

## ORANGE COUNTY FIRE AUTHORITY AGENDA

**Budget and Finance Committee Special Meeting** 

Wednesday, July 15, 2015 12:00 Noon

Orange County Fire Authority Regional Fire Operations and Training Center 1 Fire Authority Road Room AE117 Irvine, California 92602

Jerry McCloskey, Chair Elizabeth Swift, Vice Chair Gerard Goedhart Gene Hernandez Al Murray Todd Spitzer Tri Ta Bruce Channing - Ex Officio

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. Unless legally privileged, all supporting documents, including staff reports, and any writings or documents provided to a majority of the Budget and Finance Committee after the posting of this agenda are available for review at the Orange County Fire Authority Regional Fire Operations & 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 Thursday, and every other Friday from 8 a.m. to 5 p.m. and available online at <a href="http://www.ocfa.org">http://www.ocfa.org</a>

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.

 $\checkmark$  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 Vice Chair Swift

#### **ROLL CALL**

#### 1. PRESENTATIONS

No items.

#### **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.

#### 2. MINUTES

A. Minutes for the May 14, 2015, Budget and Finance Committee Special Meeting Submitted by: Sherry Wentz, Clerk of the Authority

Recommended Action: Approve as submitted.

#### 3. CONSENT CALENDAR

#### A. 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 July 16, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the reports.

B. Quarterly Status Update – Orange County Employees' Retirement System Submitted by: Lori Zeller, Assistant Chief/Business Services Department

<u>Recommended Action:</u> Receive and file the report.

#### C. Quarterly Change Order Report Submitted by: Lori Zeller, Assistant Chief/Business Services Department

Recommended Action:

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of July 16, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the report.

**D.** Grant Acceptance – FEMA Assistance to Firefighter Grant (AFG) Submitted by: Sandy Cooney, Director/Communications and Public Affairs Recommended Action:

Accept the grant award and approve a FY 2015/16 budget adjustment to revenues and expenditures in the amount of \$43,022 in Fund 121.

#### END OF CONSENT CALENDAR

### 4. DISCUSSION CALENDAR

## A. Updated Cost Reimbursement Rates

Submitted by: Lori Zeller, Assistant Chief/Business Services 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 July 23, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors approve and adopt the proposed Cost Reimbursement Rate schedules effective retroactively July 1, 2015.

## B. Approval of the Updated OCFA Advanced Life Support (ALS) Paramedic and Basic Life Support (BLS) Medical Supplies Reimbursement Rates

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 July 23, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors take the following actions:

- 1. Conduct a Public Hearing.
- 2. Upon approval of the proposed increase to the maximum BLS emergency 9-1-1 transportation billing rate by the Orange County Board of Supervisors, authorize staff to increase OCFA's Advanced Life Support (ALS) and Basic Life Support (BLS) Medical Supply Reimbursement Rates by the same percentage increase.

#### C. Community Risk Reduction Fee Study and Adoption of Associated Fee Schedules 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 July 23, 2015, 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 Resolution and Exemption Policy approving changes in Community Risk Reduction and Miscellaneous fees and effective date.

#### REPORTS

No items.

#### **COMMITTEE MEMBER COMMENTS**

**ADJOURNMENT** – The next regular meeting of the Budget and Finance Committee is scheduled for Wednesday, August 12, 2015, 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, front gate public display case, and website of the Orange County Fire Authority, Regional Fire Training and Operations Center, 1 Fire Authority Road, Irvine, CA, not less than 72 hours prior to the meeting. Dated this 9<sup>th</sup> day of July 2015.

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

#### **UPCOMING MEETINGS:**

Claims Settlement Committee Meeting

**Executive Committee Meeting** 

Board of Directors Special Meeting

Human Resources Committee Meeting

Thursday, July 16, 2015, 5:30 p.m.

Thursday, July 16, 2015, 6:00 p.m.

Thursday, July 23, 2015, 6:00 p.m.

Tuesday, August 4, 12:00 noon



## Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 1 Presentations

There are no presentations scheduled for this agenda.

**AGENDA ITEM NO. 2A** 

## MINUTES ORANGE COUNTY FIRE AUTHORITY

## Budget and Finance Committee Special Meeting Wednesday, May 14, 2015 12:00 Noon

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

#### CALL TO ORDER

A special meeting of the Orange County Fire Authority Budget and Finance Committee was called to order on May 14, 2015, at 12:00 p.m. by Chair McCloskey.

#### PLEDGE OF ALLEGIANCE

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

#### **ROLL CALL**

#### **Present:**

Gerard Goedhart, La Palma Jerry McCloskey, Laguna Niguel Al Murray, Tustin Elizabeth Swift, Buena Park Tri Ta, Westminster

#### Absent:

Gene Hernandez, Yorba Linda Todd Spitzer, County of Orange

#### Also present were:

Fire Chief Jeff Bowman Assistant Chief Lori Zeller Assistant Chief Brian Young Assistant Chief Lori Smith Ex Officio Bruce Channing Assistant Chief David Thomas General Counsel David Kendig Human Resources Director Jeremy Hammond Communications Director Sandy Cooney Clerk of the Authority Sherry Wentz

#### 1. PRESENTATIONS

No items.

#### PUBLIC COMMENTS (F: 12.02B3)

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

#### 2. MINUTES

#### A. Minutes for the April 8, 2015, Budget and Finance Committee Meeting (F: 12.02.B2)

On motion of Director Ta and second by Vice Chair Swift, the Committee voted to approve the Minutes of the April 8, 2015, Budget and Finance Committee meeting, as submitted. Director Goedhart was recorded as an abstention, due to his absence from the meeting. Director Murray was absent for the vote.

#### 3. CONSENT CALENDAR

#### A. Monthly Investment Reports (F: 11.10D2)

On motion of Director Goedhart and second by Director Ta, the Committee voted unanimously to direct staff to place the item on the agenda for the Executive Committee meeting of May 21, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the reports. Director Murray was absent for the vote.

#### **B.** Third Quarter Financial Newsletter (F: 15.07)

On motion of Director Goedhart and second by Director Ta, the Committee voted to direct staff to place the item on the agenda for the Executive Committee meeting of May 21, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the report. Director Murray was absent for the vote.

#### 4. DISCUSSION CALENDAR

#### A. Communication with Auditors for Fiscal Year 2014/15 Financial Audit (F: 15.02B)

Assistant Chief Lori Zeller introduced General Accounting Manager Tammie Pickens who introduced Audit Manager J'on Dennis from Lance, Soll & Lunghard, LLP, who provided an update on the Fiscal Year 2014/15 Financial Audit and upcoming changes to financial statement reporting.

On motion of Director Ta and second by Vice Chair Swift, the Committee voted to receive and file the report as submitted. Director Murray was absent for the vote.

#### **B.** Approval of 2015 Tax and Revenue Anticipation Notes (F: 15.10E)

Treasurer Tricia Jakubiak provided a PowerPoint presentation on Tax and Revenue Anticipation Notes.

Director Murray arrived at this point (12:14 p.m.)

Stephen Wontrobski, Mission Viejo resident, spoke in opposition to the item addressing market rates, added costs from salaries of OCFA employees, and asked if UBS was involved.

Committee discussion ensued regarding use of staff time and resources, and regarding the amount requested.

On motion of Director Ta and second by Vice Chair Swift, the Committee voted to direct staff to place the item on the agenda for the Board of Directors meeting of May 28, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors take the following actions:

- 1. Adopt the proposed Resolution authorizing the issuance of the 2015-2016 Tax and Revenue Anticipation Notes.
- 2. Approve and authorize the temporary transfer of up to \$11,000,000 from Fund 123 (Fire Stations and Facilities) to Fund 121 (General Fund) to cover a projected temporary cash flow shortfall for FY 2015/16.
- 3. Approve and authorize the repayment of \$11,000,000 borrowed funds from Fund 121 to Fund 123 along with interest when General Fund revenues become available in FY 2015/16.

## **C. Rosenow Spevacek Group, Inc. (RSG) Final Property Tax Revenue Projections** (F: 15.10)

Budget Analyst Stuart Lam presented the staff report.

On motion of Director Ta and second by Vice Chair Swift, the Committee voted to receive and file the report.

#### D. Review of the Fiscal Year 2015/16 Proposed Budget (F: 15.04 15/16)

Assistant Chief Lori Zeller presented the budget overview. Stephen Wontrobski, Mission Viejo resident, addressed concerns about liability assumptions

and inequitable costs for contract cities versus non-contract cities.

Committee discussion ensued regarding workers' compensation and authorizing the addition of slides for the Board presentation relating to workers' compensation funding and liabilities.

On motion of Vice Chair Swift 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 May 28, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors take the following actions:

- 1. Adopt the FY 2015/16 Proposed Budget.
- 2. Adopt the proposed Resolution.
- 3. Direct staff to amend the Master Position Control to add positions, as further described in the FY 2015/16 Proposed Budget, including 9 Firefighters, 3 Dispatchers, 2 Senior IT Analysts, 1 Senior Fire Apparatus Technician, 1 Delivery Driver, and 1 part-time HR Analyst.
- 4. Approve and authorize a change to OCFA's workers' compensation funding policy to establish the annual budget using the 50% confidence level provided by the independent actuary, rather than the former 60% confidence level.
- 5. Approve and authorize a FY 2014/15 budget adjustment to transfer \$2,936,970 in budgeted expenditures from the Capital Project Funds to the General Fund, including the General Fund CIP Fund; transfer \$401,063.16 in "rolled" project budgets and expenditures which represent encumbrances from previous fiscal years; and to reduce transfers out of the General Fund by \$1,133,712 as a result of these budget transfers.

#### REPORTS

No items.

#### COMMITTEE MEMBER COMMENTS (F: 12.02B4)

Vice Chair Swift reported attending the Fire/EMS deployment presentation and expressed appreciation of staff's work for the informative demonstration.

Chair McCloskey reported observing firefighters training at Laguna Niguel Lake.

Director Murray reported attending Fire/EMS deployment presentation, thanked staff for their work, and suggested city managers would benefit from a demonstration.

**ADJOURNMENT** – Chair McCloskey adjourned the meeting at 1:44 p.m. The next regular meeting of the Budget and Finance Committee is scheduled for Wednesday, June 10, 2015, at 12:00 noon.

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



## Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 3A Consent Calendar

### **Monthly Investment Reports**

## **Contact**(s) for Further Information

Tricia Jakubiak, Treasurer Treasury & Financial Planning	triciajakubiak@ocfa.org	714.573.6301
Jane Wong, Assistant Treasurer	janewong@ocfa.org	714.573.6305

#### **Summary**

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

#### **Prior Board/Committee Action**

Not Applicable.

#### **Recommended Action(s)**

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of July 16, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the reports.

**Impact to Cities/County** Not Applicable.

**Fiscal Impact** Not Applicable.

#### Background

Attached is the final monthly investment report for the month ended May 31, 2015. A preliminary investment report as of June 19, 2015, is also provided as the most complete report that was available at the time this agenda item was prepared.

#### Attachment(s)

Final Investment Report – May 2015/Preliminary Report – June 2015

# Orange County Fire Authority Monthly Investment Report



Final Report – May 2015

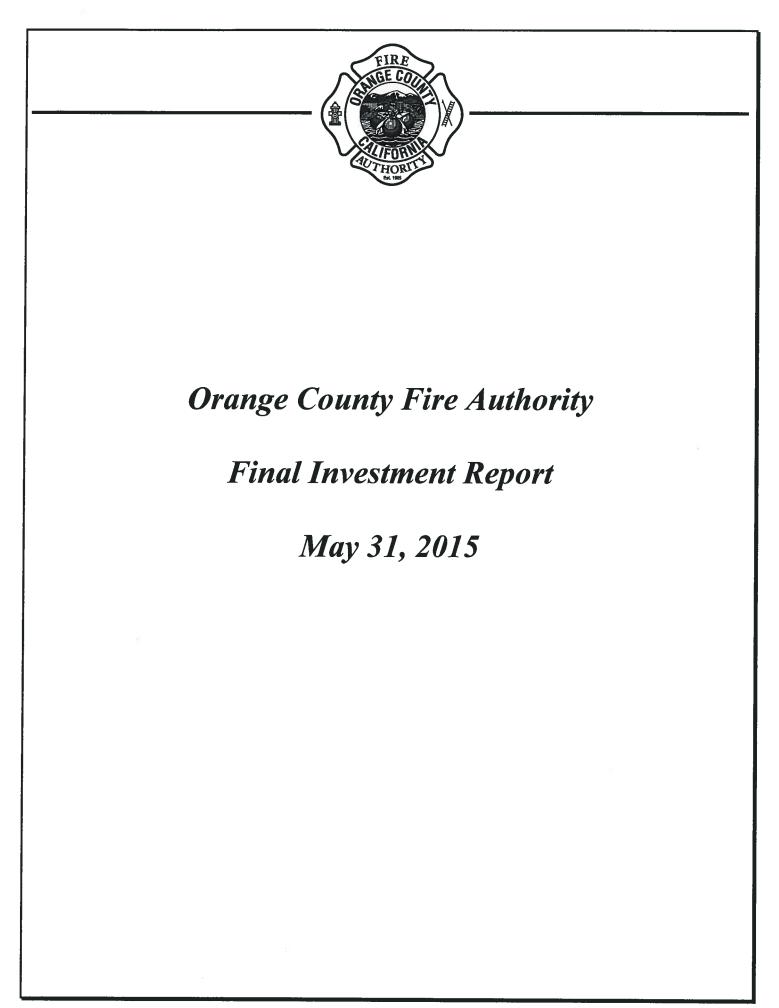
**Preliminary Report – June 2015** 



## Monthly Investment Report Table of Contents

Final Investment Report – May 31, 2015	1
Executive Summary	2
Benchmark Comparison	3
Portfolio Size, Yield, & Duration	3
Portfolio Summary	4
Portfolio Details	5
Aging Report	8
Notes to Portfolio Management Report	9
Local Agency Investment Fund	
Preliminary Investment Report – June 19, 2015	12
Portfolio Summary	
Portfolio Details	14
Aging Report	17
Notes to Portfolio Management Report	

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**Treasury & Financial Planning** 



Monthly Investment Report

#### **EXECUTIVE SUMMARY**

#### **Portfolio Activity & Earnings**

During the month of May 2015, the size of the portfolio decreased by approximately \$9.0 million to \$204.0 million. Significant receipts for the month included various apportionments of property taxes, intergovernmental agency contract and grant payments and charges for current services for a total of \$10.8 million. Significant disbursements for the month included primarily two biweekly payrolls, which were approximately \$8.9 million each with related benefits. Total May cash outflows amounted to approximately \$21.5 million. The portfolio's balance is expected to decrease significantly in the following month as the repayment of the FY14/15 TRANs (Tax and Revenue Anticipation Notes) will take place at the end of June.

In May, the portfolio's yield to maturity (365-day equivalent) remained largely unchanged at 0.28%. The effective rate of return declined by 1 basis point to 0.28% for the month, but increased by 1 basis point to 0.27% for the fiscal year to date. The average maturity of the portfolio shortened by 13 days to 112 days to maturity.

#### Economic News

The U.S. economy continued to improve in May. Employment conditions strengthened and exceeded expectations. There were a total of 280,000 new jobs created for the month, a much higher number than expected. However, the unemployment rate edged up a notch to 5.5% for the month as more people started actively looking for jobs. Retail sales picked up and rose by 1.2%, meeting expectations. May manufacturing activity increased while the non-manufacturing activity declined. Industrial production and durable goods orders declined slightly in May. Both the CPI (Consumer Price Index) and the PPI (Producer Price Index) increased. Housing activity continued to improve. The Leading Economic Index continued to rise, and the NFIB (National Federation of Independent Business) Small Business Optimism Index also rose. On June 17, 2015, at the second day of its scheduled meeting, the Federal Open Market Committee voted to keep the federal funds rate unchanged at a target range of 0 - 0.25%. As a result, many market observers now expect that the first rate increase will likely take place in September.

Treasury & Financial Planning



Monthly Investment Report

## **BENCHMARK COMPARISON AS OF MAY 31, 2015**

*3 Month T-Bill:* 0.02% *6 Month T-Bill:* 0.08%

1 Year T-Bill:	0.24%
LAIF:	0.29%

OCFA Portfolio: 0.28%

#### **PORTFOLIO SIZE, YIELD, & DURATION**

	Current Month	Prior Month	Prior Year
Book Value-	\$203,983,755	\$212,936,310	\$159,812,738
Yield to Maturity (365 day) Effective Rate of Return	0.28% 0.28%	0.28% 0.29%	0.25% 0.24%
Days to Maturity	112	125	196



#### ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Summary May 31, 2015

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	Market	Book	% of		Days to	YTM/C	YTM/C
investments	Value	Value	Value	Portfolio	Term	Maturity	360 Equiv.	365 Equiv.
Money Mkt Mutual Funds/Cash	12,039,236.24	12,039,236.24	12,039,236.24	5.91	1	-1	0.001	0.001
Commercial Paper DiscAmortizing	8,585,000.00	8,569,676.05	8,576,437.78	4.21	203	173	0.211	0.214
Federal Agency Coupon Securities	43,000,000.00	42,984,920.00	43,009,217.78	21.12	1,238	384	0.783	0.793
Federal Agency DiscAmortizing	90,000,000.00	89,993,700.00	89,990,511.39	44.20	125	53	0.076	0.077
Local Agency Investment Funds	50,000,000.00	50,019,186.40	50,000,000.00	24.56	1	1	0.286	0.290
Investments	203,624,236.24	203,606,718.69	203,615,403.19	100.00%	326	112	0.278	0.282
Cash and Accrued Interest								
Passbook/Checking (not included in yield calculations)	462,270.55	462,270.55	462,270.55		< 1	1	0.000	0.000
Accrued Interest at Purchase		247.50	247.50					
Subtotal		462,518.05	462,518.05					
Total Cash and Investments	204,086,506.79	204,069,236.74	204,077,921.24		326	112	0.278	0.282
Total Earnings	May 31 Month Ending	Fiscal Year To I	Date	m	5		R. C	
Current Year	50,159.27	411,51	3.14					
Average Daily Balance	207,459,005.67	168,152,38	3.28					
Effective Rate of Return	0.28%		0.27%					

"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, 2015. 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

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Cash and Investments with GASB 31 Adjustment: Book Value of Cash & Investments before GASB 31 (Above) GASB 31 Adjustment to Books (See Note 3 on page 9)

Total

\$ (94,166.47)
\$ 203,983,754.77

204,077,921.24

## ORANGE COUNTY FIRE AUTHORITY Portfolio Management

Portfolio Details - Investments

May 31, 2015

(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	YTM/C	Days to	Maturity
Money Mkt Mul	tual Funds/Casl	n					BOOK ABING	Rate	365	Maturity	Date
SYS528	528	High Mark 100% US	Treasury MMF		12.039.236.24	12,039,236,24	12,039,236,24	0.001			
		Subtotal and Average	8,640,753.37	_	12,039,236,24	12,039,236.24	12,039,236.24	0.001	0.001	1	
Commercial Pa	per DiscAmo	rtizina	· · · · · · · · · · · · · · · · · · ·	20		······································	12,039,236.24	100 <b>• • • • • • • • • • • •</b>	0.001	<b>1</b> .	
36959JYR8	860	GEN ELEC CAP CRE	, ,	04/00/0045							
36595JYL1	862	GEN ELEC CAP CRE		04/23/2015	2,570,000.00	2,565,322.60	2,567,472.83	0.200	0.206	177	11/25/2015
		Subtotal and Average		05/06/2015	6,015,000.00	6,004,353.45	6,008,964.95	0.210	0.218	172	11/20/2015
n an			7,606,667.87		8,585,000.00	8,569,676.05	8,576,437.78		0.214	173	
Federal Agency		ities							179757 (S · 3		
3133ECM76	809	Federal Farm Credit E	Bank (Callable anytime)	04/25/2013	9,000,000.00	9,000,090.00	8,998,122,28	0.400	0.424	200	
3133EEA75	861	Federal Farm Credit B		04/23/2015	9,000,000.00	8,987,400.00	8,998,968,54	0.990	0.4∠4 1.031		04/22/2016
3133804V6 3133813R4	787	Fed Home Loan Bank		08/09/2012	6,000,000.00	6,000,300.00	6,000,000,00	1.000	0.981		01/22/2018 08/09/2017
3130A3RM8	800	Fed Home Loan Bank		12/20/2012	9,000,000.00	8,991,630.00	9,007,187,72	1.000	0.966		11/09/2017
JIJUASKING	850	Fed Home Loan Bank	(Callable 6-30-15)	12/30/2014	10,000,000.00	10,005,500.00	10,004,939.24	0.770	0.645		12/30/2016
	· · · · · · · · · · · · · · · · · ·	Subtotal and Average	43,095,105.48		43,000,000.00	42,984,920.00	43,009,217.78		0.793	384	1200/2010
Federal Agency	DiscAmortizi	ing				· · · · · · · · · · · · · · · · · ·		7. 7.7.8			100 <b>100 100</b> 100 100
313396GM9	849	Freddie Mac		12/18/2014	9,000,000.00	9,000,000.00	8 000 005 00				
313396MC4	859	Freddie Mac		04/23/2015	9,000,000,00	8,998,290,00	8,999,865.00	0.135	0.139		06/05/2015
313384HN2	851	Fed Home Loan Bank		02/03/2015	9,000,000,00	8,999,820.00	8,997,700.00 8,999,420.00	0.080	0.082		09/24/2015
313384HB8	852	Fed Home Loan Bank		03/09/2015	9,000,000,00	8,999,910,00	8,999,420.00 8,999,775.00	0.080 0.050	0.082		06/30/2015
313384HN2	853	Fed Home Loan Bank		03/12/2015	10,000,000,00	9,999,800,00	9,999,516.67		0.051		06/19/2015
313384HN2	854	Fed Home Loan Bank		03/18/2015	8,000,000.00	7,999,840.00	7,999,452,22	0.060	0.062		06/30/2015
313384JF7	855	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,999,550,00	8,999,310.00	0.085 0.060	0.087 0.062		06/30/2015
313384KK4	856	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,999,100.00	8,998,797.50	0.065			07/17/2015
313384KZ1	857	Fed Home Loan Bank		04/23/2015	9,000,000,00	8,998,920.00	8,998,460.00	0.085	0.067		08/14/2015
313588LP8	858	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,998,470.00	8,998,215.00	0.070	0.072 0.072		08/28/2015
	9.101 9.1	Subtotal and Average	98,116,478.95		90,000,000.00	89,993,700.00	89,990,511.39		0.077	53	Jan 11/2015
Local Agency In	vestment Fund	\$		• • • • • • • • • • • • • • • • • • •	···· ··· ··· ··· ·		- <u>- 8</u> -580 B			· · · · · · · · · · · · · · · · · · ·	
SYS336	336	Local Agency Invstmt I	Fund		50,000,000.00	50,019,186,40	50.000.000.00	0.290	0.290		
	:	Subtotal and Average	50,000,000.00	_	50,000,000,00			V.47V			
		-			~~,~~,~~.vV	50,019,186.40	50,000,000.00		0.290	1	

## ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Details - Investments

May 31, 2015

						(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 Days to 365 Maturity
		Total and Average	207,459,005.67		203,624,236.24	203,606,718.69	203,615,403.19		0.282 112

## ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Details - Cash May 31, 2015

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate		Days to Maturity
Money Mkt Mu	tual Funds/Cash									
SYS10104	10104	ABPA (Acct Closed)		07/01/2014	0.00	0.00	0.00		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		07/01/2014	442,270.55	442,270.55	442,270,55		0.000	1
SYS361	361	CORVEL (Acct Closed)		07/01/2014	0.00	0.00	0.00		0.000	1
		Average Balance	0.00	Accrued Interest a	t Purchase	247.50	247.50	11	··	1
				Subtotal	<u>=+3</u>	462,518.05	462,518.05			-
	Total Cas	sh and Investments	207,459,005.67		204,086,506.79	204,069,236.74	204,077,921.24		0.282	112



## ORANGE COUNTY FIRE AUTHORITY Aging Report By Maturity Date As of June 1, 2015

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	(06/01/2015 - 06/01/2015)		6 Maturities	0 Payments	62,501,506.79	30.63%	62,501,506.79	62,520,693.19
Aging Interval:	1 - 30 days	(06/02/2015 - 07/01/2015)		5 Maturities	0Payments	45,000,000.00	22.05%	44,998,028.89	44,999,370.00
Aging Interval:	31 - 60 days	(07/02/2015 - 07/31/2015)		1 Maturities	0 Payments	9,000,000.00	4.41%	8,999,310.00	8,999,550.00
Aging Interval:	61 - 91 days	(08/01/2015 - 08/31/2015)		2 Maturities	0 Payments	18,000,000.00	8.82%	17,997,257.50	17,998,020.00
Aging Interval:	92 - 121 days	(09/01/2015 - 09/30/2015)		2 Maturities	0 Payments	18,000,000.00	8.82%	17,995,915.00	17,996,760.00
Aging Interval:	122 - 152 days	(10/01/2015 - 10/31/2015)		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	153 - 183 days	(11/01/2015 - 12/01/2015)		2 Maturities	0 Payments	8,585,000.00	4.20%	8,576,437.78	8,569,676.05
Aging Interval:	184 - 274 days	(12/02/2015 - 03/01/2016)		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	275 - 365 days	(03/02/2016 - 05/31/2016)		1 Maturities	0 Payments	9,000,000.00	4.41%	8,998,122.28	9,000,090.00
Aging Interval:	366 - 1095 days	(06/01/2016 - 05/31/2018)		4 Maturities	0 Payments	34,000,000.00	16.67%	34,011,095.50	33,984,830.00
Aging Interval:	1096 days and after	(06/01/2018 - )		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
			Total for	23 Investments	0 Payments		100.00	204,077,673.74	204,068,989.24

Treasury & Financial Planning



Monthly Investment Report

## **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.

Monthly Investment Report

Treasury & Financial Planning



## Local Agency Investment Fund (LAIF)

As of May 31, 2015, 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 May 31, 2015 is 1.000383728. When applied to OCFA's LAIF investment, the fair value is \$50,019,186 or \$19,186 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 May 31, 2015 is included on the following page.



