit recommendations are important, during the next few months priority attention should be given to those audit recommendations that address the more significant risks to the organization. The following nine recommendations should be given the highest priority, as they directly address the issues of safeguarding of assets and the proper assessment of fees. The first two recommendations in the following table include the issues of proper access controls for IFP and SharePoint computer systems, which should be addressed right away.

<u>Table 6.</u> <u>Highest Priority Recommendations Not Yet Fully Implemented and Operational</u>		
Finding No.	Area	Recommendation
5	Front Counter	Review of complete and closed plan reviews; proper archiving
6, 40	Front Counter/Information Technology	Controls over edits and adjustments to SR records
(a)	Front Counter	Locked cash drawer
7	Plan Review	Second level of review for plan reviews and fee code adjustments
10	Plan Review	Approval of Plan Review (PR) fee code changes/reversals
13	Scheduling	Follow-up of aging SRs
(d)	Scheduling	Development of Quality Control (QC) process for Scheduling
(e)	Scheduling	Charging for late-cancel inspections
(i)	Code Enforcement/Annual Inspections	Lack of consistency in assessing re-inspection fees

Eight of these nine priority recommendations are in the Planning and Development section of the department. As noted earlier, three of them (#s (a), 13 and (e)), are very close to being fully implemented and operational. The biggest hindrance to date affecting the implementation of the P&D audit recommendations has been the heavy workload of plans and inspections as a result of the upturn in development activity in the county. The challenge will be to identify and devote sufficient resources to P&D to support both the timely processing of peak workloads as well as the full implementation of the audit recommendations and continued execution of the new control procedures going forward. Supervisory spans of control may need to be addressed.

A number of the audit recommendations cited weaknesses of the current Integrated Fire Prevention (IFP) information system. It is unfortunate that the most recent efforts to replace the system were unsuccessful and that work must begin again to identify how best to proceed. The benefits of a modern information system are many in terms of improved controls, greater efficiencies and better information. A new system can offer individual modules that are well integrated, greater opportunities for automating manual processes, remote data entry and enhanced reporting capabilities. Under the best of circumstances, implementation of a new system takes at least a year from start to finish, and more likely, two or more years. It is essential that work to replace the IFP system continues to move forward as rapidly as possible. During the next two or more years, needs may arise to make certain modifications to the IFP system to improve internal controls within the CRR Department. Those modifications should be given serious consideration, despite the relatively short remaining life of the IFP system, if the changes offer significant benefits in terms of better controls or greater efficiencies.

The ultimate timeframe to complete the implementation of the nine priority recommendations noted above as well as the total of 19 audit recommendations that are not yet fully implemented and operational depends significantly on how long it takes to address the resource question in P&D. Interim solutions to address the weaknesses in the current IFP system, such as manual reviews of paperwork and data entry, are being implemented to address the audit recommendations in the short term.

In the long term, sustainability of the improvements to CRR internal controls will require a modern and efficient information system, sufficient staffing resources and continued management focus. Additional training for both management and staff on internal controls may also help to improve and sustain a stronger control environment for the department, training that emphasizes that effective internal controls requires a team effort and the importance of ongoing monitoring of internal controls.

Monitoring of internal controls can take many forms. It includes both the ongoing monitoring that is built into the department's operations as well as separate evaluations by outside parties. In terms of "built-in" monitoring, one recommendation is for department management to revisit, on a quarterly or semi-annually basis, the effectiveness of the new QC efforts and other new control activities, to make sure they are addressing the most important risk exposures for the department. This effort can also serve to strengthen the risk assessment aspect of internal controls, and identify other major risks to the department that are perhaps not yet being properly addressed.

External reviews of the status of internal controls in the CRR department should continue on a periodic basis. The current practice of utilizing external auditors for such reviews could be continued. Other options include utilizing Finance staff or evaluating the feasibility of establishing an internal audit function within OCFA, which could conduct internal control and other types of reviews throughout the organization.

Community Risk Reduction Department Internal Control Audit - Summary of Recommendations

I. Planning and Development - Front Counter Processing (and Information Technology):

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013			Implementation Assistance, August 2013 - January 2014			
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
1	No individual was charged with supervising the daily activities of front counter staff.	Daily front counter operations should be supervised by Deputy Fire Marshall (DFM), or individual designated by DFM, separate from front counter operations.	Management Assistant (MA) has been filled and is responsible for daily operations of front counter. An Asst Fire Marshall (AFM) will oversee front counter operations and will develop a policy outlining frequency of data reviews.	AFM Grubb supervises MA Lynda Martinez. CRR staff setting up processes for QC for counter staff. DFM level supervision is considered too high. QC procedure has been developed for FPSS activities - data entry and phone etiquette.	Concur with measures implemented by staff; see recommendation in #2 below re QC for data entry.	MA position filled; AFM overseeing Front Counter; Front Counter process narrative and flowchart completed; new QC process developed to review 5% of transactions, including data entry. New process not yet fully implemented due to workload and customer service priorities.
2 (1)	Service Request (SR) forms are used out of sequence; policy is unclear re: sequence control; 24% of SR #s were unaccounted for.	SRs created should be reviewed by a staff member independent of front counter intake. This individual would be responsible for the ordering of SRs and would investigate missing SRs and usage out of sequence.	Due to software and logistical limitations, we are not currently able to issue SRs sequentially. Blank SRs are held by partner cities and contractors. SRs with errors are discarded. New RMS system will issue SR numbers eliminating this problem. Prior to new RMS system, AFM referenced in #1 above will be responsible for accuracy and consistency of SR data.	Staff was planning to develop a report of deleted SRs, as that was identified as the area of greatest exposure.	The initial approach was to see if the IFP system could generate a sequential record number for each SR entered, but it was indicated that this was not feasible, given IT resources and priorities. As a result, recommend: (1) that implementation of new RMS system be accelerated, if possible; (2) consider supplementing IT resources to accelerate RMS implementation; (3) continue to research methods for improving IFP reporting of open and closed SRs.	Deleted SR report has been developed and just needs to be published to IFP to become available for continued use. Development of a background sequential record number for all SRs entered is still not feasible, given IT resources and priorities.