## State of California Pooled Money Investment Account Market Valuation 5/31/2015

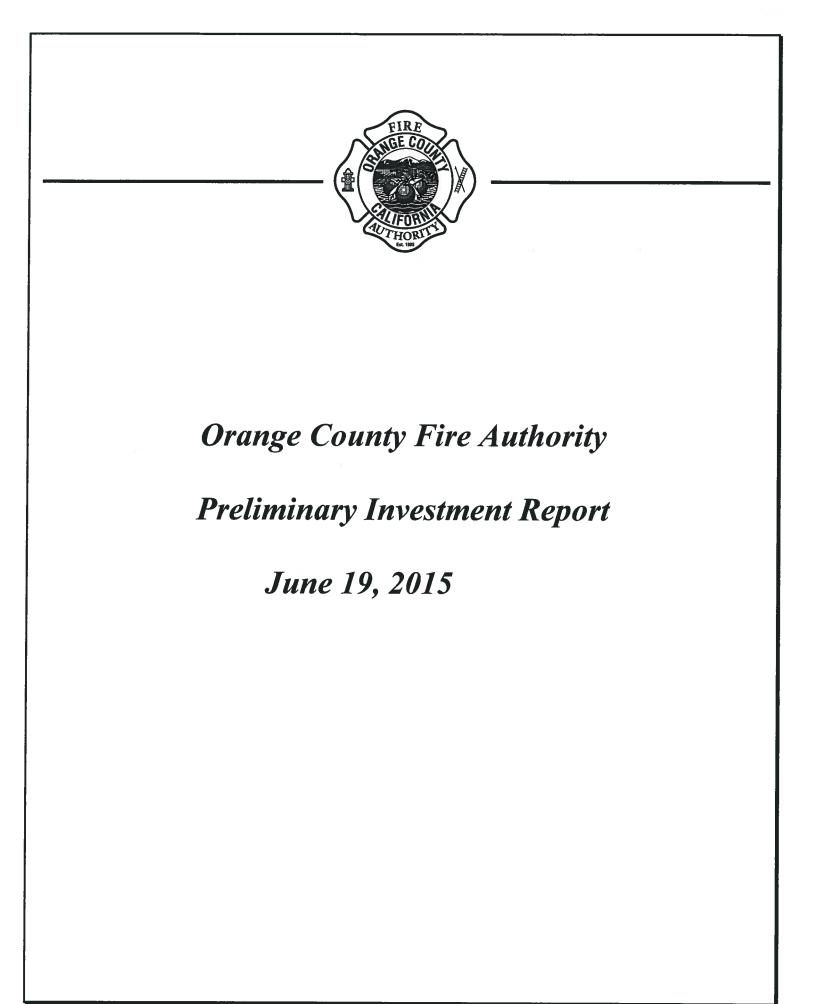
		arrying Cost Plus			at a state of	
Description	Acc	rued Interest Purch.	- Allow	Fair Value	Acc	rued Interest
United States Treasury:				·····		
Bills	\$	11,981,807,123.41	\$	11,992,137,500.00		NA
Notes	\$	20,668,210,909.71	\$	20,681,961,500.00	\$	35,673,299.00
Federal Agency:						
SBA	\$	573,153,104.69	\$	569,648,850.53	\$	508,522.97
MBS-REMICs	\$	91,401,676.31	\$	97,981,866.55	\$	434,673.70
Debentures	\$	1,934,400,444.34	\$	1,933,518,450.00	\$	3,621,398.04
Debentures FR	\$	-	\$	-	\$	-
Discount Notes	\$	4,942,190,909.66	\$	4,945,059,500.00		NA
GNMA	\$	~	\$	-	\$	
Supranational Debentures	\$	450,189,038.36	\$	450,661,000.00	\$	514,159.00
CDs and YCDs FR	\$		\$	-	\$	
Bank Notes	\$	600,000,000.00	\$	599,933,075.23	\$	422,722.22
CDs and YCDs	\$	13,350,001,268.16	\$	13,346,934,875.06	\$	8,609,993.03
Commercial Paper	\$	5,871,698,666.68	\$	5,872,809,381.95		NA
Corporate:						• • • • • • • • • • • • • • • • • • •
Bonds FR	\$	-	\$	-	\$	-
Bonds	\$	-	\$	-	\$	-
Repurchase Agreements	\$		\$			NA
Reverse Repurchase	\$		\$		\$	-
Time Deposits	\$	5,394,540,000.00	\$	5,394,540,000.00		NA
AB 55 & GF Loans	\$	381,649,755.13	\$	381,649,755.13		NA
TOTAL	\$	66,239,242,896.45	\$	66,266,835,754.45	\$	49,784,767.96

Fair Value Including Accrued Interest

66,316,620,522.41

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

\$





Page

#### ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Summary June 19, 2015

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	23,240,264.91	23,240,264.91	23,240,264.91	11.81	1	_ 1	0.001	0.001
Commercial Paper DiscAmortizing	8,585,000.00	8,570,792.10	8,577,375.73	4.36	203	154	0.211	0.214
Federal Agency Coupon Securities	43,000,000.00	42,983,530.00	43,009,392.73	21.85	1,238	365	0.783	0.793
Federal Agency DiscAmortizing	72,000,000.00	71,995,050.00	71,993,565.69	36.58	123	45	0.072	0.073
Local Agency Investment Funds	50,000,000.00	50,019,186.40	50,000,000.00	25.40	1	1	0.286	0.290
Investments	196,825,264.91	196,808,823.41	196,820,599.06	100.00%	325	103	0.279	0.283
Cash and Accrued Interest								
Passbook/Checking (not included in yield calculations)	632,248.15	632,248.15	632,248.15		1	1	0.000	0.000
Accrued Interest at Purchase		247.50	247.50					
Subtotal		632,495.65	632,495.65					
Total Cash and Investments	197,457,513.06	197,441,319.06	197,453,094.71		325	103	0.279	0.283
Total Earnings	June 19 Month Ending	Fiscal Year To D	ate					
Current Year	30,307.64	441,820	.78				and the second second	
Average Daily Balance	203,581,019.04	170,053,920	.23					
Effective Rate of Return	0.29%	0	.27%					

"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, 2015. 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 fax months."/

Patricia Jakubiak, Treasurer Cash and Investments with GASB 31 Adjustment:

Total	\$ 197,358,928.24
GASB 31 Adjustment to Books (See Note 3 on page 18)	\$ (94,166.47)
Book Value of Cash & Investments before GASB 31 (Above)	\$ 197,453,094.71

## ORANGE COUNTY FIRE AUTHORITY Portfolio Management

Portfolio Details - Investments

June 19, 2015

(See Note 1 on page 18) (See Note 2 on page 18	(See Note	e 1 on page 18)	(See Note 2 on page 18)
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CUSIP Money Mkt Mutu SYS528	investment #	issuer	Average	Purchase							
	-1 E		Balance	Date	Par Value	Market Value	Book Value	Stated Rate		Days to	
SYS528	ai runds/Cash						BOOK Value	rate	200	Maturity	Date
	528	High Mark 100% US T	reasury MMF		23,240,264,91	23,240,264.91	00 040 00 <i>4</i> 04				
	S	ubtotal and Average	19,581,546.98		23,240,264.91		23,240,264.91	0.001	0.001	1	
Commercial Pap					23,240,204.91	23,240,264.91	23,240,264.91	- X	0.001	1	
36959JYR8		-									
36595JYL1	860	GEN ELEC CAP CRP		04/23/2015	2,570,000.00	2,565,656.70	2,567,744.11	0.200	0.206	159 -	11/25/2015
202323111	862	GEN ELEC CAP CRP		05/08/2015	6,015,000.00	6,005,135.40	6,009,631.62	0,210	0.218		11/20/2015
2 <u>1111</u> 1 1 1 1	S	ubtotal and Average	8,576,931.44		8,585,000.00	8,570,792.10	8,577,375.73		0.214		112012015
Federal Agency (	Coupon Securit	ies				· · · · · · · · · · · · · · · ·			<b>U.214</b>	154	-
3133ECM76	809	Federal Farm Credit B		04/25/2013	0.000.000.00						
3133EEA75	861	Federal Farm Credit B	BRK (Callable 7.22.15)	04/23/2015	9,000,000.00	9,000,090.00	8,998,233,43	0.400	0.424	307 0	04/22/2016
3133804V6	787	Fed Home Loan Bank		08/09/2012	9,000,000.00	8,987,490.00	8,999,352.81	0.990	1.031	32 (	01/22/2018
3133813R4	800	Fed Home Loan Bank		12/20/2012	8,000,000.00	6,000,300.00	6,000,000.00	1.000	0.981	781 0	08/09/2017
3130A3RM8	850	Fed Home Loan Bank		12/30/2014	9,000,000.00	8,994,150.00	9,007,032.18	1.000	0.966	873 1	11/09/2017
	S	ubtotal and Average	· · · · · · · · · · · · · · · · · · ·	12/30/2014	10,000,000.00	10,001,500.00	10,004,774.31	0.770	0.645	10 1	2/30/2016
Federal Assess		· · · · · · · · · · · · · · · · · · ·	43,009,309.85		43,000,000.00	42,983,530.00	43,009,392.73		0.793	365	
Federal Agency [		9					1 1000 1000				
313396MC4	859	Freddie Mac		04/23/2015	9,000,000,00	8,998,380.00	8,998,080.00	0.080		•• •	
313384HN2	851	Fed Home Loan Bank		02/03/2015	9,000,000.00	9,000,000,00	8,999,800.00	0.080	0.082		9/24/2015
313384HN2	853	Fed Home Loan Bank		03/12/2015	10,000,000,00	10,000,000.00	9,999,833,33	0.060	0.082		6/30/2015
313384HN2	854	Fed Home Loan Bank		03/18/2015	8,000,000.00	8,000,000.00	7,999,811.11	0.085	0.062 0.087		6/30/2015
313384JF7	855	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,999,820,00	8,999,595.00	0.060			6/30/2015
313384KK4	856	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,999,190.00	8,999,106,25	0.065	0.062		7/17/2015
313384KZ1	857	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,999,010.00	8,998,792,50	0.065	0.067 0.072		8/14/2015
313588LP8	858	Fed Home Loan Bank		04/23/2015	9,000,000.00	8,998,650.00	8,998,547.50	0.070	0.072		8/28/2015 9/11/2015
	· · · ·	ibtotal and Average	82,413,230.76		72,000,000.00	71,995,050.00	71,993,565.69	0.010	0.072	45	8111/2015
Local Agency Inv	estment Funds		5 S. 5 S.				·· · · · · · ·				0 W 703
SYS338	336	Local Agency Invstmt F	und		50,000,000.00	50,019,186.40	50,000,000.00	0.290	0.290	1	
	Su	btotal and Average	50,000,000.00		50,000,000.00	50,019,186.40	50,000,000,00	- 1200	0.290	'	

#### ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Details - Investments June 19, 2015

						(See Note 1 on page 18)	(See Note 2 on page 18)	ote 2 on page 18)			
CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Stated Book Value Rate	YTM/C Days to 365 Maturity			
	Tota	al and Average	203,581,019.04		196,825,264.91	196,808,823.41	196,820,599.06	0.283 103			

## ORANGE COUNTY FIRE AUTHORITY Portfolio Management Portfolio Details - Cash June 19, 2015

CUSIP	Investment #	Issuer	Average Balance	Purchase Date	Par Value	Market Value	Book Value	Stated Rate		Days to Maturity
Money Mkt Mu	tual Funds/Cash									
SYS10104 SYS10033 SYS4 SYS361	10104 10033 4 361	ABPA (Acct Closed) Revolving Fund Union Bank CORVEL (Acct Closed)		07/01/2014 07/01/2014 07/01/2014 07/01/2014	0.00 20,000.00 612,248.15 0.00	0.00 20,000.00 612,248.15 0.00	0.00 20,000.00 612,248.15 0.00		0.000 0.000 0.000 0.000	1 1 1
	Average Balance		0.00	Accrued Interest at Subtotal	Purchase	247.50 632,495.65	247.50 632,495.65			1
	Total Cas	sh and Investments	203,581,019.04		197,457,513.06	197,441,319.06	197,453,094.71		0.283	103



#### ORANGE COUNTY FIRE AUTHORITY Aging Report By Maturity Date As of June 20, 2015

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	(06/20/2015 - 06/20/2015)		6 Maturities	0 Payments	73,872,513.06	37.41%	73,872,513.06	73,891,699.46
Aging Interval:	1 - 30 days	(06/21/2015 - 07/20/2015)		4 Maturities	0 Payments	36,000,000.00	18.23%	35,999,039.44	35,999,820.00
Aging Interval:	31 - 60 days	(07/21/2015 - 08/19/2015)		1 Maturities	0 Payments	9,000,000.00	4.56%	8,999,106.25	8,999,190.00
Aging Interval:	61 - 91 days	(08/20/2015 - 09/19/2015)		2 Maturities	0 Payments	18,000,000.00	9.11%	17,997,340.00	17,997,660.00
Aging Interval:	92 - 121 days	(09/20/2015 - 10/19/2015)		1 Maturities	0 Payments	9,000,000.00	4.56%	8,998,080.00	8,998,380.00
Aging Interval:	122 - 152 days	(10/20/2015 - 11/19/2015)		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	153 - 183 days	(11/20/2015 - 12/20/2015)		2 Maturities	0 Payments	8,585,000.00	4.34%	8,577,375.73	8,570,792.10
Aging Interval:	184 - 274 days	(12/21/2015 - 03/20/2016)		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
Aging Interval:	275 - 365 days	(03/21/2016 - 06/19/2016)		1 Maturities	0 Payments	9,000,000.00	4.56%	8,998,233.43	9,000,090.00
Aging Interval:	366 - 1095 days	(06/20/2016 - 06/19/2018)		4 Maturities	0 Payments	34,000,000.00	17.22%	34,011,159.30	33,983,440.00
Aging Interval:	1096 days and after	(06/20/2018 - )		0 Maturities	0 Payments	0.00	0.00%	0.00	0.00
			Total for	21 Investments	0 Payments	··· ···	100.00	197,452,847.21	197,441,071.56

Treasury & Financial Planning



Monthly Investment Report

### 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.

#### GLOSSARY

#### **INVESTMENT TERMS**

Basis Point. Measure used in quoting yields on bonds and notes. One basis point is .01% of yield.

**Book Value**. This value may be the original cost of acquisition of the security, or original cost adjusted by the amortization of a premium or accretion of a discount. The book value may differ significantly from the security's current value in the market.

**Commercial Paper**. Unsecured short-term promissory notes issued by corporations, with maturities ranging from 2 to 270 days; may be sold on a discount basis or may bear interest.

**Coupon Rate.** Interest rate, expressed as a percentage of par or face value, that issuer promises to pay over lifetime of debt security.

Discount. The amount by which a bond sells under its par (face) value.

**Discount Securities**. Securities that do not pay periodic interest. Investors earn the difference between the discount issue price and the full face value paid at maturity. Treasury bills, bankers' acceptances and most commercial paper are issued at a discount.

Effective Rate of Return. Rate of return on a security, based on its purchase price, coupon rate, maturity date, and the period between interest payments.

**Federal Agency Securities**. Securities issued by agencies such as the Federal National Mortgage Association and the Federal Farm Credit Bank. Though not general obligations of the US Treasury, such securities are sponsored by the government and therefore have high credit ratings. Some are issued on a discount basis and some are issued with coupons.

**Federal Funds.** Funds placed in Federal Reserve banks by depository intuitions in excess of current reserve requirements. These depository institutions may lend fed funds to each other overnight or on a longer basis. They may also transfer funds among each other on a same-day basis through the Federal Reserve banking system. Fed Funds are considered to be immediately available funds.

Fed Funds Rate. The interest rate charged by one institution lending federal funds to another.

Federal Open Market Committee. The branch of the Federal Reserve Board that determines the direction of monetary policy.

Local Agency Investment Fund (LAIF). A California State Treasury fund which local agencies may use to deposit funds for investment and for reinvestment with a maximum of \$50 million for any agency *(excluding bond funds, which have no maximum)*. It offers high liquidity because

deposits can be converted to cash in 24 hours and no interest is lost. Interest is paid quarterly and the State's administrative fee cannot to exceed 1/4 of a percent of the earnings.

Market value. The price at which the security is trading and could presumably be purchased or sold.

**Maturity Date**. The specified day on which the issuer of a debt security is obligated to repay the principal amount or face value of security.

Money Market Mutual Fund. Mutual funds that invest solely in money market instruments (short-term debt instruments, such as Treasury bills, commercial paper, bankers' acceptances, repurchase agreements and federal funds).

**Par**. Face value or principal value of a bond typically \$1,000 per bond.

**Rate of Return**. The amount of income received from an investment, expressed as a percentage. A *market rate of return* is the yield that an investor can expect to receive in the current interest-rate environment utilizing a buy-and-hold to maturity investment strategy.

**Treasury Bills.** Short-term U.S. government non-interest bearing debt securities with maturities of no longer than one year. The yields on these bills are monitored closely in the money markets for signs of interest rate trends.

**Treasury Notes.** Intermediate U.S. government debt securities with maturities of one to 10 years.

Treasury bonds. Long-term U.S. government debt securities with maturities of 10 years or longer.

Yield. Rate of return on a bond.

**Yield-to-maturity.** Rate of return on a bond taking into account the total annual interest payments, the purchase price, the redemption value and the amount of time remaining until maturity.

#### ECONOMIC TERMS

**Conference Board Consumer Confidence Index** A survey that measures how optimistic or pessimistic consumers are with respect to the economy in the near future.

**Consumer Price Index (CPI).** A measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food and medical care. Changes in CPI are used to assess price changes associated with the cost of living.

**Durable Goods Orders**. An economic indicator released monthly that reflects new orders placed with domestic manufacturers for delivery of factory durable goods such as autos and appliances in the near term or future.

**Gross Domestic Product.** The monetary value of all the finished goods and services produced within a country's borders in a specific time period. It includes all of private and public consumption, government outlays, investments and exports less imports that occur within a defined territory.

**Industrial Production**. An economic indicator that is released monthly by the Federal Reserve Board. The indicator measures the amount of output from the manufacturing, mining, electric and gas industries.

**ISM Institute for Supply Management (ISM) Manufacturing Index**. A monthly index that monitors employment, production inventories, new orders and supplier deliveries.

**ISM Non-manufacturing Index**. An index based on surveys of non-manufacturing firms' purchasing and supply executives. It tracks economic data for the service sector.

Leading Economic Index. A monthly index used to predict the direction of the economy's movements in the months to come. The index is made up of 10 economic components, whose changes tend to precede changes in the overall economy.

National Federation of Independent Business Small Business Optimism Index. An index based on surveys of small business owners' plans and expectations regarding employment, capital, inventories, economic improvement, credit conditions, expansion, and earnings trends in the near term or future.

**Producer Price Index.** An index that measures the average change over time in the selling prices received by domestic producers for their output.

University of Michigan Consumer Sentiment Index. An index that measures the overall health of the economy as determined by consumer opinion. It takes into account an individual's feelings toward his or her own current financial health, the health of the economy in the short term and the prospects for longer term economic growth.



## Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 3B Consent Calendar

## Quarterly Status Update Orange County Employees' Retirement System

<b>Contact(s) for Further Information</b> Lori Zeller, Assistant Chief Business Services Department	lorizeller@ocfa.org	714.573.6020
Tricia Jakubiak, Treasurer Treasury & Financial Planning	triciajakubiak@ocfa.org	714.573.6301

#### **Summary**

This agenda item is a routine quarterly transmittal to the Committee to provide a report on actions taken by the Orange County Employees' Retirement System's (OCERS) relating to financial issues, procedures, and business practices from April to June 2015.

**Prior Board/Committee Action** 

Not Applicable.

**Recommended Action(s)** Receive and file the report.

**Impact to Cities/County** Not Applicable.

#### **Fiscal Impact**

The net impact to OCFA from the retirement rate changes discussed herein is an increased cost of \$1.4 million over prior projections for FY 2016/17. If the phase-in plan that has been made available by OCERS is used by OCFA, the impact would be smoothed over multiple years from FY 2016/17 to FY 2018/19.

#### Background

### **OCERS INVESTMENT COMMITTEE MEETING April 22, 2015:**

The Investment Committee took the following actions:

- Approved the 2015 target asset allocation for OCERS' \$12.6 billion portfolio, which includes the elimination of global fixed income (from 2% to 0%), a lowering of the real return allocation from 10% to 8%, with a corresponding increase to diversified credit from 10% to 14%.
- Approved the candidate profile for a non-core multifamily real estate fund.
- Approved the Chief Investment Officer's recommended capital allocations to Diversified Credit Managers, which included \$20 million to Monroe Capital (for a total of \$70 million); \$50 million to Park Square (for a total of \$100 million); \$50 million to Tennenbaum Energy Credit Opportunities Fund (for a total of \$125 million); and \$100 million to Blue Bay direct lending.

#### **OCERS BOARD OF RETIREMENT MEETING May 11, 2015:**

The Board received a presentation of the initial December 31, 2014 actuarial valuation report by Paul Angelo of Segal Consulting. This was informational only and the Board was then scheduled to approve the formal December 31, 2014 valuation at its meeting of June 15.

On a system-wide basis, the report is an indicator of OCERS' improving financial health, with contribution costs dropping by -1.28% on an aggregate basis, a reduction in the UAAL from \$5.4 billion to \$4.9 billion, and an improvement of the funding ratio to nearly 70%. That being said, the cost for safety members rose significantly and was of great concern to the Board.

The Board indicated its displeasure that this material was not telegraphed sooner to the Board, in order to allow stakeholders more time to plan for its impact on contribution rates beginning in July 2016. Mr. Angelo apologized, indicating that the rise in safety rates had been masked by the drop in overall plan costs on an aggregate basis, but assured the Board that Segal will always break-out rate group impacts in the future.

The Board asked that staff work with both OCERS' stakeholders as well as contract cities to review the 2014 valuation with them. A meeting to discuss the impacts on contribution rates and the possibility of "phasing-in" the increased cost of employer contributions for safety members was held on May 20<sup>-</sup>

#### **OCERS BOARD OF RETIREMENT MEETING June 15, 2015:**

For the second time, the OCERS Board considered and ultimately adopted the December 31, 2014, Actuarial Valuation by Segal Consulting which sets employer and employee contribution rates for the July 1, 2016 – June 30, 2017 fiscal year (Attachment).

Rates for general employees decreased while rates for safety employees increased. The primary cause of the increase in safety rates was improving mortality and recent merit and pay increases. For OCFA, our general employees are in Rate Group #10 and show a decreased contribution rate of -3.65% of pay; our safety employees are in Rate Group #8 and show an increased contribution rate of 1.36% of pay (Pages 5 and 6 of Attachment). The net impact will increase OCFA's retirement contributions in FY 2016/17 by approximately \$1.4 million over our prior projections for FY 2016/17. OCFA's accelerated pension pay down plan had an offsetting and positive impact on the increase we might have otherwise seen. The OCERS Board also approved a three year "phase-in" of the increased costs to those plan sponsors with safety members, to smooth the impact of the increased costs over multiple years.

OCFA staff will continue to monitor actions taken by OCERS and will report back in October regarding actions taken during the next quarter.

#### Attachment

Segal Consulting Presentation, June 15, 2015

• December 31, 2014 Actuarial Valuation (On file with the Clerk of the Authority and available upon request.)

Orange County Employees Retirement System

## December 31, 2014 Actuarial Valuation – Second Presentation

June 15, 2015

Prepared by:

Paul Angelo, FSA Segal Consulting San Francisco

Attachment

\* Segal Consulting

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# Agenda

➢ Review of December 31, 2014 valuation

- Page references are to the full actuarial valuation report
- Information requested at May presentation related to changes in actuarial assumptions
  - Effect of changes in specific actuarial assumptions on employer contributions for General and Safety members by rate group
  - Comparison of mortality assumptions for California public retirement systems
  - Actual mortality experience for OCERS' Safety retirees
  - Analysis of merit and promotional salary experience for OCERS

Possible phase-in for Safety rate groups of employer contribution rate increase due to changes in actuarial assumptions

# Changes in UAAL since December 31, 2013 Valuation

<ul> <li>December 31, 2013 valuation</li> <li>Total UAAL</li> </ul>	\$5,368 million
Changes during calendar year 2014	+ - )
<ul> <li>Interest minus expected payments to UAAL</li> </ul>	\$2 million
<ul> <li>Additional UAAL payments from Sanitation, Cemetery and OCFA</li> </ul>	-\$151 million
<ul> <li>Difference in actual versus expected contributions</li> </ul>	\$89 million
<ul> <li>Investment gain</li> </ul>	-\$10 million
<ul> <li>Difference in actual versus expected salary increases</li> </ul>	-\$126 million
<ul> <li>Difference in actual versus expected COLA increases</li> </ul>	-\$153 million
<ul> <li>Other (gains)/losses</li> </ul>	\$66 million
<ul> <li>Changes in actuarial assumptions</li> </ul>	-\$122 million
December 31, 2014 valuation	

Total UAAL

\$4,963 million

# Reconciliation of Aggregate Employer Contributions (\$000) [see page 32]

	Contribution Rate	Estimated Amount <sup>(1)</sup>	
Aggregate Recommended Contribution Rate as of December 31, 2013 (before UAAL credit)	38.68%	\$637,586	
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions from Sanitation and Cemetery Districts	<u>-0.55%</u>	<u>-\$9,196</u>	
Aggregate Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	38.13%	\$628,390	
Effect of investment gain (after smoothing)	-0.04%	-\$659	
Effect of additional UAAL contributions from OCFA	-0.10%	-\$1,648	
Effect of difference in actual versus expected contributions	0.39%	\$6,428	
Effect of difference in actual versus expected COLA increases	-0.65%	-\$10,713	
Effect of difference in actual versus expected salary increases	-0.53%	-\$8,735	
Effect of growth in total payroll less than expected	0.27%	\$4,450	
Effect of changes in actuarial assumptions	0.06%	\$989	
Effect of including terminal pay assumptions in legacy plan member rates	-0.18%	-\$2,967	
Effect of other experience (gain)/loss	<u>0.06%</u> <sup>(2)</sup>	<u>\$1,202</u>	
Subtotal	-0.72%	-\$11,653	
Aggregate Recommended Contribution Rate as of December 31, 2014	37.41%	\$616,737	

<sup>(1)</sup> Based on December 31, 2014 projected compensation of \$1,648,160,000.

<sup>(2)</sup> Net of an adjustment of -0.06% to reflect 18-month delay between date of valuation and date of rate implementation for all actuarial experience.



## Reconciliation of Employer Contributions for General Members [see page 137]

	RG #1	RG #2	RG #3	RG #5	RG #9	RG #10	RG #11
Recommended Contribution Rate as of December 31, 2013 (before UAAL credit)	21.03%	36.72%	34.33%	27.03%	25.95%	36.92%	22.10%
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions	<u>0.00%</u>	<u>0.00%</u>	<u>-13.74%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>-9.87%</u>
Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	21.03%	36.72%	20.59%	27.03%	25.95%	36.92%	12.23%
Effect of investment gain	-0.03%	-0.04%	-0.04%	-0.03%	-0.02%	-0.03%	N/A <sup>(1)</sup>
Effect of additional UAAL contributions	0.00%	0.00%	0.00%	0.00%	0.00%	-1.17%	N/A <sup>(1)</sup>
Effect of actual contributions (more)/less than expected	0.12%	0.38%	0.65%	0.29%	0.45%	0.20%	N/A <sup>(1)</sup>
Effect of COLA increases less than expected	-0.39%	-0.58%	-0.50%	-0.48%	-0.29%	-0.41%	N/A <sup>(1)</sup>
Effect of actual individual salary increases more/(less) than expected	-0.12%	-0.56%	0.13%	0.17%	-0.12%	-0.41%	N/A <sup>(1)</sup>
Effect of growth in total payroll (more)/less than expected	-0.83%	0.16%	-0.09%	0.19%	1.05%	-0.41%	N/A <sup>(1)</sup>
Effect of changes in actuarial assumptions	-1.01%	-1.68%	-1.82%	-2.06%	-1.47%	-1.40%	-0.01%
Effect of including terminal pay assumptions in legacy plan member rates	-0.10%	-0.16%	-0.15%	-0.13%	-0.13%	-0.16%	-0.16%
Effect of other experience (gain)/loss <sup>(2)</sup>	<u>-0.63%</u> <sup>(3)</sup>	<u>0.07%</u>	<u>-0.27%</u>	<u>0.20%</u>	<u>0.30%</u>	<u>0.14%</u>	<u>-0.27%</u>
Subtotal	-2.99%	-2.41%	-2.09%	-1.85%	-0.23%	-3.65%	-0.44%
Recommended Contribution Rate as of December 31, 2014	18.04%	34.31%	18.50%	25.18%	25.72%	33.27%	11.79%

<sup>(1)</sup> N/A because RG #11 has become overfunded and under CalPEPRA, the employer's contribution rate cannot be less than the Normal Cost unless the funded ratio is over 120% and other conditions in CalPEPRA are met. If that restriction did not apply, the UAAL rate would have been -0.31% if the overfunded amount is amortized over 30 years.

<sup>(2)</sup> Net of an adjustment to reflect 18-month delay between date of valuation and date of rate implementation for all actuarial experience.

<sup>(3)</sup> Includes -0.28% to reflect recognition of \$2.8 million in estimated withdrawal liability as of 12/31/2014 for Vector Control.



## Reconciliation of Employer Contributions for Safety Members [see page 138]

	RG #6 Probation	RG #7 Law	RG #8 Fire
Recommended Contribution Rate as of December 31, 2013 (before UAAL credit)	40.70%	56.23%	49.53%
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>
Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	40.70%	56.23%	49.53%
Effect of investment gain	-0.04%	-0.06%	-0.05%
Effect of additional UAAL contributions	0.00%	0.00%	-1.19%
Effect of actual contributions (more)/less than expected	0.38%	0.55%	0.43%
Effect of COLA increases less than expected	-0.54%	-1.17%	-0.88%
Effect of actual individual salary increases more/(less) than expected	-0.58%	-1.10%	-0.60%
Effect of growth in total payroll (more)/less than expected	0.70%	1.55%	-0.10%
Effect of changes in actuarial assumptions	6.51%	6.40%	4.26%
Effect of including terminal pay assumptions in legacy plan member rates	-0.22%	-0.35%	-0.13%
Effect of other experience (gain)/loss <sup>(1)</sup>	<u>0.25%</u>	<u>0.61%</u> <sup>(2)</sup>	<u>-0.38%</u>
Subtotal	6.46%	6.43%	1.36%
Recommended Contribution Rate as of December 31, 2014	47.16%	62.66%	50.89%

<sup>(1)</sup> Net of an adjustment to reflect 18-month delay between date of valuation and date of rate implementation for all actuarial experience.

<sup>(2)</sup> Effect of other experience (gain)/loss includes a rate increase of 0.83% due to a loss from retirement.



## Effect of Changes in Actuarial Assumptions on Employer Contributions for General Members [page 141]

	RG #1	RG #2	RG #3	RG #5	RG #9	RG #10	RG #11
Effect of changes in mortality rates <sup>(1)</sup>	-0.84%	-1.17%	-0.96%	-0.74%	-0.75%	-1.00%	-0.09%
Effect of changes in merit and promotional salary increases <sup>(2)</sup>	-0.41%	-0.58%	-0.46%	-0.39%	-0.22%	-0.51%	-0.09%
Effect of changes in retirement rates <sup>(3)</sup>	-0.12%	-0.35%	-0.30%	-0.15%	-0.43%	-0.30%	-0.04%
Effect of changes in termination rates <sup>(4)</sup>	0.94%	1.07%	0.90%	0.01%	0.56%	1.00%	0.57%
Effect of 18-month delay	-0.14%	-0.18%	-0.18%	-0.20%	-0.15%	-0.15%	0.00%
Effect of new lower inflation component of individual salary increases <sup>(5)</sup>	-0.55%	-0.74%	-0.63%	-0.52%	-0.44%	-0.65%	-0.30%
Effect of amortization of established UAAL bases using new lower payroll growth rate <sup>(5)</sup>	0.19%	0.45%	0.11%	0.30%	0.26%	0.41%	0.00%
Effect of other changes in actuarial assumptions <sup>(6)</sup>	<u>-0.08%</u>	<u>-0.18%</u>	<u>-0.30%</u>	<u>-0.37%</u>	<u>-0.30%</u>	<u>-0.20%</u>	<u>-0.06%</u>
Total	-1.01%	-1.68%	-1.82%	-2.06%	-1.47%	-1.40%	-0.01%
Liability Volatility Index (AAL / Payroll)	5.6	9.3	8.5	7.6	5.7	8.2	6.0

<sup>(1)</sup> Includes pre-retirement mortality, healthy post-retirement mortality and disabled post-retirement mortality.

<sup>(4)</sup> Includes percent assumed to elect a refund and percent assumed to be reciprocal.

<sup>(5)</sup> These two changes are the result from lowering the inflation assumption from 3.25% to 3.00%.

<sup>(6)</sup> Includes changes in disability rates, percent married at retirement and annual leave assumptions.



<sup>&</sup>lt;sup>(2)</sup> Includes salary increase assumption for deferred vested members with reciprocity.

<sup>&</sup>lt;sup>(3)</sup> Includes deferred vested retirement age.

## Effect of Changes in Actuarial Assumptions on Employer Contributions for Safety Members [page 142]

	RG #6 Probation	RG #7 Law	RG #8 Fire
Effect of changes in mortality rates <sup>(1)</sup>	2.76%	3.33%	2.77%
Effect of changes in merit and promotional salary increases <sup>(2)</sup>	2.04%	1.82%	1.52%
Effect of changes in retirement rates	-0.71%	0.40%	-0.42%
Effect of changes in termination rates <sup>(3)</sup>	1.90%	0.20%	0.12%
Effect of 18-month delay	0.59%	0.56%	0.38%
Effect of new lower inflation component of individual salary increases <sup>(4)</sup>	-1.01%	-0.98%	-0.84%
Effect of amortization of established UAAL bases using new lower payroll growth rate <sup>(4)</sup>	0.39%	0.64%	0.42%
Effect of other changes in actuarial assumptions <sup>(5)</sup>	<u>0.55%</u>	<u>0.43%</u>	<u>0.31%</u>
Total	6.51%	6.40%	4.26%
Liability Volatility Index (AAL / Payroll)	10.1	15.8	11.8

<sup>(1)</sup> Includes pre-retirement mortality, healthy post-retirement mortality and disabled post-retirement mortality as well as percent of pre-retirement deaths that are assumed to be duty related.

<sup>(2)</sup> Includes salary increase assumption for deferred vested members with reciprocity.

<sup>(3)</sup> Includes percent assumed to elect a refund.

<sup>(4)</sup> These two changes are the result from lowering the inflation assumption from 3.25% to 3.00%.

<sup>(5)</sup> Includes changes in disability rates, percent married at retirement and annual leave assumptions.



# Comparison of mortality assumptions for California public retirement systems

Illustrative Life Expectancy for General and Safety members retiring with service retirement at age 60 and 55, respectively.

		General Members (Assumed Ret. @ 60)		-	Members I Ret. @ 55)
Segal Client	Effective on Valuation Date	Assumed Male Life Expectancy @ Ret. Age	Assumed Female Life Expectancy @ Ret. Age	Assumed Male Life Expectancy @ Ret. Age	Assumed Female Life Expectancy @ Ret. Age
Ventura CERA	06/30/2015	25.9	26.4	32.3	34.7
Alameda CERA	12/31/2014	24.3	26.7	27.9	32.3
Orange CERS	12/31/2014	23.4	25.8	29.7	32.3
San Bernardino CERA	06/30/2014	23.4	25.8	29.7	31.3
Sacramento CERS	06/30/2014	23.7	26.0	29.0	28.8
Imperial CERS	06/30/2014	21.6	24.8	26.9	30.3
Los Angeles City ERS/FPP*	06/30/2014	24.3	25.8	29.0	31.5
Kern CERA	06/30/2014	22.9	25.2	29.1	31.6
Mendocino CERA	06/30/2014	24.3	25.8	28.8	30.4
San Diego CERA	06/30/2013	24.4	25.5	28.1	29.2
Fresno CERA	06/30/2013	23.4	26.4	28.0	30.1
City of Fresno ERS*	06/30/2013	23.9	25.8	30.5	28.5
Contra Costa CERA	12/31/2012	24.7	26.2	30.3	31.8
Sonoma CERA	12/31/2012	24.3	26.4	27.1	29.1
Non Segal Client					
Tulare CERA	06/30/2014	24.8	27.1	27.9	30.8
CALPERS	06/30/2013	25.2	27.5	29.4	31.9
Los Angeles CERA	06/30/2013	24.3	25.9	29.9	30.6
Santa Barbara CERS	06/30/2013	25.3	27.5	29.7	32.0
San Mateo CERA	06/30/2011	24.7	27.2	29.3	31.8
Stanislaus CERA	06/30/2010	23.0	24.8	27.5	29.4

\* Fresno City and Los Angeles City both have separate retirement systems for their General members and Safety members.

# Comparison of mortality assumptions for California public retirement systems

Summary of Post Retirement Mortality Table Adopted for Service Retirees.

			General M	embers			Safety Me	mbers	
	Effective on			Male Age	Female Age			Male Age	Female Age
Segal Client	Valuation Date	Table	Projection	Adjustment	Adjustment	Table	Projection	Adjustment	Adjustment
Ventura CERA	06/30/2015	RP2000 CH	(BB) 2035	-1	1	RP2000 CH	(BB) 2035	-3	-3
Alameda CERA	12/31/2014	RP2000 CH	(BB) 2020	-1	-1	RP2000 CH	(BB) 2020	0	-2
Orange CERS	12/31/2014	RP2000 CH	(BB) 2020	0	0	RP2000 CH	(BB) 2020	-2	-2
San Bernardino CERA	06/30/2014	RP2000 CH	(BB) 2020	0	0	RP2000 CH	(BB) 2020	-2	-1
Sacramento CERS	06/30/2014	RP2000 CH	(BB) 2022	0	0	RP2000 CH	(BB) 2022	-1	2
Imperial CERS	06/30/2014	RP2000 CH	(BB) 2019	2	1	RP2000 CH	(BB) 2019	1	0
Los Angeles City ERS/FPP*	06/30/2014	RP2000 CH	(BB) 2020	-1	0	RP2000 CH	(BB) 2022	-1	-1
Kern CERA	06/30/2014	RP2000 CH	(BB) 2023	1	1	RP2000 CH	(BB) 2023	-1	-1
Mendocino CERA	06/30/2014	RP2000 CH	(BB) 2020	-1	0	RP2000 CH	(BB) 2020	-1	0
San Diego CERA	06/30/2013	RP2000 CH	(AA) 2016	-2	-1	RP2000 CH	(AA) 2016	-1	0
Fresno CERA	06/30/2013	RP2000 CH	(AA) 2015	-1	-2	RP2000 CH	(AA) 2015	-1	-1
City of Fresno ERS*	06/30/2013	RP2000 CH	(AA) 2021	-1	-1	RP2000 CH	(AA) 2021	-3	1
Contra Costa CERA	12/31/2012	RP2000 CH	(AA) 2030	-1	-1	RP2000 CH	(AA) 2030	-2	-2
Sonoma CERA	12/31/2012	RP2000 CH	(AA) 2015	-2	-2	RP2000 CH	(AA) 2015	0	0
Non Segal Client			(				(115-51)		
			(MP2014-2DM)				(MP2014-2DM)		
Tulare CERA	06/30/2014	RP2014 CH	2024	0	0	RP2014 BCH	2024	0	0
CALPERS	06/30/2013	CalPERS Table	(BB) 2020	0	0	CalPERS Table	(BB) 2020	0	0
Los Angeles CERA	06/30/2013	RP2000 CH	(AA) 2025	-1	-1	RP2000 CH	(AA) 2025	-2	-1
Santa Barbara CERS	06/30/2013	RP2000 CH	(BB) 2037	0	0	RP2000 CH	(BB) 2037	0	0
San Mateo CERA	06/30/2011	RP2000 WCH	Not Applic.	-3	-3	RP2000 WCH	Not Applic.	-3	-3
Stanislaus CERA	06/30/2010	RP2000 CH	(AA) 2020	0	0	RP2000 CH	(AA) 2020	0	0

\* Fresno City and Los Angeles City both have separate retirement systems for their General members and Safety members.

CH - Combined Healthy Mortality Table WCH - White Collar Combined Healthy Table BCH - Blue Collar Combined Healthy Table



## Actual mortality experience for OCERS' Safety retirees

Safety							
Period	Actual Death Among <u>Service Retirees</u>	Actual Death Among Disabled Retirees					
01/01/2005 to 12/31/2007	31	8					
01/01/2008 to 12/31/2010	47	18					
01/01/2011 to 12/31/2013	<u>43</u>	<u>14</u>					
Average	40	13					
Expected Deaths under Proposed Assumptions in 12/31/2013 Experience Study	40	13					



The following tables shows the General and Safety members' actual average merit and promotional increases by years of service over the three-year period from January 1, 2011 through December 31, 2013 along with the actual average increases based on combining the current three-year period with the three years from the prior experience study. The current and proposed assumptions are also shown.

The actual average total salary increases for the most recent three-year period were reduced by the actual average inflation plus "across the board" increase (i.e., wage inflation, estimated as the increase in average salaries) for each year over the current threeyear experience period.

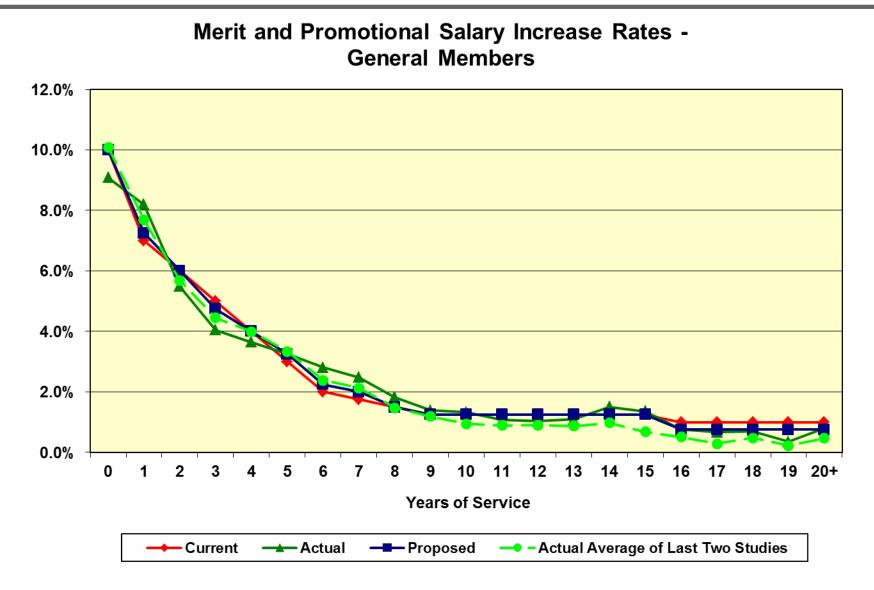
That actual average wage inflation was 1.0% for General and 0.3% for Safety.