2 (2)	<p>Front counter personnel are not following policy on ensuring project info from SRs are entered correctly into IFP; supervision of daily inputs is limited. As a result, there were SR numbers input incorrectly.</p>	<p>Daily starting and ending SR numbers should be reviewed and agreed to physical documentation, by someone independent of person inputting.</p>	<p>See response to #1 above.</p>	<p>New QC procedure to be implemented to review for data entry quality. Proposed sample size is 5% of total volume.</p>	<p>Management is concerned that the QC sample size be set at a level that is achievable given current workloads and resources.</p>	<p>New QC process developed to review 5% of transactions, including data entry; new QC process not yet fully implemented due to workload and customer service priorities.</p>
5	<p>Certain fields in SR forms are editable after the SR was complete and finalized. Existing policy specifies the IFP application should not allow for edits to SRs after they are finalized.</p>	<p>Complete and closed plan reviews should be reviewed by management. Management should develop process to ensure completed SRs are properly archived.</p>	<p>The new AFM referenced in #1 above will be responsible for implementing a process to ensure completed SRs are properly archived.</p>	<p>AFM in charge of plan review has developed a new archiving policy that spells out how to archive properly and calls for plans to be archived daily. Proper archiving of plans will be part of new QC procedure for plan review.</p>	<p>When plan is approved, fee-related fields are currently locked. There are a number of valid reasons why certain tabs and/or fields of SRs need to be modified after the plan is approved. Regarding archiving of plans: archiving is often not done timely and backlogs are created, because archiving can be a time-consuming process. Access to archiving program is currently not sufficiently controlled to prevent unauthorized changes to or deletions of archived plans.</p>	<p>Plan archiving procedure was re-issued by management in February 2014. Also, the numbering convention for archiving has been simplified. As a result, archiving is more timely and backlogs have been eliminated. Revisions to access rights to the archiving program are in process. Feasibility of locking additional SR fields and authorities to change SR fields not yet reviewed.</p>
					<p>Recommend that management consider locking all or most SR tabs and fields at the time of plan approval, and that supervisor approval be required to unlock. Access to archiving program should be revised to prevent unauthorized changes to or deletions of archived plans.</p>	

6, 40	Fire Prevention Services Specialists (FPSS's) that intake new plan review service requests also have the ability to accept payments and apply credits to SR records.	All edits and adjustments should be made by separate individuals with the proper oversight from management.	Once plans have been entered by the FPS, they are reviewed by a Fire Prevention Analyst who reviews the info entered by the FPS. If the fee info is erroneous, the Analyst will update the info. Once Analyst approves the plans and final fees are determined, only a P&D supervisor can change the fee. Policies will be developed for additional oversight/ approvals whenever payments or credits have been accepted at the Front Counter.	In September 2013, front counter terminals were made view only terminals. FPSS data entry must now take place at their own terminals. In addition, IFP passwords were changed and password policy was re-enforced to ensure accountability for changes made in IFP.	Concur with measures taken by staff.	FPSS's have ability to make changes in IFP after plans are approved, but policy is being followed to advise supervisor and request permission to do so. Computer access authority of front counter personnel should be further reviewed.
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B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(a)	The drawer into which checks and CC receipts are placed is unlocked and many people access the drawer	Internal controls include policies and procedures for the security of assets and records. Assets need to be protected against the risk of loss or theft. The more individuals that have access to assets, the greater the risk.	Drawer should be locked.	Staff plans to acquire and install a separate locked box for Front Counter receipts, but funding is currently uncertain.	Locked box has been ordered.
(b)	Plans are tagged at front counter with SR# but are not physically marked with SR# until plan approval	SR# is critical tracking device, so plans should be marked with SR# at front counter, in case tag gets separated from the plan. Plans are often resubmitted without tags.	Recommend that SR# be written on plans at front counter.		Decision has been made to implement. New practice will commence within next two weeks.
(c)	Plans requiring OCFA review may be submitted at the building departments of 13 member agencies	Plan submittals at member agencies allows for greater convenience to the customer and member agencies, but at greater costs, inefficiencies and lower levels of controls for OCFA. The majority of plans are currently submitted at OCFA. Six cities require OCFA plan submittal at their city.	Recommend that staff study the feasibility of requiring all plans to be submitted at OCFA, or determine ways to require or encourage a greater number of plans to be submitted at OCFA.		Current assessment by staff is that the value of customer service and allowing plans to be submitted at cities outweighs the potential benefit of greater efficiencies for OCFA if plans are submitted directly to OCFA.