Years of Service	Current Assumptions	General January 1, 2011 Through December 31, 2013 Average Merit and Promotional Increases	Average Increases Combining Current (2011 – 2013) and Prior (2008 - 2010) Studies	Proposed Assumptions
Less than 1	10.00%	9.08%	10.09%	10.00%
1	7.00	8.19	7.68	7.25
2	6.00	5.49	5.69	6.00
3	5.00	4.04	4.45	4.75
4	4.00	3.64	4.00	4.00
5	3.00	3.26	3.33	3.25
6	2.00	2.81	2.38	2.25
7	1.75	2.47	2.13	2.00
8	1.50	1.82	1.47	1.50
9	1.25	1.39	1.19	1.25
10	1.25	1.33	0.94	1.25
11	1.25	1.07	0.89	1.25
12	1.25	1.03	0.90	1.25
13	1.25	1.09	0.87	1.25
14	1.25	1.51	0.97	1.25
15	1.25	1.35	0.68	1.25
16	1.00	0.77	0.51	0.75
17	1.00	0.67	0.28	0.75
18	1.00	0.70	0.48	0.75
19	1.00	0.35	0.22	0.75
20 or more	1.00	0.81	0.46	0.75

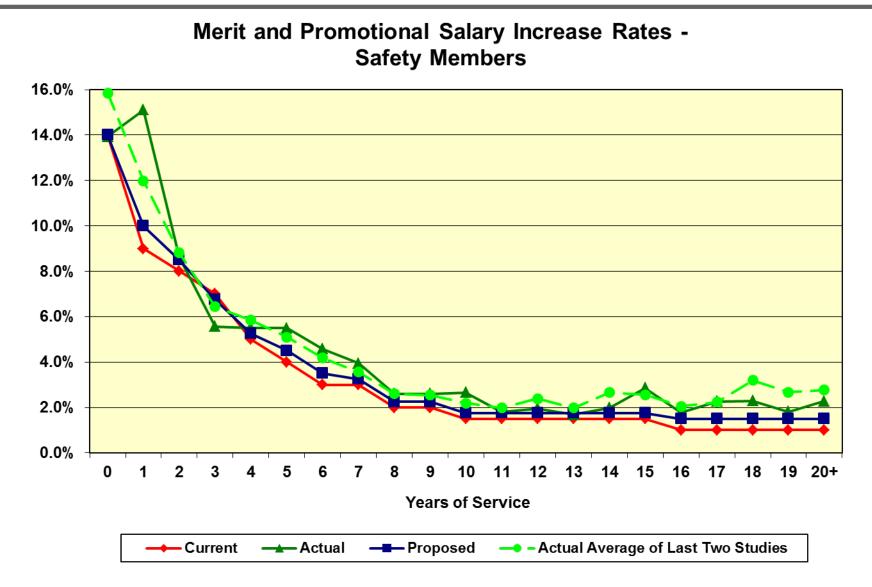


		Safety January 1, 2011 Through	Average Increases Combining	
Years of Service	Current Assumptions	December 31, 2013 Average Merit and Promotional Increases	Current (2011 – 2013) and Prior (2008 - 2010) Studies	Proposed Assumptions
Less than 1	14.00%	13.94%	15.85%	14.00%
1	9.00	15.10	11.99	10.00
2	8.00	8.60	8.81	8.50
3	7.00	5.57	6.43	6.75
4	5.00	5.51	5.85	5.25
5	4.00	5.50	5.09	4.50
6	3.00	4.58	4.18	3.50
7	3.00	3.93	3.56	3.25
8	2.00	2.60	2.60	2.25
9	2.00	2.60	2.54	2.25
10	1.50	2.66	2.20	1.75
11	1.50	1.82	1.98	1.75
12	1.50	1.95	2.39	1.75
13	1.50	1.68	1.98	1.75
14	1.50	1.98	2.66	1.75
15	1.50	2.86	2.57	1.75
16	1.00	1.77	2.05	1.50
17	1.00	2.26	2.24	1.50
18	1.00	2.29	3.19	1.50
19	1.00	1.81	2.68	1.50
20 or more	1.00	2.27	2.77	1.50













## **Possible Phase-in Scenarios for Safety Rate Groups**

- Phase-in of the cost impact of <u>all</u> the changes in actuarial assumptions
  - Over two years
  - Over three years
- Phase-in of the cost impact of only the mortality assumption change
  - Over two years
  - Over three years



## **Employer Contributions for Safety Members**

	RG #6 Probation	RG #7 Law	RG #8 Fire
2015/2016 Employer Contribution Rate	40.70%	56.23%	49.53%
2016/2017 Employer Contribution Rate before Changes in Actuarial Assumptions	40.65%	56.26%	46.63%
2016/2017 Employer Contribution Rate <u>after</u> Changes in Actuarial Assumptions (Without Phase-in)	47.16%	62.66%	50.89%
Phase-in of Cost Impact of All the Changes in Actuarial Assumptions			
2016/2017 Employer Contribution Rate after Changes in Actuarial Assumptions (First year of a <b>Two Year Phase-in</b> )	43.91%	59.46%	48.76%
2016/2017 Employer Contribution Rate after Changes in Actuarial Assumptions (First year of a <b>Three Year Phase-in</b> )	42.82%	58.39%	48.05%
Phase-in of Cost Impact of Only the Mortality Assumption Change			
2016/2017 Employer Contribution Rate after Changes in Actuarial Assumptions (First Year of a <b>Two Year Phase-in</b> )	45.78%	61.00%	49.51%
2016/2017 Employer Contribution Rate after Changes in Actuarial Assumptions (First Year of a <b>Three Year Phase-in</b> )	45.32%	60.44%	49.04%

# Cumulative Incremental Contribution Rate Impact of Assumption Changes – Rate Group #6 Probation

Rate Group #6 – All Assumptions							
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYear Phase-in							
2016/17	6.51%	3.26%	2.17%				
2017/18	6.51%	6.74%	4.65%				
2018/19 and later	6.51%	6.74%	6.95%				

Rate Group #6 – Mortality Only (of the 6.51% total increase, 2.76% is due to mortality)						
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYear Phase-in						
2016/17	6.51%	6.51% 5.13% 4.6				
2017/18	6.51%	6.61%	5.72%			
2018/19 and later			6.70%			



## **Cumulative Incremental Contribution Rate Impact of Assumption Changes – Rate Group #7 Law**

Rate Group #7 – All Assumptions							
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYear Phase-in							
2016/17	6.40%	3.20%	2.13%				
2017/18	6.40%	6.63%	4.57%				
2018/19 and later	6.40%	6.63%	6.83%				

Rate Group #7 – Mortality Only (of the 6.40% total increase, 3.33% is due to mortality)						
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYearYearYear Phase-in						
2016/17	6.40%	6.40% 4.74% 4.18				
2017/18	6.40%	6.52%	5.45%			
2018/19 and later			6.63%			



## **Cumulative Incremental Contribution Rate Impact of Assumption Changes – Rate Group #8 Fire**

Rate Group #8 – All Assumptions							
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYear Phase-in							
2016/17	4.26%	2.13%	1.42%				
2017/18	4.26%	4.41%	3.04%				
2018/19 and later	4.26%	4.41%	4.55%				

Rate Group #8 – Mortality Only (of the 4.26% total increase, 2.77% is due to mortality)						
WithoutWith Two-With Three-Fiscal YearPhase-inYear Phase-inYearYearYear Phase-in						
2016/17	4.26%	2.88%	2.41%			
2017/18	4.26%	4.36%	3.47%			
2018/19 and later			4.45%			





## Orange County Employees Retirement System

Actuarial Valuation and Review as of December 31, 2014

This report has been prepared at the request of the Board of Retirement to assist in administering the Fund. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Retirement and may only be provided to other parties in its entirety. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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100 Montgomery Street, Suite 500 San Francisco, CA 94104 T 415.263.8200 F 415.376.1167 www.segalco.com

June 5, 2015

Board of Retirement Orange County Employees Retirement System 2223 Wellington Avenue Santa Ana, CA 92701

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of December 31, 2014. It summarizes the actuarial data used in the valuation, establishes the funding requirements for fiscal 2016-2017 and analyzes the preceding year's experience.

This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board to assist in administering the Plan. The census and financial information on which our calculations were based was prepared by the Retirement System. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, Enrolled Actuary.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period); and changes in plan provisions or applicable law.

We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in the actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal Consulting, a Member of The Segal Group, Inc.

By:

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

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

AW/hy

## **SECTION 1**

### VALUATION SUMMARY

Purpose.....i Significant Issues in Valuation Year ...ii Summary of Key Valuation Results ...vi Summary of Key Valuation Demographic and Financial Data .... viii

## SECTION 2

1

### VALUATION RESULTS

A.	Member Data1
B.	Financial Information4
C.	Actuarial Experience7
D.	Employer and Member
	Contributions 12
Ε.	Funded Ratio34
F.	Volatility Ratios35

### SECTION 3

### SUPPLEMENTAL INFORMATION

EXHIBIT A	EX
Table of Plan Coverage    36	
EXHIBIT B	
Members in Active Service and	EX
Projected Average Compensation as of	
December 31, 2014 47	
EXHIBIT C	Ež
Reconciliation of Member Data –	
December 31, 2013 to	ЕΣ
December 31, 2014 58	
EXHIBIT D	
Summary Statement of Income and	
Expenses on an Actuarial Value Basis . 59	ЕΣ
EXHIBIT E	
Summary Statement of Assets	
EXHIBIT F	ЕУ
Actuarial Balance Sheet 61	
EXHIBIT G	Aŗ
Summary of Reported Asset Information	
as of December 31, 2014	
EXHIBIT H	Ap
Development of Unfunded/(Overfunded)	<b>A</b>
Actuarial Accrued Liability for Year	Ap
Ended December 31, 2014 63	
EXHIBIT I	۸
Section 415 Limitations 64	Aŗ
EXHIBIT J	
Definitions of Pension Terms	

## **SECTION 4**

### **REPORTING INFORMATION**

EXHIBIT I
Summary of Actuarial Valuation
Results
EXHIBIT II
Schedule of Employer
Contributions
EXHIBIT III
Schedule of Funding Progress 70
EXHIBIT IV
Supplementary Information on
Actuarial Determined Contribution
Required by GASB71
EXHIBIT V
Actuarial Assumptions and
Actuarial Cost Method72
EXHIBIT VI
Summary of Plan Provisions
Appendix A
UAAL Amortization Schedule as of
December 31, 2014 107
Appendix B
Member Contribution Rates 118
Appendix C
Funded Percentages
(by Rate Group)136
Appendix D
Reconciliation of Employer
Contribution Rates
(by Rate Group)137
Appendix E
Reconciliation of UAAL
(by Rate Group) 139
Appendix F
Reconciliation of Impact of
Assumption Changes on Employer
Contribution Rates
(by Rate Group)141
Appendix G
Phase-in of Increase in Contribution
Rates for Safety Rate Groups 143

#### Purpose

This report has been prepared by Segal Consulting to present a valuation of the Orange County Employees Retirement System as of December 31, 2014. The valuation was performed to determine whether the assets and contributions are expected to be sufficient to provide the prescribed benefits. The contribution requirements presented in this report are based on:

- > The benefit provisions of the Retirement System, as administered by the Board of Retirement;
- The characteristics of covered active members, inactive vested members, retired members, and beneficiaries as of December 31, 2014, provided by the Retirement System;
- > The assets of the Plan as of December 31, 2014, provided by the Retirement System;
- > Economic assumptions regarding future salary increases and investment earnings; and
- > Other actuarial assumptions, regarding employee terminations, retirement, death, etc.

One of the general goals of an actuarial valuation is to establish contributions that fully fund the System's liabilities, and that, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions to evaluate the System's assets, liabilities and future contribution requirements. Our calculations are based upon member data and financial information provided to us by the System's staff. This information has not been audited by us, but it has been reviewed and found to be consistent, both internally and with prior year's information.

The contribution requirements are determined as a percentage of payroll. The System's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have applied the Board's funding policy adopted in 2013 to combine and re-amortize the outstanding balance of the unfunded actuarial accrued liability (UAAL) from the December 31, 2012 valuation over a declining 20-year period effective with the December 31, 2013 valuation. Any changes in UAAL due to actuarial gains or losses or due to changes in assumptions or methods will be amortized over separate 20-year periods. Any changes in UAAL due to plan amendments will be amortized over separate 15-year periods and any change in UAAL due to early retirement incentive programs will be amortized over a separate period of up to 5 years.

The rates calculated in this report may be adopted by the Board for the fiscal year that extends from July 1, 2016 through June 30, 2017 (the rates will go into effect during the pay period in which July 1, 2016 is included).

	SECTION 1. Valuation Summary for the Grange County Employees Retirement System
	Significant Issues in Valuation Year
	The following key findings were the result of this actuarial valuation:
<i>Ref: Pgs. 72 and 141</i>	The results of this valuation reflect changes in the economic and non-economic assumptions as recommended by Segal and adopted by the Board for the December 31, 2014 valuation. These changes were documented in our Review of Economic Assumptions report and Actuarial Experience Study and are also outlined in Section 4 Exhibit V of this report. These assumption changes resulted in an increase in the average employer rate of 0.06% of payroll and a decrease in the aggregate members rate of 0.27% of payroll. A reconciliation of the major assumption modifications that cause the change in the employer's rate for each Rate Group is provided in Appendix F.
Ref: Pg. 81	➤ As directed by the Board, we have included the additional cashout (terminal pay) assumptions in developing the basic member rates is this valuation. This resulted in a decrease in the average employer rate of 0.18% of payroll and an increase in the aggregate member rate of 0.20% of payroll.
Ref: Pgs. 70 and 136 Ref: Pgs. 63 and 139	The ratio of the valuation value of assets to the actuarial accrued liabilities has increased from 66.0% to 69.8%. For informational purposes only, we have also prepared in Appendix C the funded ratio for each Rate Group. The System's funded ratio measured on a market value basis increased from 67.7% to 69.6%. The System's unfunded actuarial accrued liability has decreased from \$5,367.9 million as of December 31, 2013 to \$4,963.2 million as of December 31, 2014. The decrease in unfunded actuarial accrued liability is mainly due to additional UAAL payments made by certain employers, lower than expected COLA increases and lower than expected salary increases. A reconciliation of the System's unfunded actuarial accrued liability is provided in Section 3, Exhibit H. A schedule showing the reconciliation of the UAAL by Rate Group is provided in Appendix E.
	The aggregate employer rate calculated in this valuation has decreased from 38.13% of payroll to 37.41% of payroll. The 38.13% rate was calculated after adjusting for the additional UAAL contributions made by O.C. Sanitation District and O.C. Cemetery District during 2014. The contribution rate without adjustment for the additional UAAL contribution was 38.68% of payroll.
Ref: Pgs. 32 and 137	The reasons for the changes in the rates between the 2013 and 2014 valuations are: (i) favorable investment return (after smoothing), (ii) additional UAAL contributions made by certain employers, (iii) lower than expected individual salary increases, (iv) lower than expected individual COLA increases and (v) including the terminal pay assumptions in legacy plan member rates, offset somewhat by (vi) growth in total payroll less than expected, (vii) actual contributions less than expected, (viii) change in actuarial assumptions and (ix) other experience losses. A reconciliation of the System's aggregate employer rate is provided in Section 2, Subsection D (see Chart 15). A reconciliation of the employer contribution rate by Rate Group is provided in Appendix D.

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Ref: Pg. 15	<u>UAAL Rate for Rate Group #1</u> It should be noted that in developing the contribution rate to pay off the UAAL in Rate Group #1 in the body of this report, we have continued to follow the policy used in developing the UAAL rate in the December 31, 2013 valuation to allocate the amortized UAAL payment in proportion to payroll. As the Board is in the process of finalizing a new policy for employers with declining payroll that would apply to University of California-Irvine (U.C.I.) and the Department of Education, we have included a footnote to Chart 13 showing what the contribution rates would be for the other employers (i.e., the County and O.C. IHSS Public Authority) when calculated under that new policy.
	The UAAL amounts allocated to U.C.I. and the Department of Education determined as of December 31, 2014 are provided in our side letters dated June 3, 2015. We have also included in those letters the UAAL payment amounts for U.C.I. and the Department of Education calculated using a level dollar amortized payment over 20 years.
Ref: Pg. 143	<u>Phase-in Rates for Rate Groups #6, #7 and #8</u> In developing the Safety employer contribution rates in the body of this report, we have not reflected the two-year or three-year alternative phase-in of the contribution rate impact of all the changes in actuarial assumptions or of just the change in the mortality assumptions. A copy of our letter dated May 19, 2015 describing the phase-in process together with the resulting contribution rates in 2016/2017 under the different phase-in schedules is provided in Appendix G.
	We understand O.C. Transportation Authority (Rate Group #5) will place the new members hired on or after January 1, 2015 into the PEPRA Plan U. The contribution rate for the PEPRA tier prior to having actual members in that tier has been developed based on the same methodology used to estimate contribution rates for all of the PEPRA tiers in the December 31, 2012 valuation together with the new actuarial assumptions used in this report. We have assumed in this valuation that their demographic profiles (e.g., entry age, composition of male versus female, etc.) can be approximated by the data profile of active members hired in the last year prior to the December 31, 2011 actuarial valuation. That profile is also used in preparing our recommended contribution rates for 2015/2016 as provided in our letter dated June 5, 2015.
Ref: Pg. 33	The aggregate member rate calculated in this valuation has decreased from 12.47% of payroll to 12.42% of payroll. The change in the aggregate member rate is due to: (i) changes in membership demographics, (ii) changes in actuarial assumptions and (iii) including of the terminal pay assumptions in legacy plan member rates. A reconciliation of the System's aggregate member rate is provided in Section 2, Subsection D (see Chart 16).
Ref: Pg. 5	<ul> <li>As indicated in Section 2, Subsection B (see Chart 7) of this report, the total net unrecognized investment loss as of December 31, 2014 is \$21,778,000 (as compared to a net unrecognized gain of \$262,167,000 as of December 31, 2013). This deferred investment loss will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years and will offset any investment gains that may occur after December 31, 2014. The deferred losses will be recognized over the next four years as shown on Line 7 of Chart 7,</li> </ul>

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along with any future gains or losses that will occur if the System does not earn the assumed rate of investment return of 7.25% per year (net of expenses) on a market value basis.

The deferred losses of \$22 million represent about 0.2% of the market value of assets. The potential impact associated with the deferred investment losses may be illustrated as follows:

- If the deferred losses were recognized immediately in the valuation value of assets, the funded ratio would decrease from 69.8% to 69.6%.
- If the deferred losses were recognized immediately in the valuation value of assets, the aggregate employer rate would increase from 37.41% to about 37.5% of payroll.
- > The actuarial valuation report as of December 31, 2014 is based on financial information as of that date. Changes in the value of assets subsequent to that date are not reflected. Declines in asset values will increase the actuarial cost of the plan, while increases will decrease the actuarial cost of the plan.
- This report reflects the \$125 million and \$1.66 million<sup>1</sup> additional contributions made by O.C. Sanitation District and O.C. Cemetery District, respectively, towards their UAAL. The \$125 million<sup>2</sup> of additional contributions made by O.C. Sanitation District has been amortized as a level percent of pay over a period of twenty years effective on January 1, 2015 and used to reduce their UAAL rates for one-half of 2014/2015 and all of 2015/2016. The \$1.6 million of additional contributions made by O.C. Cemetery District has been used to reduce their UAAL rate to zero effective for 2014/2015.

This report also reflects the \$22.5 million<sup>3</sup> additional contributions made by O.C. Fire Authority towards their UAAL. The \$22.5 million of additional contributions made by O.C. Fire Authority has been amortized as a level percent of pay over a period of twenty years effective on December 31, 2014 and used to reduce their UAAL rates for 2016/2017.

The Governmental Accounting Standards Board (GASB) approved two Statements affecting the reporting of pension liabilities for accounting purposes. Statement 67 replaces Statement 25 and is for plan reporting. Statement 68 replaces Statement 27 and is for employer reporting. Statement 67 is effective with the calendar year ending

<sup>&</sup>lt;sup>1</sup> \$1.66 million in additional contributions were made by O.C. Cemetery District on June 30, 2014. After adjusting with interest, those contributions have a value of \$1.72 million as of December 31, 2014.

<sup>&</sup>lt;sup>2</sup> \$125 million in additional contributions were made by O.C. Sanitation District on November 7, 2014. After adjusting with interest, those contributions have a value of \$126.4 million as of December 31, 2014.

<sup>&</sup>lt;sup>3</sup> \$22.5 million in additional contributions were made by O.C. Fire Authority continuously throughout the year. After adjusting with interest, those contributions have a value of \$23.4 million as of December 31, 2014.

December 31, 2014 for plan reporting. Statement 68 is effective with the fiscal year ending June 30, 2015 for employer reporting. The information needed to comply with Statements 67 and 68 will be provided in separate reports.

#### Impact of Future Experience on Contribution Rates

Future contribution requirements may differ from those determined in the valuation because of:

- > difference between actual experience and anticipated experience;
- > changes in actuarial assumptions or methods;
- > changes in statutory provisions; and
- > difference between the contribution rates determined by the valuation and those adopted by the Board.