II. Planning and Development - Plan Review:

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013				Implementation Assistance, August 2013 - January 2014		
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
7	Fire Prevention Analysts (FPAs) have sole authority to approve new construction plans without any oversight or quality control review. FPAs have ability to change plan review codes without any level of approval.	A second level of review or authority should be implemented over plan reviews and adjustments to plan review SR codes	Supervisors will be developing plan review quality control procedures that will include a requirement for supervisor approval before any fees are adjusted by staff.	Existing QC process for plan review expanded and sample size formally set at 5%. QC to include both approved plans and plans returned for corrections, as well as observation of plan reviewer meetings with customers. For fee code changes, see #10 below.	Management is concerned that the QC sample size be set at a level that is achievable given current workloads and resources. Recommend that sample size be set at 5% initially, but increased to 10% in the future, if possible. Also, management should establish an acceptable error rate and modify QC procedure to include sample expansion if errors are found in excess of acceptable error rate. For fee code changes, see #10 following.	Staff has not yet been able to implement, due to current plan review volumes and supervisor time required to maintain timely processing. Supervisors continue to address plan review issues as they occur, but 5% sampling of all approved and returned plans has not yet begun.
10	It appeared that Fire Prevention Specialists (FPSs), both at the front counter and plan review processes, were not following a policy that would require a second level of oversight or approval for PR fees code in SRs that were reversed or changed, prior to changing the PR fee code in the SR.	A quality control process should be implemented to ensure all changes or reversals of PR fee codes are properly approved prior to the change in the IFP program.	Supervisors will be developing quality control procedures checking for accuracy of PR codes to plans.	Requiring all fee code changes to be approved by a supervisor prior to entry into the IFP system was determined to be undesirable in terms of causing delays in plan processing when a supervisor was not available. In January, staff was pursuing whether IFP could automatically notice the AFM of fee code changes made by plan reviewers, that the AFM could then review on a 5% sampling basis.	Concur with measures proposed by staff in January. Recommend that staff continue to analyze alternative methods of fee approval by supervisors for possible future implementation.	It has been determined that the IFP system cannot generate automatic notification to the AFM of fee code changes made by plan reviewers. As a result, a manual email notification process began in May 2014. Plan reviewers are making notes in IFP to explain fee code changes. Staff will investigate whether an IFP report can be generated to facilitate AFM review of fee code changes after they are entered by plan reviewers into the IFP system. 5% sampling of transactions with fee code changes not yet begun.

III. Planning and Development - Scheduling:

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013			Implementation Assistance, August 2013 - January 2014			
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
13	There is no process in place to follow up on aging SRs with completed plan reviews that have not been scheduled for inspection.	For projects exceeding a specific time frame (e.g., 1 year), management should consider following up with project contractors on the status of the project and place notes within the IFP program, tracking dates and times contractors were contacted and results of correspondence.	Aging or tracking reports will be developed to track construction projects that have not been completed. Planning and Development will work with Finance on processes to contact individuals that submitted plans.	Staff was planning to implement construction permit expiration at 180 days for suspended or abandoned projects; staff was meeting with IT to develop a process to report plans without inspection activity within the last 6 months. Additionally, a new SR form was to be developed advising customers that it is their responsibility to notify the OCFA for all projects not moving forward.	Government Code Sections 50050-50057 specify that money not the property of a local agency that remains unclaimed after three years becomes the property of the agency, provided appropriate notice is given as specified by law. Concur with measures taken by staff. Also, recommend additional resources be devoted to resolving the existing backlog of open inspections, perhaps with use of interns/extra help. Recommend that Government Code Section 50050-50057 be reviewed for applicability in instances where the original applicant is no longer in business, etc.	New SR expiration policy implemented effective with plans first submitted June 1, 2014. SR will expire 6 months after initial plan returned date subject to requests for extension. Inspection fees will be refunded upon expiration. New reports and IFP tracking developed to support the new policy. Email notification procedure to be developed. Current backlog of SRs with approved plans and open inspections has been reduced with extra help. Management intends to address the balance of the backlog in June/July.

B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(d)	No QC process has been defined for Scheduling activities.	The Scheduling process is a critical activity for the department. Appropriate management oversight of this function is important to ensure not only that reinspection fees are properly assessed, but also that inspections are scheduled in a timely manner and open inspections for which fees have been collected are properly monitored.	A QC process should be developed to encompass the major responsibilities of Scheduling personnel. Recommend that consideration be given to include the timely monitoring of open inspections, handling of backlogs, and efficiency of inspection schedules.	Staff drafted a QC procedure for Scheduling in which a 5% sample of failed inspections will be reviewed to confirm that correct fees were assessed.	Not yet implemented. Capability of IFP to report needed information being researched. Management sees the appropriate assessment of reinspection fees as the primary area to address QC efforts.
(e)	If a re-inspection is cancelled later than 1 pm on the day before the scheduled inspection, any prepaid inspection fee is retained.	Charging for a late cancel re-inspection is akin to charging a penalty. Such a penalty fee is not included on the current fee schedule.	Recommend that this practice be stopped until such time as the fee schedule can be modified.		Penalty fee to be added to the new fee schedule.