Summary of Key Valuation Results				
	December 31, 2014		December 31, 2013	
Aggregate Employer Contribution Rates:		Estimated		Estimated
General	Total Rate	<u>Annual Amount<sup>(1)</sup></u>	Total Rate <sup>(2)</sup>	<u>Annual Amount<sup>(1)</sup></u>
Rate Group #1 – Plans A, B and U (non-OCTA, non-OCSD)	18.04%	\$13,437	21.03%	\$15,660
Rate Group #2 – Plans I, J, O, P, S, T and U	34.31	340,899	36.72	364,836
Rate Group #3 – Plans B, G, H and U (Law Library, OCSD)	18.50	12,215	20.59	13,592
Rate Group #5 – Plans A, B and U (OCTA)	25.18	26,099	27.03	28,017
Rate Group #9 – Plans M, N and U (TCA)	25.72	1,590	25.95	1,604
Rate Group #10 – Plans I, J, M, N and U (OCFA)	33.27	7,417	36.92	8,231
Rate Group #11 – Plans M and N, future service, and U (Cemetery)	11.79	152	12.23	158
<u>Safety</u>				
Rate Group #6 – Plans E, F and V (Probation)	47.16%	\$30,192	40.70%	\$26,055
Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	62.66	125,841	56.23	112,921
Rate Group #8 – Plans E, F, Q, R and V (Fire Authority)	50.89	58,895	49.53	57,316
All Groups Combined	37.41%	\$616,737	38.13%	\$628,390
Average Member Contribution Rates:		Estimated		Estimated
General	Total Rate	Annual Amount <sup>(1)</sup>	Total Rate <sup>(3)</sup>	Annual Amount <sup>(1)</sup>
Rate Group #1 – Plans A, B and U (non-OCTA, non-OCSD)	8.73%	\$6,502	9.04%	\$6,732
Rate Group #2 – Plans I, J, O, P, S, T and U	11.68	116,062	12.03	119,540
Rate Group #3 – Plans B, G, H and U (Law Library, OCSD)	11.91	7,862	12.25	8,086
Rate Group #5 – Plans A, B and U (OCTA)	9.31	9,650	9.68	10,033
Rate Group #9 – Plans M, N and U (TCA)	10.28	636	10.57	654
Rate Group #10 – Plans I, J, M, N and U (OCFA)	11.80	2,630	12.13	2,704
Rate Group #11 – Plans M and N, future service, and U (Cemetery)	8.86	114	9.18	119
Safety				
Rate Group #6 – Plans E, F and V (Probation)	15.71%	\$10,058	14.72%	\$9,424
Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	16.50	33,137	15.43	30,989
Rate Group #8 – Plans E, F, Q, R and V (Fire Authority)	15.57	18,018	14.89	17,231
All Groups Combined	12.42%	\$204,669	12.47%	\$205,512

<sup>(1)</sup> Based on December 31, 2014 projected annual compensation.

<sup>(2)</sup> For those Rate Groups with tier specific contribution rates, the total rates shown above have been recalculated by applying the tier specific contribution rates determined in the December 31, 2013 valuation to the corresponding projected payrolls reported as of December 31, 2014.

<sup>(3)</sup> Average rates have been recalculated by applying the individual entry age based rates determined in the December 31, 2013 valuation to the System membership as of December 31, 2014.

	December 31, 2014	December 31, 2013
Funded Status:		
Actuarial accrued liability (AAL)	\$16,413,124	\$15,785,042
Valuation value of assets (VVA) <sup>(1)</sup>	11,449,911	10,417,125
Market value of assets (MVA) <sup>(1),(2)</sup>	11,428,133	10,679,292
Funded percentage on a VVA basis	69.76%	65.99%
Funded percentage on a MVA basis	69.63%	67.65%
Unfunded Actuarial Accrued Liability on a VVA basis	\$4,963,213	\$5,367,917
Unfunded Actuarial Accrued Liability on a MVA basis	4,984,991	5,105,750
Key Assumptions:		
Interest rate	7.25%	7.25%
Inflation rate	3.00%	3.25%
Across-the-board real		
salary increase	0.50%	0.50%

<sup>(1)</sup> Excludes County Investment Account (funded by pension obligation bond proceeds held by OCERS), prepaid employer contributions account and non-valuation reserves.

<sup>(2)</sup> Based on the preliminary unaudited financial statement provided by OCERS for this valuation.



	December 31, 2014	December 31, 2013	Percentage Change
Active Members:			
Number of members	21,459	21,368	0.4%
Average age	45.6	45.6	N/A
Average service	13.2	13.2	N/A
Projected total compensation	\$1,648,160,449	\$1,604,496,236	2.7%
Average projected compensation	\$76,805	\$75,089	2.3%
Retired Member and Beneficiaries:			
Number of members:			
Service retired	11,759	11,228	4.7%
Disability retired	1,364	1,334	2.2%
Beneficiaries	<u>2,046</u>	<u>1,943</u>	5.3%
Total	15,169	14,505	4.6%
Average age	69.4	69.2	N/A
Average monthly benefit <sup>(1)</sup>	\$3,455	\$3,366	2.6%
Vested Terminated Members:			
Number of vested terminated members <sup>(2)</sup>	4,789	4,613	3.8%
Average age	44.7	44.4	N/A
Summary of Financial Data (dollar amounts in thousands):			
Market value of assets <sup>(3)</sup>	\$11,428,223	\$10,679,507	7.0%
Return on market value of assets	4.52%	10.73%	N/A
Actuarial value of assets <sup>(3)</sup>	\$11,450,001	\$10,417,340	9.9%
Return on actuarial value of assets	7.34%	9.11%	N/A
Valuation value of assets <sup>(3)</sup>	\$11,449,911	\$10,417,125	9.9%
Return on valuation value of assets	7.34%	9.11%	N/A

(1) Excludes monthly benefits payable from the STAR COLA.

<sup>(2)</sup> This includes members who chose to leave their contributions on deposit even though they have less than five years of service.

(3) The market value excludes \$109,103,000 and \$109,254,000 as of December 31, 2014 and December 31, 2013, respectively, in the County Investment Account (funded by pension obligation bond proceeds held by OCERS) and \$207,829,000 and \$172,348,000 as of December 31, 2014 and December 31, 2013, respectively, in the prepaid employer contributions account.

Note that the above market values and actuarial values include the non-valuation reserves, which are excluded from the valuation values.

### A. MEMBER DATA

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, vested terminated members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups.

More detailed information for this valuation year and the preceding valuation can be found in Section 3, Exhibits A, B, and C.

A historical perspective of how the member population has changed over the past ten valuations can be seen in this chart.	CHART 1 Member Population: 2005 – 2014					
	Year Ended December 31	Active Members	Vested Terminated Members <sup>(1)</sup>	Retired Members and Beneficiaries	Ratio of Non-Actives to Actives	
	2005	22,467	2,466	10,218	0.56	
	2006	22,791	3,195	10,915	0.62	
	2007	23,618	3,646	11,421	0.64	
	2008	23,720	3,881	11,778	0.66	
	2009	22,633	4,094	12,243	0.72	
	2010	21,742	4,308	12,762	0.79	
	2011	21,421	4,406	13,289	0.83	
	2012	21,256	4,415	13,947	0.86	
	2013	21,368	4,613	14,505	0.89	
	2014	21,459	4,789	15,169	0.93	

<sup>(1)</sup> Includes terminated members due a refund of member contributions.



#### **Active Members**

Plan costs are affected by the age, years of service and compensation of active members. In this year's valuation, there were 21,459 active members with an average age of 45.6, average years of service of 13.2 years, and average compensation of \$76,805. The 21,368 active members in the prior valuation had an average age of 45.6, average service of 13.2 years, and average compensation of \$75,089.

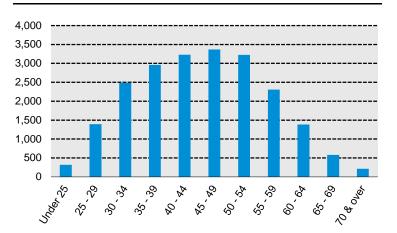
#### **Inactive Members**

In this year's valuation, there were 4,789 members with a vested right to a deferred or immediate vested benefit or entitled to a return of their member contributions versus 4,613 in the prior valuation.

These graphs show a distribution of active members by age and by years of service.

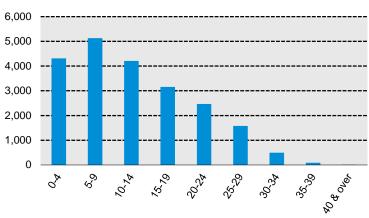
#### CHART 2

Distribution of Active Members by Age as of December 31, 2014



#### CHART 3

Distribution of Active Members by Years of Service as of December 31, 2014





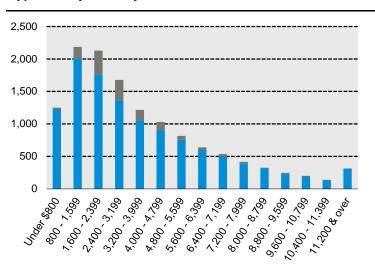
#### **Retired Members and Beneficiaries**

As of December 31, 2014, 13,123 retired members and 2,046 beneficiaries were receiving total monthly benefits of \$52,407,644. For comparison, in the previous valuation, there were 12,562 retired members and 1,943 beneficiaries receiving total monthly benefits of \$48,822,169. These monthly benefits exclude benefits payable from the Supplemental Targeted Adjustment for Retirees Cost of Living Adjustment (STAR COLA).

These graphs show a distribution of the current retired members based on their monthly amount and age, by type of pension.

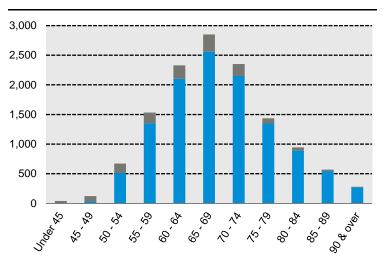


Distribution of Retired Members (Excl. Beneficiaries) by Type and by Monthly Amount as of December 31, 2014



### CHART 5

Distribution of Retired Members (Excl. Beneficiaries) by Type and by Age as of December 31, 2014



Disability

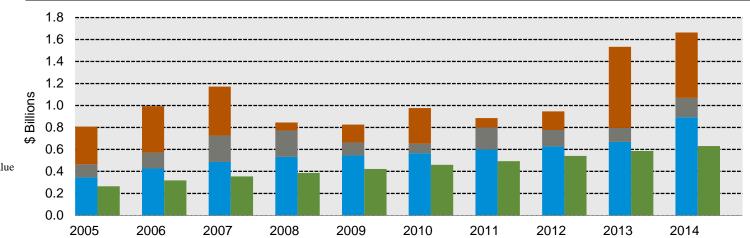
Regular

#### **B.** FINANCIAL INFORMATION

Retirement plan funding anticipates that, over the long term, both contributions and net investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. Retirement plan assets change as a result of the net impact of these income and expense components. The adjustment toward market value shown in the chart is the "non-cash" earnings on investments implicitly included in the actuarial value of assets. Additional financial information, including a summary of these transactions for the valuation year, is presented in Section 3, Exhibits D and E.

#### CHART 6

Comparison of Increases and Decreases in the Actuarial Value of Assets for Years Ended December 31, 2005 – 2014



The chart depicts the components of changes in the actuarial value of assets over the past ten years. Note: The first bar represents increases in assets during each year while the second bar details the decreases.

- Adjustment toward market value
- Benefits paid
- Net interest and dividends
- Net contributions



It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board of Retirement has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets does not have an immediate effect on the actuarial value of assets. The determination of the Actuarial Value of Assets and Valuation Value of Assets is provided below.

#### CHART 7

Determination of Actuarial and Valuation Value of Assets for Year Ended Decembe	r 31, 2014
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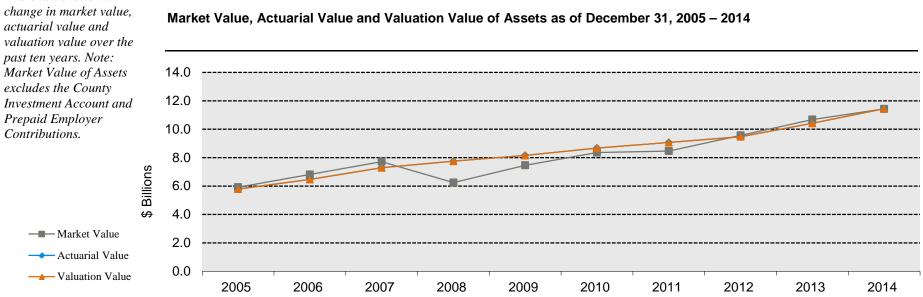
PI	an Year Ending	Total Actual Market Return (net)	Expected Market Return (net)	Investment Gain / (Loss)	Deferred Factor	Deferred Return
	2010	\$787,215,000	\$582,621,000	\$204,594,000	0.0	\$0
	2011	3,236,000	651,782,000	(648,546,000)	0.2	(129,709,000)
	2012	1,014,471,000	659,447,000	355,024,000	0.4	142,010,000
	2013	1,031,118,000	696,553,000	334,565,000	0.6	200,739,000
	2014	487,104,000	780,627,000	(293,523,000)	0.8	(234,818,000)
1.	Total Deferred Retu	rn				\$(21,778,000)
2.	obligation bond proc	f Assets (Excludes \$109,103,000 in ceeds held by OCERS) and \$207,82				\$11,428,223,000 <sup>(1)</sup>
3.	Actuarial Value of A					\$11,450,001,000
4.	Ratio of Actuarial V	falue To Market Value $(3) / (2)$				100.2%
5.	Non-valuation Reser	rves				
	(a) Unclaimed me	ember deposit				\$0
	(b) Medicare med	lical insurance reserve				90,000
	(c) Subtotal					\$90,000
6.	Valuation value of a	ssets $(3) - (5)(c)$				\$11,449,911,000
7.	Deferred Return Rec	cognized in Each of the Next 4 year	s			
	(a) Amount recog	nized on 12/31/2015				\$(50,495,000)
	(b) Amount recog	nized on 12/31/2016				79,213,000
	(c) Amount recog	nized on 12/31/2017				8,209,000
	(d) Amount recog	nized on 12/31/2018				(58,705,000)
	(e) Subtotal (may	not total exactly due to rounding)				\$(21,778,000)

<sup>(1)</sup> Based on the preliminary unaudited financial statement provided by OCERS for this valuation.



The chart shows the determination of the actuarial value of assets as of the valuation date.

The market value, actuarial value, and valuation value of assets are representations of OCERS' financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets, but with less volatility. The valuation value of assets is the actuarial value, excluding any non-valuation reserves. The valuation value of assets is significant because OCERS' liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.



### CHART 8

★ Segal Consulting

This chart shows the

Contributions.

6

#### C. ACTUARIAL EXPERIENCE

To calculate the required contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the contribution requirement will decrease from the previous year. On the other hand, the contribution requirement will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years.

The total experience gain was \$284.3 million, a gain of \$9.6 million from investments, a gain of \$62.1 million from contribution experience (includes a gain of \$151.5 million from additional UAAL payments and a loss of \$89.4 million from all other contribution experiene) and a gain of \$212.7 million from all other sources. A discussion of the major components of the actuarial experience is on the following pages.

#### This chart provides a summary of the actuarial experience during the past year.

#### CHART 9

Actuarial Experience for Year Ended December 31, 2014 (Dollar Amounts in Thousands)

1.	Net gain/(loss) from investments <sup>(1)</sup>	\$9,570,000
2.	Net gain/(loss) from contribution experience	62,078,000
3.	Net gain/(loss) from other experience <sup>(2)</sup>	212,676,000
4.	Net experience gain/(loss): $(1) + (2) + (3)$	\$284,324,000

<sup>(1)</sup> Details in Chart 10.

<sup>(2)</sup> See Section 3, Exhibit H.

#### **Investment Rate of Return**

CHART 10

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on OCERS' investment policy. For valuation purposes, the assumed rate of return on the valuation value of assets was 7.25% (based on the December 31, 2013 valuation). The actual rate of return on a valuation basis for the 2014 plan year was 7.34%.

Since the actual return for the year was more than the assumed return, OCERS experienced an actuarial gain during the year ended December 31, 2014 with regard to its investments.

# This chart shows the gain/(loss) due to investment experience.

Investment Experience for Year Ended December 31, 2014 – Valuation Value and Actuarial Value of Assets

	Valuation Value	Actuarial Value	Market Value
1. Actual return	\$771,174,000	\$771,049,000	\$487,104,000
2. Average value of assets	\$10,504,886,000	\$10,505,101,000	\$10,767,268,000
3. Actual rate of return: $(1) \div (2)$	7.34%	7.34%	4.52%
4. Assumed rate of return	7.25%	7.25%	7.25%
5. Expected return: (2) x (4)	\$761,604,000	\$761,620,000	\$780,627,000
6. Actuarial gain/(loss): $(1) - (5)$	<u>\$9,570,000</u>	<u>\$9,429,000</u>	<u>\$(293,523,000)</u>



Because actuarial planning is long term, it is useful to see how the assumed investment rate of return has followed actual experience over time. The chart below shows the rate of return on an valuation, actuarial and market basis for the last ten years.

#### CHART 11

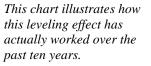
Investment Return – Valuation Value, Actuarial Value and Market Value: 2005 - 2014 (Dollar Amounts in Thousands)

	Valuatio Investmer		Actuaria Investme		Market Investmen	
Year Ended December 31	Amount	Percent	Amount	Percent	Amount	Percent
2005	\$449,620	8.50%	\$461,972	8.72%	\$441,178	8.11%
2006	565,491	9.68%	568,254	9.71%	787,330	13.17%
2007	683,212	10.45%	685,780	10.49%	769,613	11.18%
2008	312,821	4.25%	311,887	4.23%	(1,617,791)	-20.76%
2009	282,764	3.62%	281,360	3.60%	1,092,660	17.32%
2010	412,046	5.02%	411,960	5.02%	787,215	10.47%
2011	287,241	3.29%	286,585	3.28%	3,236	0.04%
2012	318,043	3.49%	318,033	3.49%	1,014,471	11.92%
2013	866,402	9.11%	866,402	9.11%	1,031,118	10.73%
2014	771,174	7.34%	771,049	7.34%	487,104	4.52%
Year Average Return		5.63%		5.62%		7.44%
-Year Average Return		6.44%		6.46%		6.11%

Note: The dollar amount of return on market value is net of the return on the County Investment Account (funded by pension obligation bond proceeds held by OCERS) and prepaid employer contributions account. Furthermore, due to differences in how returns are calculated, these market value rates of return will generally differ somewhat from the return reported by OCERS and its investment consultant.

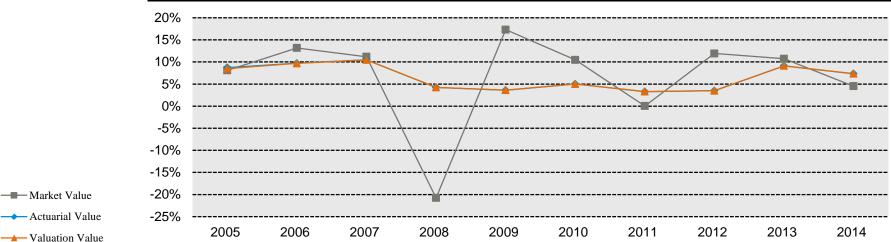


Subsection B described the actuarial asset valuation method that gradually takes into account fluctuations in the market value rate of return. The effect of this is to stabilize the actuarial rate of return, which contributes to leveling pension plan costs.





Market, Actuarial, and Valuation Value Rates of Return for Years Ended December 31, 2005 - 2014





#### **Other Experience**

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- > actual turnover among the participants,
- > retirement experience (earlier or later than expected),
- > mortality (more or fewer deaths than expected),

- > the number of disability retirements, and
- > salary increases different than assumed.

The net gain from this other experience for the year ended December 31, 2014 amounted to \$212.7 million which is 1.30% of the actuarial accrued liability. See Exhibit H in Section 3 for a detailed development of the Unfunded Actuarial Accrued Liability.

### **D.** EMPLOYER AND MEMBER CONTRIBUTIONS

Employer contributions consist of two components:

Normal Cost	The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.
	For Probation Safety members who have prior benefit service in the General OCERS plan, the normal cost rate for their current plan is calculated based on the entry date for their current plan.
Contribution to the Unfunded	
Actuarial Accrued Liability (UAAL)	The annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative unfunded actuarial accrued liability) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 3.50% (i.e., 3.00% inflation plus 0.50% across-theboard salary increase). The outstanding balance of the December 31, 2012 UAAL was combined and re-amortized over a declining 20-year period effective with the December 31, 2013 valuation. Any changes in UAAL due to actuarial gains or losses or due to changes in assumptions or methods will be amortized over separate 15-year periods and any change in UAAL due to early retirement incentive programs will be amortized over a separate period of up to 5 years.

The recommended employer contributions are provided in Chart 13.

Member Contributions

Non-CalPEPRA Members

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a member's basic contributions made in a given year until a certain age will be sufficient to fund an annuity at that age that is equal to:

- > 1/200 of Final Average Salary for General Plan A;
- > 1/120 of Final Average Salary for General Plan B;
- > 1/100 of Final Average Salary for General Plans G, H, I, J, and S;
- > 1/120 of Final Average Salary for General Plans M, N, O, and P;
- > 1/200 of Final Average Salary for Safety Plans E and Q, and;
- > 1/100 of Final Average Salary for Safety Plans F and R.

The annuity age is 60 for General Plans A, B, M, N, O, P and S, 55 for Plans G, H, I, and J, and 50 for Safety Plans E, F, Q, and R. It is assumed that contributions are made annually at the same rate, starting at entry age. In addition to the basic contributions, members pay one-half of the total normal cost necessary to fund cost-of-living benefits. Accumulation includes crediting of interest at the assumed investment earnings rate.

Effective with the December 31, 2014 valuation, for determining the cost of the total benefit (i.e., basic and COLA components), the effect of the assumed additional cashouts are recognized in the valuation as an employer and member cost. Prior to the December 31, 2014 valuation, for determining the cost of the basic benefit (i.e., non-COLA component), the effect of the assumed additional cashouts were recognized in the valuation only as an employer cost and did not affect member contribution rates. The assumed additional cashouts were only used in establishing COLA member contribution rates.

CalPEPRA MembersPursuant to Section 7522.30(a) of the Government Code, CalPEPRA members in<br/>Plans T, U and V are required to contribute at least 50% of the Normal Cost rate.<br/>We have assumed that exactly 50% of the Normal Cost would be paid by the new<br/>members. Also of note is that based on our recommendation, OCERS has decided<br/>to use the discretion made available by AB1380 to no longer round the member's<br/>contribution rate to the nearest ¼% as previously required by the California Public<br/>Employees' Pension Reform Act of 2013 (CalPEPRA).<br/>Note that for members in Plan T, their basic rates have been calculated using a<br/>methodology similar to that used for Plan P. For members in Plan U or Plan V,<br/>their basic rates have been calculated using a methodology outlined in our letter<br/>dated December 4, 2012 that was previously approved by the Board.Member contribution rates are provided in Appendix B.

#### SECTION 2: Valuation Results for the Orange County Employees Retirement System

#### CHART 13

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 3	1, 2014 Valuation	December 3	l, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #1 – Plans A and B (2.0% @ 57 and 1.6667% @ 57.5 – n	on-OCTA, no	on-OCSD)		
Normal Cost	9.67%	\$4,965	9.82%	\$5,042
UAAL <sup>(2),(3)</sup>	8.62%	4,426	11.34%	<u>5,823</u>
Total Contribution	18.29%	\$9,391	21.16%	\$10,865
Rate Group #1 – Plan U (2.5% @ 67 PEPRA) (4)				
Normal Cost	8.87%	\$2,052	9.39%	\$2,172
UAAL <sup>(2),(3)</sup>	8.62%	<u>1,994</u>	11.34%	2,623
Total Contribution	17.49%	\$4,046	20.73%	\$4,795
Rate Group #1 – Plans A, B and U Combined				
Normal Cost	9.42%	\$7,017	9.69%	\$7,214
UAAL <sup>(2),(3)</sup>	8.62%	<u>6,420</u>	<u>11.34%</u>	<u>8,446</u>
Total Contribution	18.04%	\$13,437	21.03%	\$15,660

<sup>(1)</sup> See page 27 for projected annual compensation.

<sup>(2)</sup> UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

<sup>&</sup>lt;sup>(4)</sup> Applicable for members hired on or after January 1, 2013.



<sup>(3)</sup> In developing the above contribution rate to pay off the UAAL, we have continued to follow the policy used in developing the UAAL rate in the December 31, 2013 valuation to allocate the amortized UAAL payment by payroll. As the Board is in the process of finalizing a new policy for the employer with declining payroll that applies to U.C.I. and the Department of Education, we have also calculated what the contribution rate would be for the other employers (i.e., the County and O.C. IHSS Public Authority) when calculated under that new policy once it is finalized. That rate is 5.67% of payroll as of December 31, 2014. The annual payment amounts for U.C.I. and the Department of Education to pay off their UAAL over a 20-year period are provided in our side letters dated June 3, 2015.

#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation		December 3	1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #2 – Plans I and J (2.7% @ 55 – non-OCFA)				
Normal Cost	13.22%	\$118,832	13.66%	\$122,787
UAAL <sup>(2)</sup>	<u>21.72%</u>	<u>195,237</u>	<u>23.72%</u>	213,215
Total Contribution	34.94%	\$314,069	37.38%	\$336,002
Rate Group #2 – Plans O and P (1.62% @ 65)				
Normal Cost	5.49%	\$774	5.61%	\$791
UAAL <sup>(2)</sup>	<u>21.72%</u>	<u>3,064</u>	<u>23.72%</u>	<u>3,346</u>
Total Contribution	27.21%	\$3,838	29.33%	\$4,137
Rate Group #2 – Plan S (2.0% @ 57)				
Normal Cost	10.54%	\$54	12.46%	\$63
UAAL <sup>(2)</sup>	21.72%	<u>111</u>	23.72%	<u>121</u>
Total Contribution	32.26%	\$165	36.18%	\$184

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

Note: For employers with future service only benefit improvements under 2.7% @ 55, refer to the employer rate adjustment on page 28.



#### SECTION 2: Valuation Results for the Orange County Employees Retirement System

#### CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation		er 31, 2014 Valuation December 31, 2013 Valuat	
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #2 – Plan T (1.62% @ 65 PEPRA) <sup>(3)</sup>				
Normal Cost	6.61%	\$4,874	6.70%	\$4,941
UAAL <sup>(2)</sup>	<u>21.72%</u>	<u>16,016</u>	23.72%	<u>17,491</u>
Total Contribution	28.33%	\$20,890	30.42%	\$22,432
Rate Group #2 – Plan U (2.5% @ 67 PEPRA) (4)				
Normal Cost	8.33%	\$537	8.56%	\$552
UAAL <sup>(2)</sup>	21.72%	<u>1,400</u>	23.72%	<u>1,529</u>
Total Contribution	30.05%	\$1,937	32.28%	\$2,081
Rate Group #2 – Plans I, J, O, P, S, T and U Combined				
Normal Cost	12.59%	\$125,071	13.00%	\$129,134
UAAL <sup>(2)</sup>	21.72%	215,828	23.72%	235,702
Total Contribution	34.31%	\$340,899	36.72%	\$364,836

<sup>(1)</sup> See page 27 for projected annual compensation.

<sup>(2)</sup> UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

(3) Applicable for members hired on or after January 1, 2013 except for County Attorneys, San Juan Capistrano employees and OCERS management employees.

<sup>(4)</sup> Applicable for County Attorneys, San Juan Capistrano employees and OCERS management employees hired on or after January 1, 2013.

Note: For employers with future service only benefit improvements under 2.7% @ 55, refer to the employer rate adjustment on page 28.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation		December 3	1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #3 – Plans G and H (2.5% @ 55 – OCSD)				
Normal Cost	12.40%	\$6,760	12.89%	\$7,027
UAAL <sup>(2)</sup>	6.26%	3,413	7.86%	4,285
Total Contribution	18.66%	\$10,173	20.75%	\$11,312
Rate Group #3 – Plans G and H (2.5% @ 55 – Law Library)				
Normal Cost	12.40%	\$159	12.89%	\$166
UAAL <sup>(2)</sup>	20.21%	<u>260</u>	21.87%	281
Total Contribution	32.61%	\$419	34.76%	\$447
Rate Group #3 – Plan B (1.64% @ 57 – OCSD)				
Normal Cost	10.30%	\$517	10.53%	\$529
UAAL <sup>(2)</sup>	<u>6.26%</u>	<u>314</u>	7.86%	<u>394</u>
Total Contribution	16.56%	\$831	18.39%	\$923

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

Note: For employers with future service only benefit improvements under 2.5% @ 55, refer to the employer rate adjustment on page 28.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation		December 3	1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #3 – Plan U (2.5% @ 67 PEPRA – OCSD) <sup>(3)</sup>				
Normal Cost	9.00%	\$467	9.66%	\$502
UAAL <sup>(2)</sup>	<u>6.26%</u>	<u>325</u>	7.86%	408
Total Contribution	15.26%	\$792	17.52%	\$910
Rate Group #3 – Plan U (2.5% @ 67 PEPRA – Law Library) <sup>(3)</sup>				
Normal Cost	9.00%	\$0	9.66%	\$0
UAAL <sup>(2)</sup>	20.21%	<u>0</u>	21.87%	<u>0</u>
Total Contribution	29.21%	\$0	31.53%	\$0
Rate Group #3 – Plans B, G, H and U Combined				
Normal Cost	11.97%	\$7,903	12.46%	\$8,224
UAAL <sup>(2)</sup>	6.53%	4,312	8.13%	5,368
Total Contribution	18.50%	\$12,215	20.59%	\$13,592

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.

<sup>(3)</sup> Applicable for members hired on or after January 1, 2013.

Note: For employers with future service only benefit improvements under 2.5% @ 55, refer to the employer rate adjustment on page 28.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation		December 3	l, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #5 – Plans A and B (2.0% @ 57 and 1.6667% @ 57.5 –	OCTA)			
Normal Cost	10.78%	\$11,173	11.81%	\$12,241
UAAL <sup>(2)</sup>	<u>14.40%</u>	<u>14,926</u>	15.22%	<u>15,776</u>
Total Contribution	25.18%	\$26,099	27.03%	\$28,017
Rate Group #5 – Plan U (2.5% @ 67 PEPRA) <sup>(3)</sup>				
Normal Cost	10.04%	\$0	10.69%	\$0
UAAL <sup>(2)</sup>	<u>14.40%</u>	<u>0</u>	15.22%	<u>0</u>
Total Contribution	24.44%	\$0	25.91%	\$0
Rate Group #5 – Plans A, B and U Combined				
Normal Cost	10.78%	\$11,173	11.81%	\$12,241
UAAL <sup>(2)</sup>	<u>14.40%</u>	<u>14,926</u>	<u>15.22%</u>	<u>15,776</u>
Total Contribution	25.18%	\$26,099	27.03%	\$28,017

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 (3) Applicable for members hired on or after January 1, 2015.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31	, 2014 Valuation	December 31, 2013 Valuation	
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #9 – Plans M and N (2.0% @ 55 – TCA)				
Normal Cost	13.59%	\$696	14.13%	\$724
UAAL <sup>(2)</sup>	<u>12.78%</u>	<u>655</u>	<u>12.28%</u>	<u>629</u>
Total Contribution	26.37%	\$1,351	26.41%	\$1,353
Rate Group #9 – Plan U (2.5% @ 67 PEPRA) <sup>(3)</sup>				
Normal Cost	9.85%	\$104	11.40%	\$121
UAAL <sup>(2)</sup>	12.78%	<u>135</u>	<u>12.28%</u>	<u>130</u>
Total Contribution	22.63%	\$239	23.68%	\$251
Rate Group #9 – Plans M, N and U Combined				
Normal Cost	12.94%	\$800	13.67%	\$845
UAAL <sup>(2)</sup>	12.78%	<u>790</u>	<u>12.28%</u>	<u>759</u>
Total Contribution	25.72%	\$1,590	25.95%	\$1,604

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 (3) Applicable for members hired on or after January 1, 2013.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31	, 2014 Valuation	December 3	1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #10 – Plans I and J (2.7% @ 55 – OCFA)				
Normal Cost	13.53%	\$2,388	14.06%	\$2,482
UAAL <sup>(2)</sup>	20.28%	<u>3,579</u>	23.34%	4,120
Total Contribution	33.81%	\$5,967	37.40%	\$6,602
Rate Group #10 – Plans M and N (2.0% @ 55 – OCFA)				
Normal Cost	12.47%	\$266	14.15%	\$302
UAAL <sup>(2)</sup>	20.28%	<u>433</u>	23.34%	<u>498</u>
Total Contribution	32.75%	\$699	37.49%	\$800
Rate Group #10 – Plan U (2.5% @ 67 PEPRA) <sup>(3)</sup>				
Normal Cost	9.63%	\$242	9.71%	\$244
UAAL <sup>(2)</sup>	20.28%	<u>509</u>	<u>23.34%</u>	<u>585</u>
Total Contribution	29.91%	\$751	33.05%	\$829
Rate Group #10 – Plans I, J, M, N and U Combined				
Normal Cost	12.99%	\$2,896	13.58%	\$3,028
UAAL <sup>(2)</sup>	20.28%	4,521	23.34%	<u>5,203</u>
Total Contribution	33.27%	\$7,417	36.92%	\$8,231

See page 27 for projected annual compensation.
 UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 Applicable for members hired on or after January 1, 2013.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General Employers	December 31, 2014 Valuation			1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #11 – Plans M and N, future service (2.0% @ 55 – Cem	etery)			
Normal Cost	11.79%	\$146	12.33%	\$153
UAAL <sup>(2)</sup>	0.00%	<u>0</u>	0.00%	<u>0</u>
Total Contribution	11.79%	\$146	12.33%	\$153
Rate Group #11 – Plan U (2.5% @ 67 PEPRA) <sup>(3)</sup>				
Normal Cost	11.81%	\$6	8.66%	\$5
UAAL <sup>(2)</sup>	0.00%	<u>0</u>	0.00%	<u>0</u>
Total Contribution	11.81%	\$6	8.66%	\$5
Rate Group #11 – Plans M, N and U Combined				
Normal Cost	11.79%	\$152	12.23%	\$158
UAAL <sup>(2)</sup>	0.00%	<u>0</u>	0.00%	<u>0</u>
Total Contribution	11.79%	\$152	12.23%	\$158

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 (3) Applicable for members hired on or after January 1, 2013.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

Safety Employers	December 31	, 2014 Valuation	December 31, 2013 Valuation	
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #6 – Plans E and F (3% @ 50 – Probation)				
Normal Cost	22.17%	\$14,149	21.00%	\$13,402
UAAL <sup>(2)</sup>	25.01%	<u>15,962</u>	<u>19.72%</u>	12,586
Total Contribution	47.18%	\$30,111	40.72%	\$25,988
Rate Group #6 – Plan V (2.7% @ 57 PEPRA) <sup>(3)</sup>				
Normal Cost	15.25%	\$31	13.95%	\$28
UAAL <sup>(2)</sup>	25.01%	<u>50</u>	19.72%	<u>39</u>
Total Contribution	40.26%	\$81	33.67%	\$67
Rate Group #6 – Plans E, F and V Combined				
Normal Cost	22.15%	\$14,180	20.98%	\$13,430
UAAL <sup>(2)</sup>	25.01%	16,012	19.72%	12,625
Total Contribution	47.16%	\$30,192	40.70%	\$26,055

(1) See page 27 for projected annual compensation.
 (2) UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 (3) Applicable for members hired on or after January 1, 2013.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

Safety Employers	December 3	l, 2014 Valuation	December 3	l, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #7 – Plans E and F (3% @ 50 – Law Enforcement)				
Normal Cost	25.79%	\$41,668	24.23%	\$39,148
UAAL <sup>(2)</sup>	<u>37.46%</u>	60,523	<u>32.47%</u>	52,461
Total Contribution	63.25%	\$102,191	56.70%	\$91,609
Rate Group #7 – Plans Q and R (3% @ 55 – Law Enforcement)				
Normal Cost	23.55%	\$7,154	22.58%	\$6,859
UAAL <sup>(2)</sup>	37.46%	<u>11,379</u>	32.47%	<u>9,863</u>
Total Contribution	61.01%	\$18,533	55.05%	\$16,722
Rate Group #7 – Plan V (2.7% @ 57 PEPRA) <sup>(3)</sup>				
Normal Cost	20.10%	\$1,787	19.17%	\$1,704
UAAL <sup>(2)</sup>	<u>37.46%</u>	<u>3,330</u>	<u>32.47%</u>	<u>2,886</u>
Total Contribution	57.56%	\$5,117	51.64%	\$4,590
Rate Group #7 – Plans E, F, Q, R and V Combined				
Normal Cost	25.20%	\$50,609	23.76%	\$47,711
UAAL <sup>(2)</sup>	<u>37.46%</u>	75,232	32.47%	65,210
Total Contribution	62.66%	\$125,841	56.23%	\$112,921

See page 27 for projected annual compensation.
 UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 Applicable for members hired on or after January 1, 2013.



#### **CHART 13 (Continued)**

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

Safety Employers	December 31, 2014 Valuation		December 3	l, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>
Rate Group #8 – Plans E and F (3% @ 50 – Fire Authority)				
Normal Cost	27.05%	\$29,209	25.86%	\$27,924
UAAL <sup>(2)</sup>	24.42%	26,369	24.14%	26,066
Total Contribution	51.47%	\$55,578	50.00%	\$53,990
Rate Group #8 – Plans Q and R (3% @ 55 – Fire Authority)				
Normal Cost	22.38%	\$701	21.70%	\$680
UAAL <sup>(2)</sup>	24.42%	<u>765</u>	24.14%	756
Total Contribution	46.80%	\$1,466	45.84%	\$1,436
Rate Group #8 – Plan V (2.7% @ 57 PEPRA) <sup>(3)</sup>				
Normal Cost	15.71%	\$725	16.85%	\$777
UAAL <sup>(2)</sup>	24.42%	<u>1,126</u>	24.14%	<u>1,113</u>
Total Contribution	40.13%	\$1,851	40.99%	\$1,890
Rate Group #8 – Plans E, F, Q, R and V Combined				
Normal Cost	26.47%	\$30,635	25.39%	\$29,381
UAAL <sup>(2)</sup>	24.42%	28,260	24.14%	27,935
Total Contribution	50.89%	\$58,895	49.53%	\$57,316

See page 27 for projected annual compensation.
 UAAL rate has been adjusted to reflect 18-month delay between date of valuation and date of rate implementation.
 Applicable for members hired on or after January 1, 2013.



#### SECTION 2: Valuation Results for the Orange County Employees Retirement System

#### CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

General and Safety Combined	December 31	, 2014 Valuation	December 3	1, 2013 Valuation
	Rate	Estimated Annual <u>Amount</u> <sup>(1)</sup>	Rate	Estimated Annua <u>Amount</u> <sup>(1)</sup>
Rate Groups #1 – #11				
Total Contribution	37.41%	\$616,737	38.13%	\$628,390
<sup>1)</sup> Based on December 31, 2014 projected annual compense	ation (also in thousands):			
Rate Group #1 – Plans A and B	\$51,345			
Rate Group $\#1 - Plan U$	23.129			
Rate Group #2 – Plans I and J	898,882			
Rate Group $#2$ – Plans O and P	14,106			
Rate Group $#2$ – Plan S	509			
Rate Group $#2$ – Plan T	73,740			
Rate Group $#2$ – Plan U	6,445			
Rate Group #3 – Plans G and H (OCSD)	54,513			
Rate Group #3 – Plans G and H ( $COBD$ ) Rate Group #3 – Plans G and H (Law Library)	1,285			
Rate Group #3 – Plan B	5,019			
Rate Group $#3 - Plan U (OCSD)$	5,193			
Rate Group #3 – Plan U (Law Library)	0			
Rate Group #5 – Plans A and B	103,650			
Rate Group #5 – Plan U	0			
Rate Group #9 – Plans M and N	5,125			
Rate Group #9 – Plan U	1,058			
Rate Group #10 – Plans I and J	17,650			
Rate Group #10 – Plans M and N	2,133			
Rate Group #10 – Plan U	2,508			
Rate Group #11 – Plans M and N	1,237			
Rate Group #11 – Plan U	55			
Rate Group #6 – Plans E and F	63,821			
Rate Group #6 – Plan V	200			
Rate Group #7 – Plans E and F	161,567			
Rate Group #7 – Plans Q and R	30,377			
Rate Group #7 – Plan V	8,889			
Rate Group #8 – Plans E and F	107,980			
Rate Group #8 – Plans Q and R	3,132			
Rate Group #8 – Plan V	<u>4,612</u>			
Total	\$1,648,160			



#### SECTION 2: Valuation Results for the Orange County Employees Retirement System

#### CHART 13 (Continued)

Recommended Employer Contribution Rates as of December 31, 2014 (Dollar Amounts in Thousands)

Future Service Only Benefit Improv	ement (Plans I and J)	_	
Reduction to UAAL Rate Calculated in Dec	ember 31, 2014 Valuation	Rate	Estimated Annual <u>Amount<sup>(1)</sup></u>
Reduction to Total Contribution		-1.79%	-\$77
<sup>(1)</sup> Based on December 31, 2014 projected ann	al compensation (also in thousands):		
Retirement System	\$3,157		
Local Agency Formation Commission	268		
Children & Family Commission	<u>900</u>		
Total	\$4,325		

## December 31, 2014 Rate Adjustment for General Employers with 2.5% @ 55 – Rate Group #3 Future Service Only Benefit Improvement (Plans G and H)

Reduction to UAAL Rate Calculated in December 31, 2014 Valuation	Rate	Estimated Annual <u>Amount<sup>(2)</sup></u>
Reduction to Total Contribution	-3.41%	-\$44

 <sup>(2)</sup> Based on December 31, 2014 projected annual compensation (also in thousands): Law Library \$1,285 **F** . . . . . . .

#### CHART 14

#### "Pick – Up" - Discount Percentages

For every dollar of member contribution "picked up" by the employer and not deposited in the member's contribution account, the employer can contribute less than a dollar. This is because the "pick-up" amount is not deposited in the member's contribution account and so is not payable to a member who withdraws his or her contributions following termination of employment, and is not payable as an additional death benefit. The contribution discount percentages are as follows:

	December 31, 20 Pick-Up Pe		December 31, 2013 Va Pick-Up Percenta	
General Members				
Rate Group #1 Plan A/B (non-OCTA, non-OCSD)	Plan A: 98.41%	Plan B: 96.94%	Plan A: 97.73%	Plan B: 93.86%
Rate Group #1 Plan U (non-OCTA, non-OCSD)		Plan U: 95.82%		Plan U: 93.25%
Rate Group #2 (2.7% @ 55 – non-OCFA)	Plan I: 98.83%	Plan J: 97.28%	Plan I: 97.49%	Plan J: 94.46%
Rate Group #2 (1.62% @ 65)	Plan O: Not calculated	Plan P: 95.93%	Plan O: Not calculated	Plan P: 92.82%
Rate Group #2 (2.0% @ 57)		Plan S: 95.93%		Plan S: 92.56%
Rate Group #2 (1.62% @ 65 PEPRA)		Plan T: 94.75%		Plan T: 91.49%
Rate Group #2 (2.5% @ 67 PEPRA)		Plan U: 95.86%		Plan U: 93.17%
Rate Group #3 (2.5% @ 55)	Plan G: 98.44%	Plan H: 97.58%	Plan G: 96.58%	Plan H: 95.15%
Rate Group #3 (1.64% @ 57)		Plan B: 96.03%		Plan B: 92.86%
Rate Group #3 (2.5% @ 67 PEPRA)		Plan U: 95.92%		Plan U: 93.83%
Rate Group #5 Plan A/B (OCTA)	Plan A: 98.05%	Plan B: 94.27%	Plan A: 98.74%	Plan B: 94.53%
Rate Group #5 (2.5% @ 67 PEPRA)		Plan U: 88.64%		Plan U: 91.11%
Rate Group #9 (2.0% @ 55 – TCA)	Plan M: 97.50%	Plan N: 97.50%	Plan M: 95.19%	Plan N: 95.19%
Rate Group #9 (2.5% @ 67 PEPRA)		Plan U: 95.91%		Plan U: 94.44%
Rate Group #10 (2.7% @ 55 – OCFA)	Plan I: Not calculated	Plan J: 97.56%	Plan I: Not calculated	Plan J: 95.00%
Rate Group #10 (2.0% @ 55 – OCFA)	Plan M: Not calculated	Plan N: 96.61%	Plan M: Not calculated	Plan N: 93.77%
Rate Group #10 (2.5% @ 67 PEPRA – OCFA)		Plan U: 95.90%		Plan U: 93.70%
Rate Group #11 (2.0% @ 55 – Cemetery)	Plan M: 97.32%	Plan N: 97.32%	Plan M: 94.55%	Plan N: 94.55%
Rate Group #11 (2.5% @ 67 PEPRA – Cemetery)		Plan U: 96.72%		Plan U: 93.64%

### SECTION 2: Valuation Results for the Orange County Employees Retirement System

	December 31, 20 Pick-Up Per		December 31, 2013 V Pick-Up Percenta	
afety Members				
Rate Group #6 (3% @ 50 – Probation)	Plan E: 100.00%	Plan F: 98.61%	Plan E: 100.00%	Plan F: 95.88%
Rate Group #6 (2.7% @ 57 PEPRA – Probation)		Plan V: 97.36%		Plan V: 94.78%
Rate Group #7 (3% @ 50 – Law Enforcement)	Plan E: 100.00%	Plan F: 99.56%	Plan E: 100.00%	Plan F: 99.38%
Rate Group #7 (3% @ 55 – Law Enforcement)	Plan Q: Not calculated	Plan R: 99.13%	Plan Q: Not calculated	Plan R: 98.61%
Rate Group #7 (2.7% @ 57 PEPRA – Law Enforcen	nent)	Plan V: 99.31%		Plan V: 99.03%
Rate Group #8 (3% @ 50 – Fire Authority)	Plan E: 100.00%	Plan F: 99.45%	Plan E: 100.00%	Plan F: 99.42%
Rate Group #8 (3% @ 55 – Fire Authority)	Plan Q: Not calculated	Plan R: 99.21%	Plan Q: Not calculated	Plan R: 98.80%
Rate Group #8 (2.7% @ 57 PEPRA – Fire Authority	<i>'</i> )	Plan V: 99.22%		Plan V: 99.029

### CHART 14 (Continued)

 $\star$  Segal Consulting

### CHART 14 (Continued) "Pick – Up" - Average Entry Age

The following table provides the average entry age by employer used in determining the "pick-up" contributions under Section 31581.1.