IV. Planning and Development - New Construction Occupancy (NCO) Inspection:

A. Recommendations from Lance Soll and Lunghard audit report - None.

B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(f)	During periods of high activity/inspection volumes, staffing resources are solicited from other sections and paid overtime to accomplish the work	Borrowing staff and paying overtime is a short-term solution and may not be the most cost-effective means of addressing peak workloads.	Recommend that management determine whether contracting for additional inspectors and/or temporary hiring of additional inspectors during periods of high volume is a better solution than the current approach of seeking volunteers to work overtime.	One additional inspector has been hired as extra help.	Currently six fulltime P&D inspectors service the county. One additional inspector has now been authorized in addition to the extra help position, but new position won't be online for several months. Reliance continues on borrowing staff and use of overtime. Supervisor performs inspection work to supplement staff. Staff believes that contracting for additional inspectors is problematic due to limited supply/high cost, knowledge requirements and control issues.

(g)	<p>Inspection staff is assigned by geographic area, resulting in certain areas of the county having just one inspector assigned, and assignments are not rotated on any regular basis</p>	<p>Rotation may not be workable given current volumes and staffing levels.</p>	<p>Recommend that a rotation policy be established, at a frequency that balances the value of continuing relationships and the cost of training, with the value of having a "fresh set of eyes," and staffing levels be increased, if necessary, to permit implementation.</p>	<p>Exists in south and west county areas, but new inspector position will create some additional overlap. Management acknowledges that rotation policy should perhaps be considered. Supervisor has confidence in existing staff. Management feels there are positives to continuing relationships as well as negatives. Mitigating control is that schedulers control inspector schedules. If inspector requests a specific inspection, management will inquire.</p>
(h)	<p>Inspectors need to return to RFOTC to input inspection results into IFP</p>	<p>Lack of remote access to IFP for inspectors is inefficient and reduces staff time available to conduct inspections. New RMS system will provide remote access.</p>	<p>(F) Recommend that alternate methods of transmitting data be explored. Recommend that implementation of the new RMS system be accelerated, if possible.</p>	<p>IFP data entry can be done at Fire Stations 58 and 61 in west and south county areas. However, inspectors are currently required to start and end their workdays at RFOTC. Other means of increasing efficiencies in the inspection process will be explored by department management. New RMS system implementation is 15-24+ months away.</p>

V. Safety and Environmental Services - Annual Inspections/Permits:

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013				Implementation Assistance, August 2013 - January 2014		
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
20	It was difficult to determine if management reviewed and approved the status of annual inspections from the IFP program, or if SharePoint information agreed or was evidenced by IFP program information.	Management should develop a review process to ensure that inspection status and inspection results are inputted into the IFP program. Each inspector should be responsible for updating inspection results with management verification of results in IFP.	SharePoint tool is a disposition tracking tool to view progress of inspection workload. The Fire Inspection Form (FIF) is reviewed and accepted by the Asst Fire Marshall before SharePoint entry is made and before FIF is data entered into the system. Confirming that the approved data actually is entered into IFP would require a random quality control check by the AFM and is an easy task to incorporate.	Two quality control checkpoints were already established: one to insure the inspection information, inspections and tracking are reasonable and consistent; another to insure that what was represented in these processes is what is data-entered into IFP. Process narrative and flowchart, written QC directions and QC verification tool developed to formalize the process. Formal kickoff anticipated after section training in March, 2014. In addition, 100% of all billing information is QC'd prior to transmittal to Finance.	Auditors underscored the value of IFP and SharePoint data being consistent and reliable. However, while IFP and SharePoint information agree at the time the FIFs are initially run, there will necessarily be discrepancies between IFP and SharePoint until data is entered into IFP for inspections completed. Sharepoint data is the information used to manage the inspection process. Concur with measures taken by staff. In addition, recommend that existing policies regarding the conduct of annual inspections be reviewed and revised as necessary, appropriate training provided to staff, and policies enforced to reduce delays in the process.	Two QC checkpoints in place. Process narrative, flowchart and QC directions posted to SharePoint. QC reviews implemented (paperwork review of 100% of CRR-conducted inspections; 100% review of all billing information prior to submitting to Finance; 10% sampling of all CRR-conducted inspections to review for data entry accuracy, FIF information, inspections, proper permits, billing) and QC results being reported using QC verification tool. DFM indicates that no additional policy review is necessary at this time, because Inspection Status Report tracking tool provides the necessary information to identify problem areas.