Employer	Code	<u>Average Entry Age for</u> <u>All (non-PEPRA and</u> PEPRA) Members
General	<u></u>	
Orange County	101	32
Cemetery District	102	30
Law Library	103	42
Retirement System	105	34
Fire Authority	106	33
Transportation Corridor Agency	109	39
City of San Juan Capistrano	110	34
Sanitation District	111	34
OCTA	112	36
U.C.I. (Bi-weekly)	113	19
Children & Families Commission	118	31
Local Agency Formation Commission	119	35
Superior Court	121	33
IHSS Public Authority	122	41
Safety		
Probation	101	28
Law Enforcement	101	27
Fire Authority	106	30



The contribution rates as of December 31, 2014 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, actuarial gains and losses and changes in the actuarial assumptions or methods.

#### **Reconciliation of Recommended Contribution**

The chart below details the changes in the recommended contribution from the prior valuation to the current year's valuation, for the entire Retirement System. A reconciliation of the recommended contribution from the prior valuation to the current year's valuation by Rate Group is provided in Appendix D.

#### CHART 15

employer contribution from the prior valuation to the amount determined in this valuation.

The chart reconciles the

Reconciliation of Recommended Employer Contribution Rate from December 31, 2013 to December 31, 2014 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Amount <sup>(1)</sup>
Aggregate Recommended Contribution Rate as of December 31, 2013 (before UAAL credit)	38.68%	\$637,586
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions from O.C. Sanitation and O.C. Cemetery Districts	-0.55%	-9,196
Aggregate Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	38.13%	\$628,390
Effect of investment gain (after smoothing)	-0.04%	-659
Effect of additional UAAL contributions from O.C.Fire Authority	-0.10%	-1,648
Effect of difference in actual versus expected contributions	0.39%	6,428
Effect of difference in actual versus expected COLA increases	-0.65%	-10,713
Effect of difference in actual versus expected salary increases	-0.53%	-8,735
Effect of growth in total payroll less than expected	0.27%	4,450
Effect of changes in actuarial assumptions	0.06%	989
Effect of including terminal pay assumptions in legacy plan member rates	-0.18%	-2,967
Effect of other experience (gain)/loss <sup>(2)</sup>	<u>0.06%</u>	<u>1,202</u>
Subtotal	-0.72%	-\$11,653
Aggregate Recommended Contribution Rate as of December 31, 2014	37.41%	\$616,737

<sup>(1)</sup> Based on December 31, 2014 projected annual compensation of \$1,648,160,000.

<sup>&</sup>lt;sup>(2)</sup> Net of an adjustment of -0.06% to reflect 18-month delay between date of valuation and date of rate implementation for the rate impact of all actuarial experience. 32



The member contribution rates as of December 31, 2014 are based on all of the data described in the previous sections, the actuarial assumptions described in Section 4, and the Plan provisions adopted at the time of preparation of the Actuarial Valuation. They include all changes affecting future costs, adopted benefit changes, and changes in the actuarial assumptions or methods.

#### **Reconciliation of Recommended Contribution Rate**

The chart below details the changes in the aggregate recommended member contribution rate from the prior valuation to the current year's valuation.

The chart reconciles the member contribution from the prior valuation to the amount determined in this valuation.

#### CHART 16 Reconciliation of Average Recommended Member Contribution from December 31, 2013 to December 31, 2014 (Dollar Amounts in Thousands)

	Contribution Rate	Estimated Amount <sup>(1)</sup>
Average Recommended Contribution Rate as of December 31, 2013 <sup>(2)</sup>	12.47%	\$205,512
Effect of change in demographics	0.02%	311
Effect of changes in actuarial assumptions	-0.27%	-4,450
Effect of including terminal pay assumptions in legacy plan member rates	0.20%	<u>3,296</u>
Subtotal	-0.05%	-\$843
Average Recommended Contribution Rate as of December 31, 2014	12.42%	\$204,669

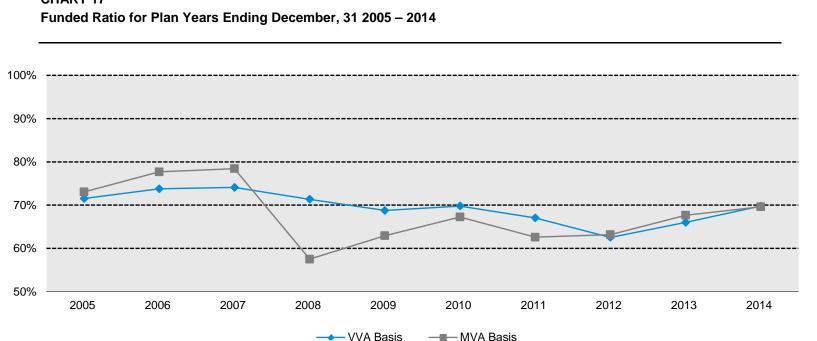
<sup>(1)</sup> Based on December 31, 2014 projected annual compensation of \$1,648,160,000.

<sup>(2)</sup> Rates have been recalculated by applying the individual entry age based rates determined in the December 31, 2013 valuation to the System membership as of December 31, 2014.

#### **E.** FUNDED RATIO

A critical piece of information regarding the Plan's financial status is the funded ratio. The ratios compare the valuation value of assets and market value of assets to the actuarial accrued liabilities of the Plan as calculated. High ratios indicate a well-funded plan with assets sufficient to cover the plan's actuarial accrued liabilities. Lower ratios may indicate recent changes to benefit structures, funding of the plan below actuarial requirements, poor asset

performance, or a variety of other factors. The chart below depicts a history of the funded ratio for this plan.



### CHART 17

#### F. VOLATILITY RATIOS

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total payroll, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measure since it is based on the current level of assets.

For OCERS, the current AVR is about 6.9. This means that a 1% asset gain/(loss) (relative to the assumed investment return) translates to about 6.9% of one-year's payroll. Since OCERS amortizes actuarial gains and losses over a 20-year period, there would be a 0.5% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss). The Liability Volatility Ratio (LVR), which is equal to the Actuarial Accrued Liability divided by payroll, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the Actuarial Accrued Liability due to actual experience or to changes in actuarial assumptions.

For OCERS, the current LVR is about 10.0. This is about 45% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long-term.

This chart shows how the asset and liability volatility ratios have varied over time.

### CHART 18

Volatility Ratios for Years Ended December 31, 2009 – 2014

Year Ended December 31	Asset Volatility Ratio	Liability Volatility Ratio
2009	4.6	7.3
2010	5.3	7.9
2011	5.2	8.4
2012	5.9	9.4
2013	6.7	9.8
2014	6.9	10.0

### EXHIBIT A

#### Table of Plan Coverage

#### i. Rate Group #1 – General – Plans A, B and U (non-OCTA, non-OCSD)

	Year Ended	Year Ended December 31	
Category	2014	2013	- Change From Prior Year
Active members in valuation			
Number	1,542	1,408	9.5%
Average age	42.9	44.0	N/A
Average service	9.2	10.3	N/A
Projected total compensation	\$74,474,442	\$66,672,983	11.7%
Projected average compensation	\$48.297	\$47,353	2.0%
Account balances	\$39,701,027	\$38,142,418	4.1%
Total active vested members	880	949	-7.3%
Vested terminated members			
Number	280	319	-12.2%
Average age	43.5	42.5	N/A
Retired members			
Number in pay status	592	583	1.5%
Average age	73.9	73.7	N/A
Average monthly benefit <sup>(1)</sup>	\$2,556	\$2,513	1.7%
Disabled members			
Number in pay status	36	33	9.1%
Average age	67.2	67.6	N/A
Average monthly benefit <sup>(1)</sup>	\$2,228	\$2,263	-1.5%
Beneficiaries			
Number in pay status	84	75	12.0%
Average age	75.8	74.8	N/A
Average monthly benefit <sup>(1)</sup>	\$1,378	\$1,217	13.2%

<sup>(1)</sup> Excludes monthly benefits payable from the STAR COLA.



#### EXHIBIT A

### Table of Plan Coverage

ii. Rate Group #2 - General - Plans I, J, O, P, S, T and U

	Year Ended December 31		
Category	2014	2013	- Change From Prior Year
Active members in valuation			
Number	13,761	13,671	0.7%
Average age	46.1	46.1	N/A
Average service	13.2	13.2	N/A
Projected total compensation	\$993,682,493	\$967,015,507	2.8%
Projected average compensation	\$72,210	\$70,735	2.1%
Account balances	\$1,590,348,357	\$1,462,349,824	8.8%
Total active vested members	11,469	11,902	-3.6%
Vested terminated members			
Number	3,305	3,130	5.6%
Average age	44.5	44.4	N/A
Retired members			
Number in pay status	8,172	7,864	3.9%
Average age	70.6	70.4	N/A
Average monthly benefit <sup>(1)</sup>	\$3,343	\$3,261	2.5%
Disabled members			
Number in pay status	567	564	0.5%
Average age	66.1	65.8	N/A
Average monthly benefit <sup>(1)</sup>	\$2,362	\$2,318	1.9%
Beneficiaries			
Number in pay status	1,348	1,305	3.3%
Average age	75.2	75.0	N/A
Average monthly benefit <sup>(1)</sup>	\$1,674	\$1,605	4.3%

<sup>(1)</sup> Excludes monthly benefits payable from the STAR COLA.



### EXHIBIT A

### Table of Plan Coverage

#### iii. Rate Group #3 – General – Plans B, G, H and U (Law Library, OCSD)

Category	Year Ended	Year Ended December 31	
	2014	2013	- Change From Prior Year
Active members in valuation			
Number	611	604	1.2%
Average age	48.3	48.5	N/A
Average service	13.5	13.6	N/A
Projected total compensation	\$66,009,510	\$63,125,635	4.6%
Projected average compensation	\$108,035	\$104,513	3.4%
Account balances	\$85,734,935	\$80,507,736	6.5%
Total active vested members	484	493	-1.8%
Vested terminated members			
Number	97	98	-1.0%
Average age	46.7	46.3	N/A
Retired members			
Number in pay status	317	296	7.1%
Average age	67.3	67.2	N/A
Average monthly benefit <sup>(1)</sup>	\$4,691	\$4,663	0.6%
Disabled members			
Number in pay status	12	12	0.0%
Average age	64.5	63.5	N/A
Average monthly benefit <sup>(1)</sup>	\$3,074	\$3,035	1.3%
Beneficiaries			
Number in pay status	56	50	12.0%
Average age	71.0	70.1	N/A
Average monthly benefit <sup>(1)</sup>	\$1,982	\$1,846	7.4%

<sup>(1)</sup> Excludes monthly benefits payable from the STAR COLA.



# Table of Plan Coverage

iv. Rate Group #5 – General – Plans A, B and U (OCTA)

	Year Ended	Year Ended December 31			
Category	2014	2013	Change From Prior Year		
Active members in valuation					
Number	1,454	1,519	-4.3%		
Average age	50.1	49.7	N/A		
Average service	13.6	13.1	N/A		
Projected total compensation	\$103,650,844	\$101,443,921	2.2%		
Projected average compensation	\$71,287	\$66,783	6.7%		
Account balances	\$118,946,235	\$114,324,193	4.0%		
Total active vested members	1,192	1,260	-5.4%		
Vested terminated members					
Number	536	524	2.3%		
Average age	49.1	48.9	N/A		
Retired members					
Number in pay status	761	705	7.9%		
Average age	69.0	68.7	N/A		
Average monthly benefit <sup>(1)</sup>	\$2,287	\$2,237	2.2%		
Disabled members					
Number in pay status	253	247	2.4%		
Average age	64.1	63.4	N/A		
Average monthly benefit <sup>(1)</sup>	\$2,184	\$2,162	1.0%		
Beneficiaries					
Number in pay status	157	148	6.1%		
Average age	70.1	69.3	N/A		
Average monthly benefit <sup>(1)</sup>	\$1,225	\$1,235	-0.8%		



# Table of Plan Coverage

## v. Rate Group #9 – General – Plans M, N and U (TCA)

	Year Ended			
Category	2014	2013	Change From Prior Year	
Active members in valuation				
Number	65	77	-15.6%	
Average age	50.0	49.8	N/A	
Average service	10.0	9.6	N/A	
Projected total compensation	\$6,182,268	\$6,492,514	-4.8%	
Projected average compensation	\$95,112	\$84,318	12.8%	
Account balances	\$5,112,999	\$5,456,492	-6.3%	
Total active vested members	50	64	-21.9%	
Vested terminated members				
Number	52	40	30.0%	
Average age	43.5	43.4	N/A	
Retired members				
Number in pay status	33	26	26.9%	
Average age	67.1	66.8	N/A	
Average monthly benefit <sup>(1)</sup>	\$2,755	\$3,002	-8.2%	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	2	2	0.0%	
Average age	72.9	71.9	N/A	
Average monthly benefit <sup>(1)</sup>	\$318	\$314	1.3%	



# Table of Plan Coverage

#### vi. Rate Group #10 - General - Plans I, J, M, N and U (OCFA)

	Year Ended	December 31	
			Change From
Category	2014	2013	Prior Year
Active members in valuation			
Number	251	247	1.6%
Average age	46.8	46.5	N/A
Average service <sup>(1)</sup>	12.9	12.5	N/A
Projected total compensation	\$22,290,639	\$21,160,575	5.3%
Projected average compensation	\$88,807	\$85,670	3.7%
Account balances	\$25,385,283	\$23,676,389	7.2%
Total active vested members	197	203	-3.0%
Vested terminated members			
Number	104	91	14.3%
Average age	41.8	41.7	N/A
Retired members			
Number in pay status	116	110	5.5%
Average age	65.3	65.0	N/A
Average monthly benefit <sup>(2)</sup>	\$4,106	\$4,022	2.1%
Disabled members			
Number in pay status	9	8	12.5%
Average age	60.6	61.5	N/A
Average monthly benefit <sup>(2)</sup>	\$2,536	\$2,512	1.0%
Beneficiaries			
Number in pay status	7	7	0.0%
Average age	58.1	57.1	N/A
Average monthly benefit <sup>(2)</sup>	\$1,327	\$1,314	1.0%

<sup>(1)</sup> For some former Santa Ana employees, service used in calculating the average above is only used for vesting purposes. Benefit service starts to accrue only effective April 2012.



# Table of Plan Coverage

#### vii. Rate Group #11 – General – Plans M and N, future service, and U (Cemetery)

	Year Ended	December 31		
Category	2014	2013	Change From Prior Year	
Active members in valuation				
Number	21	21	0.0%	
Average age	47.3	47.2	N/A	
Average service	15.9	15.2	N/A	
Projected total compensation	\$1,292,021	\$1,241,960	4.0%	
Projected average compensation	\$61,525	\$59,141	4.0%	
Account balances	\$1,686,594	\$1,564,713	7.8%	
Total active vested members	18	19	-5.3%	
Vested terminated members				
Number	2	2	0.0%	
Average age	36.1	35.1	N/A	
Retired members				
Number in pay status	5	5	0.0%	
Average age	72.8	75.3	N/A	
Average monthly benefit <sup>(1)</sup>	\$2,347	\$2,517	-6.8%	
Disabled members				
Number in pay status	0	0	N/A	
Average age	N/A	N/A	N/A	
Average monthly benefit <sup>(1)</sup>	N/A	N/A	N/A	
Beneficiaries				
Number in pay status	4	3	33.3%	
Average age	76.0	72.0	N/A	
Average monthly benefit <sup>(1)</sup>	\$1,529	\$1,625	-5.9%	



# Table of Plan Coverage

viii.Rate Group #6 – Safety – Plans E, F and V (Probation)

	Year Ended	December 31	
Category	2014	2013	Change From Prior Year
Active members in valuation			
Number	843	871	-3.2%
Average age	42.8	42.1	N/A
Average service	15.1	14.3	N/A
Projected total compensation	\$64,020,760	\$63,851,828	0.3%
Projected average compensation	\$75,944	\$73,309	3.6%
Account balances	\$111,090,176	\$102,310,351	8.6%
Total active vested members	809	833	-2.9%
Vested terminated members			
Number	170	203	-16.3%
Average age	38.7	38.0	N/A
Retired members			
Number in pay status	241	226	6.6%
Average age	65.3	64.8	N/A
Average monthly benefit <sup>(1)</sup>	\$5,495	\$5,436	1.1%
Disabled members			
Number in pay status	22	19	15.8%
Average age	53.8	54.3	N/A
Average monthly benefit <sup>(1)</sup>	\$2,679	\$2,655	0.9%
Beneficiaries			
Number in pay status	21	20	5.0%
Average age	60.8	59.3	N/A
Average monthly benefit <sup>(1)</sup>	\$2,580	\$2,424	6.4%



# Table of Plan Coverage

## ix. Rate Group #7 – Safety – Plans E, F, Q, R and V (Law Enforcement)

	Year Ended	December 31		
Category	2014	2013	Change From Prior Year	
Active members in valuation				
Number	1,949	2,012	-3.1%	
Average age	41.2	41.0	N/A	
Average service	13.9	13.9	N/A	
Projected total compensation	\$200,833,715	\$202,561,948	-0.9%	
Projected average compensation	\$103,044	\$100,677	2.4%	
Account balances	\$222,990,905	\$210,267,095	6.1%	
Total active vested members	1,556	1,634	-4.8%	
Vested terminated members				
Number	204	169	20.7%	
Average age	43.0	43.5	N/A	
Retired members				
Number in pay status	1,158	1,067	8.5%	
Average age	63.3	63.3	N/A	
Average monthly benefit <sup>(1)</sup>	\$6,529	\$6,449	1.2%	
Disabled members				
Number in pay status	332	327	1.5%	
Average age	61.8	61.4	N/A	
Average monthly benefit <sup>(1)</sup>	\$4,521	\$4,413	2.4%	
Beneficiaries				
Number in pay status	292	268	9.0%	
Average age	66.5	66.0	N/A	
Average monthly benefit <sup>(1)</sup>	\$2,781	\$2,609	6.6%	



# Table of Plan Coverage

### x. Rate Group #8 – Safety – Plans E, F, Q, R and V (Fire Authority)

	Year Ended	Year Ended December 31			
			Change From		
Category	2014	2013	Prior Year		
Active members in valuation					
Number	962	938	2.6%		
Average age	43.9	44.0	N/A		
Average service <sup>(1)</sup>	14.2	14.4	N/A		
Projected total compensation	\$115,723,757	\$110,929,365	4.3%		
Projected average compensation	\$120,295	\$118,262	1.7%		
Account balances	\$97,747,420	\$87,583,258	11.6%		
Total active vested members	746	750	-0.5%		
Vested terminated members					
Number	38	36	5.6%		
Average age	41.8	40.8	N/A		
Retired members					
Number in pay status	364	346	5.2%		
Average age	62.8	62.3	N/A		
Average monthly benefit <sup>(2)</sup>	\$7,423	\$7,226	2.7%		
Disabled members					
Number in pay status	133	124	7.3%		
Average age	63.7	63.3	N/A		
Average monthly benefit <sup>(2)</sup>	\$6,192	\$5,939	4.3%		
Beneficiaries					
Number in pay status	75	65	15.4%		
Average age	60.1	59.6	N/A		
Average monthly benefit <sup>(2)</sup>	\$2,823	\$2,848	-0.9%		

<sup>(1)</sup> For some former Santa Ana employees, service used in calculating the average above is only used for vesting purposes. Benefit service starts to accrue only effective April 2012.



## Table of Plan Coverage

xi. Total

	Year Endeo		
Category	2014	2013	– Change From Prior Year
Active members in valuation			
Number	21,459	21,368	0.4%
Average age	45.6	45.6	N/A
Average service	13.2	13.2	N/A
Projected total compensation	\$1,648,160,449	\$1,604,496,236	2.7%
Projected average compensation	\$76,805	\$75,089	2.3%
Account balances	\$2,298,743,933	\$2,126,182,470	8.1%
Total active vested members	17,401	18,107	-3.9%
Vested terminated members		,	
Number	4,789	4,613	3.8%
Average age	44.7	44.4	N/A
Retired members			
Number in pay status	11,759	11,228	4.7%
Average age	69.4	69.3	N/A
Average monthly benefit <sup>(1)</sup>	\$3,761	\$3,670	2.5%
Disabled members			
Number in pay status	1,364	1,334	2.2%
Average age	64.2	63.9	N/A
Average monthly benefit <sup>(1)</sup>	\$3,237	\$3,150	2.8%
Beneficiaries	· ·		
Number in pay status	2,046	1,943	5.3%
Average age	72.7	72.5	N/A
Average monthly benefit <sup>(1)</sup>	\$1,842	\$1,754	5.0%

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over	
Under 25	76	76									
	\$43,851	\$43,851									
25-29	188	173	15								
	43,638	42,987	\$51,144								
30-34	222	144	55	21	2						
	46,888	44,147	51,676	\$52,709	\$51,466						
35-39	212	78	63	51	20						
	48,572	43,437	51,749	51,468	51,203						
40-44	229	56	63	53	37	20					
	49,552	42,261	52,752	50,831	51,901	\$52,152					
45-49	165	43	39	27	14	36	6				
	49,518	42,395	51,026	51,197	52,037	53,775	\$51,778				
50-54	135	39	24	23	13	25	8	3			
	48,697	42,484	50,326	50,721	51,107	52,205	51,782	\$53,025			
55-59	147	37	19	22	8	39	13	7		2	
	50,270	42,226	50,850	51,019	50,713	52,322	54,205	51,272		\$114,502	
60-64	97	15	10	11	12	28	13	5	1	2	
	51,842	42,951	49,356	51,244	52,504	52,676	52,122	53,030	\$48,572	115,467	
65-69	55	4	8	12	6	17	6	1		1	
	52,683	50,189	57,290	51,117	50,390	52,798	54,246	48,572		51,118	
70 & over	16		1	4	2	8		1			
	51,469		51,853	50,053	52,015	51,620		54,449			
Total	1,542	665	297	224	114	173	46	17	1	5	
	\$48,297	\$43,261	\$51,719	\$51,225	\$51,600	\$52,659	\$52,884	\$52,126	\$48,572	\$102,211	

i. Rate Group #1 – General – Plans A, B and U (non-OCTA, non-OCSD)