<p>21</p>	<p>It was unclear if annual inspections are being conducted in a timely manner.</p>	<p>Management should obtain weekly reports exported from IFP to determine the status of annual inspections required to be conducted that quarter.</p>	<p>Inspection workloads are no longer issued in quarters. Timeframes are announced through an annual memo from the Operations Chief. SharePoint does a good job of tracking progress as well as date of data entry, the latter being a direct data drop from IFP.</p>	<p>The annual inspection program is now closely monitored by the Assistant Fire Marshal rank. This team works with the SharePoint inspection tracking list every day to insure that Operations as well as Community Risk Reduction staff are making appropriate progress as it relates to the defined timeline for completion. Operations has six months to complete their annual workload, so 17% should be completed each month. AFMs use the Inspection Status Report, which is issued weekly every Wednesday and graphs inspection progress using data from the SharePoint tracking list, to assist and coach the teams. This activity has been underway since May 2013.</p>	<p>Delays in completing paperwork and/or updating inspections status in SharePoint can make it difficult to determine if inspections are being conducted timely.</p> <p>Recommend that Operations and S&ES management continue to monitor the SharePoint tracking list and review and enforce policies and procedures to ensure timely completion of inspection paperwork and timely updating of SharePoint tracking list. Management should continue to be held accountable for insuring that inspections are conducted timely and paperwork is completed timely.</p>	<p>See #20 above. Inspection Status Report of June 4, 2014 indicates 80% of annual inspections have been completed, and Assistant Fire Marshals indicate that annual inspection goals will be met.</p>
<p>22</p>	<p>It appeared that annual inspections were updated into the IFP program at dates later than the required inspection date.</p>	<p>Management should develop supervision and review procedures that on a daily basis ensure that inspections that were performed have been properly updated in the IFP program.</p>	<p>Clarification of term "required inspection date" is needed. If observation is that data entry into IFP is too long after actual inspection, the new policy for FY 2013-14 (is) to review inspection activity at end of each day, forward to data entry or return to the Specialist for follow up. Re: inspection workload that comes in from field, SharePoint tool assists management in seeing final inspection date and data entry date. This creates a process that is an easy daily check for work flow.</p>	<p>See comment in #21 above. Ensuring that percentages of inspection completion stay on track will make the data entry component more timely as well.</p>	<p>Discussed further with auditors. "Required inspection date" refers to the Quarter indicated in IFP. Auditors pulled the Code 2 Annuals and noted the quarters the inspections were due vs the entry date into IFP. Not sending paperwork to data entry locations on a timely basis can create bottlenecks and data entry delays when large amounts are sent all at once.</p> <p>See recommendations in #20 above. Also, recommended that additional resources be devoted as needed to eliminate current backlogs.</p>	<p>Backlogs are being closely monitored. Sharepoint inspection tracking information, along with date stamps when documents are received from Operations, are being used to identify where backlogs are occurring.</p>

<p>24</p>	<p>Due to limitations of IFP system, it was difficult to determine which FIFs were not updated in a timely manner. Only the latest inspection date is maintained in IFP. Per observation, 216 inspection records from 2012 and 2013 were updated 30 days or more after inspection occurred.</p>	<p>Periodically, management should review status of FIFs for businesses that were issued permits during that period and compare permit issuance date to the date the FIF was updated into the IFP, to ensure management is relying on timely and accurate information on inspection results.</p>	<p>There are two ways of verifying timeliness of data entry and related permit issuance: SharePoint tool and periodic random backlog check at each division office by AFM. We are working with Operations to accelerate movement of inspection forms from the station to the data entry locations through addition of a QC function at the Battalion Chief level.</p>	<p>Community Risk Reduction management has been working with Operations to accelerate movement of inspection forms from the station to the data entry locations through addition of a QC function at the Battalion Chief level.</p>	<p>Concur with measures taken by staff. In addition, as noted above in #20 and #21, recommend that existing policies regarding the conduct of annual inspections be reviewed and revised as necessary, appropriate training provided to staff, and policies enforced to ensure timely conduct of annual inspections, and timely completion, quality control and data entry of inspection reports, and that management be held accountable for insuring that inspections are conducted timely and paperwork is completed timely.</p>	<p>Sharepoint status tracking tool is being used to followup on the timeliness of QC at the Battalion Chief level. No additional policy review needed at this time. As noted in #21, Inspection Status Report of June 4, 2014 indicates 80% of annual inspections have been completed, and Assistant Fire Marshals indicate that annual inspection goals will be met..</p>
<p>25</p>	<p>Inspection Support (IS) and Hazardous Material Disclosure modules of IFP system are not well integrated; information entered into IS module may not be captured in the HM Disclosure module for businesses that require HM material disclosures. Also, SR module for New Construction Inspections does not automatically relay information to the IS module for future tracking of needed annual inspections.</p>	<p>Management should ensure that the new ERP database has an automatic interface between modules. In the meantime, management should develop a process to ensure that information and results are being input into each module accurately and timely.</p>	<p>Management will work to ensure this capability in the new system. A random sampling will be reviewed to ensure quality entry in all modules until new system is on line.</p>		<p>Concur with auditor's recommendations and staff's plan to do random sampling to ensure quality entry in all modules until new system is online. Further recommend that the implementation of the new RMS system be accelerated, if possible.</p>	<p>Random sampling for data entry accuracy being conducted. Most recent comments by staff re new RMS system indicate that new system implementation is at least 15 months out, or more, depending on management's decision regarding the scope of desired capabilities of a new system.</p>
<p>26</p>	<p>Integrity of information used by Deputy Fire Marshal in monitoring inspection results may not have accurately reflected information tracked and maintained in the IFP program.</p>	<p>Management should implement a process that will require a periodic review of information entered into the IFP program to ensure the accuracy of the information and follow up with Fire Prevention Specialists on all irregularities.</p>	<p>In the upcoming year, a quality control process will be put in place where all inspection documents will be reviewed by the Asst Fire Marshals for completeness and accuracy. Field Battalion Chiefs (BCs) will review the work of firefighters and AFMs will perform random recheck of that work.</p>	<p>New quality control process -- Asst Fire Marshals will review 100% of inspection documents for CRR-conducted inspections for completeness and accuracy. Field BCs will review the work of firefighters.</p>	<p>SharePoint inspection tracking report is the tool being used to monitor inspection results. Concur with measures taken by staff.</p>	<p>As noted in #20, QC reviews implemented and QC results being reported using QC verification tool. BCs are responsible for QC review of inspections conducted by Operations staff.</p>

27	It was difficult to determine if permits were issued subsequent to inspections, due to reliability of information used.	Management should develop supervision and review procedures that on a daily basis ensure that inspections that were performed have been properly updated in the IFP program.	We will implement random review of data entry processes.	See comment in #21.	Concur with measures taken by staff.	Implemented random review of data entry processes.
28	It appeared that, as of March 19, 2013, over 800 annual inspections were still open to be conducted for 2012.	Management should review outstanding annual inspections and develop procedures to ensure that the annual inspections are completed prior to the billing date.	Hazardous materials program is transitioning to County Health Care Agency July 1. No other work is billed prior to initiation of the inspection. Only completed inspection work is entered into the system which then sends a message to Finance to generate a bill.	No specific implementation measure is required, other than to ensure that workload assigned is workload complete at the end of the inspection cycle. Accountability expectations have been expressed through both the Fire Marshal and the Assistant Chief of Operations via memoranda and utilizing weekly progress reports. These reports are currently in place.	Even though annual inspections are not billed prior to completion, management should ensure that annual inspections are completed in a timely manner for both public safety reasons and to capture cost recovery revenue.	As noted in #s 21 and 24 above, Inspection Status Report of June 4, 2014 indicates 80% of annual inspections have been completed, and Assistant Fire Marshals indicate that annual inspection goals will be met..

B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(i)	There is a lack of consistency in the assessment of re-inspection fees	Obtaining compliance has been the primary goal of the annual inspection process. Re-inspection fees are frequently not assessed if the customer is demonstrating a willingness to work toward compliance with OCFA requirements.	Recommend that policies regarding reinspection fees be reviewed, revised/clarified as appropriate, and then enforced to promote greater consistency in how reinspection fees are assessed.	This finding pertains to the annual inspection and other on-demand inspections. While the reinspection fee component will always have a subjective nature due to the cooperation of the customer and/or the magnitude of the corrections, the QC review process allows the AFM to better monitor the inspector's decision-making process, as to whether there were too infrequent visits to the customer or unreasonable re-inspections based on the magnitude of the corrections.	QC processes are in place to review reinspection fee decisions. Re-inspection fee policies will be reviewed to see if specifying additional guidelines is feasible.

VI. Safety and Environmental Services - Discontinued Programs (Hazardous Materials Disclosure/CalARP):**A. Recommendations from Lance Soll and Lunghard audit report:**

Per LSL Audit Report, March 2013				Implementation Assistance, August 2013 - January 2014		
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014

Materials Disclosure:

32	Information in SharePoint that is used by management to monitor and supervise disclosure inspections did not agree with IFP program information, due to IFP program not being updated in a timely fashion with inspection results.	Management should implement a process to periodically review information entered into IFP to ensure accuracy and to follow up with Fire Prevention Specialists on all irregularities.	The follow up would be between the Assistant Fire Marshal and the Office Services Specialist on a periodic basis. SharePoint is utilized as tracking tool for disposition of FIF. IFP is final report of completeness that actually updates the SharePoint tracking tool.	Because program will no longer be OCFA's responsibility, no additional implementation measures are planned.	None.	N/A
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CalARP:

33	CalARP program appears to have a high level of dependency on the expertise of one individual, with little oversight on the progress or activities of the program.	OCFA should consider using a third-party technical reviewer to periodically review policies and procedures and make recommendations on program performance. Department should also consider having additional staff involved in the program to reduce level of dependency on Fire Systems Engineer.	CalARP is transitioning to OCHCA July 1, 2013.	Because program will no longer be OCFA's responsibility, no implementation measures are planned.	None.	N/A
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VII. Safety and Environmental Services - Malfunctioning Alarms:

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013			Implementation Assistance, August 2013 - January 2014			
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
37	It appeared that incident types to false alarms were being coded late and incorrectly into the OCFIRS application, due to first response personnel not fully understanding the incident type to code to false alarm and having additional duties preventing followup of the incidents. Most of the incident types reviewed were closed in OCFIRS as long as 2 weeks after the incident took place, resulting in potential revenue loss.	Training is recommended on OCFIRS coding of incidents and streamlining the codes available for false alarms. Fire Captains should review open false alarm codes on a weekly basis at a minimum to ensure codes are properly closed.	OCFIRS Steering Committee will work on a training program and a method to enforce the SOP regarding completion of reports. They will also identify an Operations-based QC process for select reports.	Further work to address these issues put on hold pending Executive Management direction regarding program roles and responsibilities - Operations vs Community Risk Reduction.	User survey results from pilot study point to need for additional training, including easy- to-use reference material due to low frequency. Concur with planned measures as noted in Management Response. Recommend that the training be designed, at least in part, for personnel who perform these tasks infrequently.	On hold, pending further management direction regarding program roles and responsibilities - Operations vs Community Risk Reduction.
38 (1)	It appeared that adjustments are made to customer accounts receivable balances after invoices are sent to the customers, due to incorrect coding. This was primarily the result of incident types being reviewed by FPSS after Finance Department receives the occurrences.	A fire prevention personnel signature, indicating that incident codes were reviewed and fire prevention personnel agrees or disagrees with coding, should be obtained, prior to sending occurrences to Finance Department for billing.	See response to #37.	QC process by FPSS to review coding is now occurring ahead of Management Assistant preparing billing information for Finance. Management will establish a timeframe for FPSS to complete her QC work.	Concur with having the QC review for accurate coding take place ahead of transmitting billing information to Finance. However, having the QC review for coding take place ahead of transmitting billing information to Finance has resulted in no alarm billings going out to customers for several months. Additional resources should be assigned to eliminate existing backlogs. Following additional training of Operations personnel, Operations should be held responsible for accurate coding such that QC by FPSS can be eliminated or significantly reduced.	Coding is being reviewed prior to billing information being sent to Finance. Previous backlogs have been resolved and billings have been issued.

38 (2)	Service location addresses were not correctly identified by the correct business name prior to submission to the Office Service Specialist. Properties that have more than one suite or apartment number or address are not properly related to the property owner of those multiple addresses. As a result, OCFIRS system information may not have been properly updated and bills not sent to the correct party.	Management should implement a process that communicates the importance of First Response Personnel writing and obtaining the correct names of businesses and business addresses.	See response to #37.	This is an Operations Section incident report training issue.	Recommend that this issue be addressed as part of the planned additional training of Operations personnel.	On hold, pending further management direction regarding program roles and responsibilities - Operations vs Community Risk Reduction.
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VIII. Safety and Environmental Services - Special Activities:

A. Recommendations from Lance Soll and Lunghard audit report:

Per LSL Audit Report, March 2013				Implementation Assistance, August 2013 - January 2014		
Finding No.	Auditor's Observation	Auditor's Recommendation	Management Response in Audit Report	Process Changes Initiated/Completed by Staff; Additional Management Comments	Analysis and Additional Recommendations	Current Status as of June 2014
39	While initiation, processing and authorization processes are separate, it appeared that entire special event process was dependent on two individuals, with little quality control reviews performed outside these two individuals.	Management should consider including a second level of approval, preferably a Deputy Fire Marshal, prior to the issuance of special event permits. Management should consider having applicants for a special event permit contact Front Counter personnel to initiate the application.	There is an Assistant Fire Marshall in direct supervision of both of these individuals. A greater emphasis will be placed on their oversight responsibilities to ensure adequate internal controls over the issuance of special activity permits.	New screening form (Special Activity/Event Submittal Criteria Form) has been developed to document determinations of when permits are and are not required; QC processes to be added to randomly evaluate 5% of decisions to not require a permit, and to review monthly 5% of all special activities permits, including paperwork, IFP, inspection, and FPS interview. The FPS position has been rotated.	Concur with measures taken by staff. Also recommend that a rotation policy be established for both positions involved in administering this program, to enhance internal controls and promote cross-training.	QC implemented, with most QC work to date focused on meetings and onsite review rather than electronic and paperwork review. QC will also focus on consistent fee application and fees appropriate to risks presented by events. Spreadsheet to track open items may be considered. Management feels that the need for a rotation policy will be reduced with closer supervision and new QC efforts.

IX. Safety and Environmental Services - Property Public Record Requests:*A. Recommendations from Lance Soll and Lunghard audit report - None.**B. Additional Observations/Recommendations*

Implementation Assistance, August 2013 - January 2014					
#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(i)	Same individual runs entire process; requests in process are not being input into SharePoint until customers are notified of payment due; fax charges are not being administered according to terms printed on PRA form	Requests should be logged in immediately upon receipt so management can monitor workload and whether 10 day legal response time requirement is being met.	Because one individual handles entire process currently, additional ways to segregate some of the duties involved in this process should be studied, and/or a rotation policy should be developed for the position performing this duty. QC process should include review of PRA forms to make sure all appropriate fees were charged.	Process flowchart has been created. Flowchart is supported with written detailed instructions for the identified quality control points in the process. QC process to include verification of input into SharePoint at the time the request form is received. Current QC sample size of 5% to be expanded to 10% over time.	Process narrative and flowchart and QC instructions completed and posted to SharePoint. QC implemented with 10% sampling. Additional position has been added to the process: front counter is now accepting the payments. Rotation policy will be considered.

X. Safety and Environmental Services - Fire Safety Inspections (State Form 850):

A. Recommendations from Lance Soll and Lunghard audit report - None.

B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(k)	A minimum of two hours time is charged for inspections and there is no adjustment made based on actual time spent	Fees charged should reflect actual time spent, for proper cost recovery.	Recommend that actual time spent be charged. If fees are collected in advance, they should be adjusted to actual time once that information is known.	This finding has been expanded by staff to include quality control of when we require an inspection and when we don't and why, as well as how we charge for the service. Three process flowcharts have been created. The process flowcharts are supported with written detailed instruction for the identified control points in the process. The fee will be restructured in the 2014-15 fee schedule. We will no longer charge for two hours upfront but do a study on average time from daily time log and assess an average flat fee for all inspections.	Enhanced tracking of open items has been implemented. QC to date is about 10% sampling. Paperwork QC is stronger, in that review is being done prior to forms being sent to State. Pending implementation of an average flat fee, inspection fees are no longer being charged in advance. Currently, fees are either for one hour or two hours of staff time, based on actual time spent, and are charged after inspection work is performed.

XI. Pre-Fire - Wildland Fire Prevention for State Responsibility Areas (SRAs):

A. Recommendations from Lance Soll and Lunghard audit report - None.

B. Additional Observations/Recommendations

Implementation Assistance, August 2013 - January 2014

#	Observation	Analysis	Recommendation	Process Changes Initiated/Completed by Staff; Additional Management Comments	Current Status as of June 2014
(l)	It is not clear which program management responsibilities for this program belong to the Community Risk Reduction department and which belong to the Finance department.	The lack of clarity hinders overall program management and presents a risk that certain program management responsibilities may not be addressed.	Recommend that program management responsibilities be clarified.	Program responsibilities clarified; AFM in Community Risk Reduction is lead for OCFA	AFM in Community Risk Reduction is lead for OCFA
(m)	The State has not provided the program direction to OCFA in the area of fire prevention that is spelled out in the Annual Operating Plan documentation.	Annual meetings and training called for in the Annual Operating Plan have not occurred. This presents an increased risk that the State may in the future determine that OCFA is out of compliance with program requirements.	Recommend that following clarification of program management responsibilities, the appropriate manager contact the State to obtain further information regarding the State's expectations of OCFA for this program, and retain documentation of such discussions.	State representative contacted; no specific additional guidance provided	There is regular contact between AFM and State's Contract County rep. Required reporting has continued re: inspections conducted. Ways to enhance OCFA's own tracking and reporting of inspections and other prevention efforts in SRAs are being studied.

XII. Investigations - Restitution Fees:

A. Recommendations from Lance Soll and Lunghard audit report - None.

B. Additional Observations/Recommendations

<u>Implementation Assistance, August 2013 - January 2014</u>					
<u>#</u>	<u>Observation</u>	<u>Analysis</u>	<u>Recommendation</u>	<u>Process Changes Initiated/Completed by Staff; Additional Management Comments</u>	<u>Current Status as of June 2014</u>
(n)	Existing policy and procedure documentation regarding Restitution Fees is not consistent, and may be outdated.	Only one incident has been proposed for restitution cost recovery since August 2013, and that one was rejected by the previous Fire Marshal.	Policy documentation should be reviewed, revised/clarified as necessary, and then enforced to ensure consistent application. Policy documents issued by different departments should be reviewed for consistency.	Investigation Services is planning to correct its internal Fire Restitution Cost Recovery procedure dated 8/8/12 to more closely resemble the Business Services' Fire Restitution Cost Recovery Program Policy document dated 3/24/11.	Investigation Services policy document of 8/8/12 has been withdrawn. Post Incident Program has been suspended, and restitution is now being pursued as directed and authorized by the Court. Additional discussions will take place at staff level regarding possible changes to policy going forward.

Attachment 1b
Status of Implementation of CRR Audit Recommendations as of June 2014
By Functional Area

Functional Area	Fully Implemented and Operational	Partially Implemented; Not Fully Operational	Recommendation Evaluated by Staff; No Further Action Planned	No Action Taken to Date	No Longer Applicable/ Program Transferred	Totals
<u>Planning and Development:</u>						
Front Counter	1	6	1			8
Plan Review		2				2
Scheduling		3				3
New Construction Inspection		2	1			3
	1	13	2			16
<u>Safety and Environmental Services:</u>						
Code Enforcement /Annual Inspections	7	2				9
Discontinued Programs (Haz Mat Disclosure/CalARP)					2	2
Malfunctioning Alarms	1			2		3
Special Activities	1					1
Property Public Record Requests		1				1
Care Facility Inspections (State Form 850)	1					1
	10	3		2	2	17
<u>Pre-Fire:</u>						
Wildland Fire Prevention for State Responsibility Areas	1	1				2
<u>Investigations:</u>						
Restitution Fees	1					1
Totals	13	17	2	2	2	36