	Years of Service									
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	170	169	1							
	\$45,189	\$45,108	\$58,859							
25-29	817	597	216	4						
	54,208	54,740	52,725	\$54,947						
30-34	1,559	530	849	176	4					
	64,200	63,424	65,551	60,179	\$57,271					
35-39	1,827	318	761	552	193	3				
	69,446	69,754	70,168	69,203	66,947	\$59,136				
40-44	2,035	232	535	612	480	171	5			
	75,231	70,204	72,307	78,861	77,606	70,959	\$95,011			
45-49	2,131	199	399	446	454	470	162	1		
	76,503	73,690	72,980	77,866	78,605	77,449	76,210	\$81,944		
50-54	2,142	149	360	335	379	394	385	133	7	
	77,980	77,442	74,889	74,095	79,528	77,450	84,383	75,732	\$70,962	
55-59	1,515	96	247	253	264	267	251	111	26	
	76,862	78,453	71,119	71,894	76,213	76,989	82,190	86,940	84,699	
60-64	969	45	142	199	209	153	141	59	20	1
	75,377	85,632	72,143	70,858	76,804	73,888	78,663	83,195	70,545	\$74,463
65-69	427	18	72	94	96	71	50	16	4	6
	73,483	71,494	69,496	70,690	70,057	79,178	83,768	73,790	101,531	53,242
70 & over	169	3	32	29	32	28	26	11	6	2
	63,478	33,159	74,472	63,405	68,575	47,526	63,420	49,674	89,344	74,998
Total	13,761	2,356	3,614	2,700	2,111	1,557	1,020	331	63	9
	\$72,210	\$64,245	\$69,302	\$73,184	\$76,419	\$75,813	\$81,242	\$79,880	\$80,191	\$60,434

ii. Rate Group #2 - General - Plans I, J, O, P, S, T and U

	Years of Service										
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over	
Under 25	5	5									
	\$71,805	\$71,805									
25-29	23	21	2								
	79,942	78,763	\$92,318								
30-34	60	32	21	7							
	91,098	86,399	96,333	\$96,877							
35-39	62	24	22	16							
	93,777	88,068	101,893	91,182							
40-44	70	23	25	11	3	6	2				
	104,703	101,660	105,034	108,032	\$92,517	\$118,237	\$94,937				
45-49	100	11	14	21	17	28	9				
	116,302	104,061	121,929	110,699	125,018	117,455	115,528				
50-54	120	15	20	21	15	30	16	3			
	114,356	97,634	108,645	112,176	130,750	119,194	117,720	\$102,988			
55-59	94	12	15	17	13	17	15	5			
	118,492	99,642	105,382	117,232	124,082	126,777	118,027	166,039			
60-64	49	4	2	12	8	9	12	2			
	113,409	80,465	117,988	101,286	113,719	124,115	128,552	107,192			
65-69	18	1	3	5	2	4	3				
	113,260	102,687	88,893	116,675	182,008	105,380	100,136				
70 & over	10				1	4	5				
	111,567				116,327	112,406	109,943				
Total	611	148	124	110	59	98	62	10			
	\$108,035	\$90,940	\$105,148	\$107,250	\$124,869	\$119,565	\$117,360	\$135,354			

iii. Rate Group #3 – General – Plans B, G, H and U (Law Library, OCSD)

Members in Active Service and Projected Average Compensation as of December 31, 2014 By Age and Years of Service

		Years of Service											
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over			
Under 25	11	11											
	\$45,685	\$45,685											
25-29	39	34	5										
	53,132	52,238	\$59,210										
30-34	88	39	34	15									
	66,489	64,799	66,033	\$71,914									
35-39	133	35	33	57	8								
	68,168	64,857	69,728	67,398	\$81,705								
40-44	150	33	34	54	22	7							
	69,869	69,414	76,316	63,980	73,742	\$73,965							
45-49	231	45	41	83	35	19	8						
	72,879	69,372	79,691	69,321	71,069	83,791	\$76,620						
50-54	288	34	39	101	41	34	33	6					
	74,053	71,379	81,552	67,433	72,475	85,300	77,424	\$80,395					
55-59	264	23	30	66	42	34	31	29	9				
	75,118	66,907	83,417	65,335	75,931	87,716	76,723	74,456	\$85,383				
60-64	179	14	19	53	16	20	22	19	15	1			
	69,171	58,943	70,763	68,404	59,717	74,303	75,495	69,120	73,677	\$65,580			
65-69	57	3	9	19	8	7	6	4	1				
	75,012	74,252	74,731	88,218	64,368	57,633	78,561	60,772	71,367				
70 & over	14	2	2	6	2	1				1			
	73,416	87,263	48,262	67,820	60,779	93,371				134,931			
Total	1,454	273	246	454	174	122	100	58	25	2			
	\$71,287	\$64,749	\$75,207	\$68,194	\$71,931	\$81,764	\$76,786	\$72,379	\$77,799	\$100,255			

Members in Active Service and Projected Average Compensation as of December 31, 2014 By Age and Years of Service

					Years o	of Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	1	1								
	\$59,020	\$59,020								
25-29	1	1								
	72,618	72,618								
30-34	4	1	2	1						
	64,834	43,512	\$77,943	\$59,939						
35-39	8	3	4	1						
	81,716	99,358	73,772	60,562						
40-44	7	3	1	3						
	81,929	113,700	69,560	54,281						
45-49	7	1	2	3	1					
	88,533	97,449	98,892	81,759	\$79,218					
50-54	14	3	5	4		1	1			
	106,092	119,525	67,368	124,201		\$111,814	\$181,257			
55-59	14	3	1	4	4	1	1			
	119,607	174,682	77,784	116,203	110,781	92,248	72,480			
60-64	4		1	3						
	91,745		53,967	104,338						
65-69	3		2	1						
	52,129		53,812	48,762						
70 & over	2		1	1						
	130,592		206,279	54,906						
Total	65	16	19	21	5	2	2			
	\$95,112	\$112,150	\$78,990	\$90,806	\$104,469	\$102,031	\$126,868			

#### v. Rate Group #9 – General – Plans M, N and U (TCA)

					Years o	f Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	3	3								
	\$61,328	\$61,328								
25-29	10	7	3							
	53,139	47,110	\$67,207							
30-34	23	13	8	2						
	78,347	79,641	85,252	\$42,321						
35-39	33	14	11	7	1					
	77,854	66,556	83,330	88,485	\$101,372					
40-44	30	8	8	9	4	1				
	89,265	93,366	89,478	79,512	105,367	\$78,125				
45-49	46	8	3	16	8	10	1			
	94,578	109,775	76,308	88,949	104,242	88,547	\$100,889			
50-54	55	8	6	10	11	9	7	3	1	
	91,585	100,376	103,354	73,831	93,937	89,339	89,886	\$98,600	\$113,383	
55-59	27	3	3	10	4	2	3	2		
	102,130	153,080	85,618	94,964	94,667	115,901	118,901	62,302		
60-64	19	3	2	6	5	1	2			
	100,947	99,350	115,767	100,284	116,853	62,206	70,121			
65-69	5			3		2				
	92,568			100,014		81,399				
70 & over										
Total	251	67	44	63	33	25	13	5	1	
	\$88,807	\$84,572	\$87,580	\$86,231	\$101,606	\$88,978	\$94,387	\$84,081	\$113,383	

vi. Rate Group #10 – General – Plans I, J, M, N and U (OCFA)

					Years o	f Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25										
25-29										
30-34	3	2		1						
	\$45,777	\$44,111		\$49,110						
35-39	4		2		2					
	60,685		\$47,769		\$73,601					
40-44										
45-49	7	1	1	1	2		2			
	62,984	55,030	128,946	61,355	48,876		\$48,902			
50-54	2			1	1					
	75,954			66,061	85,847					
55-59	1				1					
	62,320				62,320					
60-64	4					1	3			
	64,209					\$73,236	61,199			
65-69										
70 & over										
Total	21	3	3	3	6	1	5			
	\$61,525	\$47,751	\$74,828	\$58,842	\$65,520	\$73,236	\$56,280			

vii. Rate Group #11 – General – Plans M and N, future service, and U (Cemetery)

					Years o	f Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	1	1								
	\$51,379	\$51,379								
25-29	22	14	7	1						
	55,572	53,199	\$58,745	\$66,593						
30-34	101	13	78	10						
	64,370	49,635	66,181	69,400						
35-39	223	5	53	131	33	1				
	73,291	49,304	66,142	75,365	\$79,855	\$83,732				
40-44	203	1	15	61	108	18				
	77,941	49,230	59,333	72,723	82,118	87,669				
45-49	148		7	33	48	48	12			
	80,030		65,917	70,893	78,542	87,371	\$89,974			
50-54	70	2	1	5	17	20	22	3		
	88,660	60,410	66,379	74,423	79,945	83,884	107,467	\$81,956		
55-59	52		3	2	10	13	17	6	1	
	83,570		65,911	74,864	68,643	83,188	90,326	99,711	\$96,467	
60-64	20		1	5	6	4	3	1		
	73,250		65,991	70,941	67,745	85,785	70,337	83,691		
65-69	3			2		1				
	72,737			65,057		88,096				
70 & over										
Total	843	36	165	250	222	105	54	10	1	
	\$75,944	\$51,611	\$65,215	\$73,663	\$79,847	\$86,152	\$96,121	\$92,783	\$96,467	

viii. Rate Group #6 – Safety – Plans E, F and V (Probation)

					Years of	Service				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	47	46	1							
	\$74,981	\$74,884	\$79,419							
25-29	233	175	57	1						
	81,381	77,782	92,168	\$96,417						
30-34	291	112	152	26	1					
	90,194	79,113	96,754	99,123	\$102,035					
35-39	278	28	106	81	63					
	99,683	82,593	97,937	102,712	106,323					
40-44	363	18	41	78	160	66				
	106,936	96,293	100,005	104,014	108,915	\$112,799				
45-49	386	8	25	44	94	138	77			
	113,895	114,991	107,451	113,335	108,441	113,893	\$122,853			
50-54	231	15	10	18	22	47	105	14		
	119,070	117,952	110,900	107,064	111,606	110,085	125,694	\$133,752		
55-59	92	25	18		8	13	20	8		
	116,641	120,371	123,481		101,355	111,739	111,499	125,698		
60-64	19	1	5	4	1	1	6	1		
	118,114	124,679	119,480	119,025	112,850	119,057	119,849	94,984		
65-69	9		2	2	1	1	2	1		
	125,352		166,959	106,747	97,451	158,300	111,609	101,785		
70 & over										
Total	1,949	428	417	254	350	266	210	24		
	\$103,044	\$83,613	\$99,449	\$105,157	\$108,276	\$113,030	\$122,999	\$128,120		

ix. Rate Group #7 – Safety – Plans E, F, Q, R and V (Law Enforcement)

				Y	ears of Sei	vice				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & ove
Under 25	7	7								
	\$78,640	\$78,640								
25-29	61	47	14							
	87,287	80,452	\$110,232							
30-34	132	65	62	5						
	104,661	92,292	116,340	\$120,634						
35-39	180	57	75	37	11					
	115,775	106,227	119,084	124,570	\$113,106					
40-44	141	33	35	35	24	13	1			
	124,165	122,315	119,654	123,334	129,493	\$132,310	\$138,390			
45-49	146	25	11	30	19	45	16			
	130,188	131,447	116,314	129,818	127,732	133,491	132,079			
50-54	166	40	3	17	22	32	40	12		
	133,055	135,124	121,582	123,542	129,474	129,906	139,147	\$137,158		
55-59	99	31		5	5	22	11	23	2	
	130,704	127,076		116,324	117,291	129,546	130,339	141,511	\$146,861	
60-64	25	11		1	1	5	1	6		
	125,774	126,663		129,677	99,766	114,117	151,623	133,234		
65-69	4	2			1			1		
	111,515	109,974			126,542			99,573		
70 & over	1				1					
	62,128				62,128					
Total	962	318	200	130	84	117	69	42	2	
	\$120,295	\$109,012	\$117,599	\$124,885	\$125,027	\$130,810	\$136,274	\$138,087	\$146,861	

x. Rate Group #8 – Safety – Plans E, F, Q, R and V (Fire Authority)

Members in Active Service and Projected Average Compensation as of December 31, 2014 By Age and Years of Service

#### xi. Total

				Y	ears of Ser	vice				
Age	Total	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & over
Under 25	321	319	2							
	\$50,608	\$50,492	\$69,139							
25-29	1,394	1,069	319	6						
	59,193	58,079	62,840	\$63,799						
30-34	2,483	951	1,261	264	7					
	68,698	65,127	71,914	66,376	\$62,007					
35-39	2,960	562	1,130	933	331	4				
	74,465	70,814	75,510	74,606	76,812	\$65,285				
40-44	3,228	407	757	916	838	302	8			
	79,817	74,176	75,550	80,070	84,601	83,527	\$100,415			
45-49	3,367	341	542	704	692	794	293	1		
	83,127	76,218	75,768	81,164	84,436	88,188	92,699	\$81,944		
50-54	3,223	305	468	535	521	592	617	177	8	
	84,124	83,750	76,963	76,365	83,532	84,833	96,076	85,214	\$76,265	
55-59	2,305	230	336	379	359	408	362	191	38	2
	81,265	85,914	75,509	73,252	78,818	81,967	85,944	94,146	88,443	\$114,502
60-64	1,385	93	182	294	258	222	203	93	36	4
	76,104	80,223	72,897	72,723	76,553	74,554	80,680	82,574	71,240	92,744
65-69	581	28	96	138	114	103	67	23	5	7
	74,012	72,609	71,280	73,987	71,322	75,276	82,222	72,768	95,498	52,938
70 & over	212	5	36	40	38	41	31	12	6	3
	66,123	54,800	76,049	62,519	68,380	55,773	70,923	50,072	89,344	94,976
Total	21,459	4,310	5,129	4,209	3,158	2,466	1,581	497	93	16
	\$76,805	\$67,559	\$73,833	\$76,195	\$81,532	\$83,440	\$90,095	\$86,721	\$81,173	\$78,467

### EXHIBIT C

Reconciliation of Member Data – December 31, 2013 to December 31, 2014

	Active Members	Vested Former Members	Pensioners	Disableds	Beneficiaries	Total
Number as of December 31, 2013	21,368	4,613	11,228	1,334	1,943	40,486
New members	1,284	86	0	0	177	1,547
Terminations – with vested rights	-332 <sup>(1)</sup>	332	0	0	0	0
Contributions refunds	-150 <sup>(2)</sup>	-103	0	0	0	-253
Retirements	-685	-97	782	0	0	0
New disabilities	-31	-3	-26	60	0	0
Return to work	33	-32	-1	0	0	0
Deaths	-28	-7	-225	-30	-74	-364
Data adjustments	0	0	1	0	0	1
Number as of December 31, 2014	21,459	4,789	11,759	1,364	2,046	41,417

<sup>(1)</sup> Includes 12 terminated before January 1, 2014.
 <sup>(2)</sup> Includes 4 terminated before January 1, 2014.

## EXHIBIT D

Summary Statement of Income and Expenses on an Actuarial Value Basis

	Year Ended Dece	mber 31, 2014	Year Ended Dece	mber 31, 2013
Contribution income:				
Employer contributions	\$625,520,000		\$427,095,000	
Employee contributions	232,656,000		209,301,000	
Discount for prepaid contributions	29,114,000		26,392,000	
Transfer from County Investment Account <sup>(1)</sup>	<u>5,000,000</u>		<u>5,000,000</u>	
Net contribution income		\$892,290,000		\$667,788,000
Investment income:				
Interest, dividends and other income	\$225,760,000		\$178,427,000	
Recognition of capital appreciation	598,681,000		741,638,000	
Less investment and administrative fees	-53,392,000		-53,663,000	
Net investment income		<u>\$771,049,000</u>		<u>\$866,402,000</u>
Total income available for benefits		\$1,663,339,000		\$1,534,190,000
Less benefit payments		-\$630,678,000		-\$586,273,000
Change in reserve for future benefits		\$1,032,661,000		\$947,917,000

<sup>(1)</sup> Funded by pension obligation bond proceeds held by OCERS.

### EXHIBIT E

**Summary Statement of Assets** 

	Year Ended Dec	ember 31, 2014	Year Ended Dec	ember 31, 2013
Cash equivalents		\$375,708,000		\$372,841,000
Accounts receivable:				
Contributions	\$17,470,000		\$14,857,000	
Investment income	20,325,000		17,766,000	
Securities settlements	138,819,000		89,493,000	
Other	<u>5,944,000</u>		<u>4,297,000</u>	
Total accounts receivable		\$182,558,000		\$126,413,000
Investments:				
Fixed income investments	\$1,961,219,000		\$2,011,257,000	
Equities	4,328,917,000		4,226,395,000	
Real estate	1,090,592,000		978,269,000	
Alternative investments and diversified credit	3,944,608,000		3,396,927,000	
Security lending collateral	197,345,000		300,092,000	
Fixed assets net of accumulated depreciation	21,482,000		<u>17,778,000</u>	
Total investments at market value		<u>\$11,544,163,000</u>		<u>\$10,930,718,000</u>
Total assets		\$12,102,429,000		\$11,429,972,000
Less accounts payable:				
Securities settlements	-\$94,290,000		-\$107,778,000	
Security lending liability	-197,345,000		-300,092,000	
All other	<u>-65,639,000</u>		<u>-60,993,000</u>	
Total accounts payable		-\$357,274,000		-\$468,863,000
Net assets at market value <sup>(1)</sup>		<u>\$11,428,223,000</u>		<u>\$10,679,507,000</u>
Net assets at actuarial value		<u>\$11,450,001,000</u>		<u>\$10,417,340,000</u>
Net assets at valuation value		<u>\$11,449,911,000</u>		<u>\$10,417,125,000</u>

(1) The market value excludes \$109,103,000 and \$109,254,000 as of December 31, 2014 and December 31, 2013, respectively, in the County Investment Account (funded by pension obligation bond proceeds held by OCERS) and \$207,829,000 and \$172,348,000 as of December 31, 2014 and December 31,2013, respectively, in the prepaid employer contributions account.

Note: Results may not total exactly due to rounding.



### EXHIBIT F

### Actuarial Balance Sheet

Second, we determine how this liability will be met. These actuarial "assets" include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments.

Ass	sets		
1.	Total valuation value of assets	\$11,449,911,000	
2.	Present value of future contributions by members	1,818,812,000	
3. Present value of future employer contributions for:			
	a. entry age normal cost	2,072,253,000	
	b. unfunded actuarial accrued liability	4,963,213,000	
4.	Total current and future assets	\$20,304,189,000	
Lia	bilities		
5.	Present value of retirement allowance payable to present retired members	\$8,644,999,000	
6.	Present value of retirement allowances to be granted to present non-retired members	<u>11,659,190,000</u>	

7. Total liabilities \$20,304,189,000



### EXHIBIT G

Summary of Reported Asset Information as of December 31, 2014

#### **Reserves**

Included in Valuation Value of Assets	
Active Members Reserve (Book Value)	\$2,490,971,000
Retired Members Reserve (Book Value)	8,221,366,000
Employer Advanced Reserve (Book Value)	1,576,559,000
ERI Contribution Reserve	7,266,000
STAR COLA Contribution Reserve	0
Unrealized Appreciation Included in Valuation Value of Assets	-846,251,000
Subtotal: Valuation Value of Assets	\$11,449,911,000

#### **Not Included in Valuation Value of Assets**

RMBR	\$0	
Unclaimed Member Deposit	0	
Medicare Medical Insurance Reserve	<u>90,000</u>	
Total	\$90,000	
Subtotal: Actuarial Value of Assets		\$11,450,001,000
Unrecognized Investment Income		<u>-21,778,000</u>
Subtotal: Market Value of Assets (Net of County Investment Account <sup>(1)</sup> and Prepaid Employer Contributions)		\$11,428,223,000
County Investment Account <sup>(1)</sup>		109,103,000
Prepaid Employer Contributions		207,829,000
Total: Gross Market Value of Assets		\$11,745,155,000

<sup>(1)</sup> Funded by pension obligation bond proceeds held by OCERS.



# EXHIBIT H

Development of Unfunded/(Overfunded) Actuarial Accrued Liability for Year Ended December 31, 2014

1.	Unfunded actuarial accrued liability at beginning of year		\$5,367,917,000
2.	Total normal cost at middle of year		454,221,000
3.	Expected employer and member contributions		-829,361,000
4.	Interest		376,931,000
5.	Expected unfunded actuarial accrued liability		\$5,369,708,000
6.	Actuarial (gain)/loss and other changes:		
	(a) Gain from additional UAAL contributions	-\$151,485,000	
	(b) Loss from actual contributions less than expected	89,407,000	
	(c) Gain from investment return	-9,570,000	
	(d) Gain from lower than expected salary increases	-125,746,000	
	(e) Gain from lower than expected COLA increases	-153,484,000	
	(f) Other experience (gain)/loss	66,554,000	
	(g) Changes in actuarial assumptions	-122,171,000	
	Total changes		<u>-\$406,495,000</u>
7.	Unfunded actuarial accrued liability at end of year		\$4,963,213,000

Note: The sum of 6(d) through 6(f) is equal to the "other experience" gain of \$212,676,000 provided on page 7.

# EXHIBIT I Section 415 Limitations

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for noncompliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar indexed for inflation. That limit is \$210,000 for both 2014 and 2015. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits for non-CalPEPRA plans that are in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Contributions rates for non-CalPEPRA plans determined in this valuation have not been reduced for the Section 415 limitations. Actual limitations will result in gains as they occur.

# EXHIBIT J Definitions of Pension Terms

The following list defines certain technical terms for the convenience of the reader: **Assumptions or Actuarial Assumptions:** The estimates on which the cost of the Plan is calculated including: Investment return — the rate of investment yield that the Plan will earn (a) over the long-term future; Mortality rates — the death rates of employees and pensioners; life (b) expectancy is based on these rates; <u>Retirement rates</u> — the rate or probability of retirement at a given age; (c) and Turnover rates — the rates at which employees of various ages are (d) expected to leave employment for reasons other than death, disability, or retirement. Normal Cost: The amount of contributions required to fund the level cost allocated to the current year of service. **Actuarial Accrued Liability** For Actives: The equivalent of the accumulated normal costs allocated to the years before the valuation date. **Actuarial Accrued Liability** For Pensioners: The single sum value of lifetime benefits to existing pensioners. This sum takes account of life expectancies appropriate to the ages of the pensioners and the interest that the sum is expected to earn before it is entirely paid out in benefits.

Unfunded Actuarial Accrued Liability:	The extent to which the actuarial accrued liability of the Plan exceeds (or is exceeded by) the assets of the Plan. There are many approaches to paying off the unfunded or overfunded actuarial accrued liability, from meeting the interest accrual only to amortizing it over a specific period of time.
Amortization of the Unfunded (Overfunded) Actuarial Accrued Liability:	Payments made over a period of years equal in value to the Plan's unfunded or overfunded actuarial accrued liability.
Investment Return:	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the market gains and losses to avoid significant swings in the value of assets from one year to the next.

# SECTION 3: Supplemental Information for the Orange County Employees Retirement System



### EXHIBIT I

### **Summary of Actuarial Valuation Results**

Th	e valuation was made with respect to the following data supplied to us:		
1.	Retired members as of the valuation date (including 2,046 beneficiaries in pay status)		15,169
2.	Members inactive during year ended December 31, 2014 with vested rights <sup>(1)</sup>		4,789
3.	Members active during the year ended December 31, 2014		21,459
Th	e actuarial factors as of the valuation date are as follows (amounts in 000s):		
1.	Normal cost		\$455,105
2.	Present value of future benefits		20,304,189
3.	Present value of future normal costs		3,891,065
4.	Actuarial accrued liability (2)		16,413,124
	Retired members and beneficiaries	\$8,644,999	
	Inactive members with vested rights <sup>(1)</sup>	372,875	
	Active members	7,395,250	
5.	Valuation value of assets <sup>(3)</sup> (\$11,428,223 at market value as reported by Retirement System)		11,449,911
6.	Unfunded actuarial accrued liability		\$4,963,213

<sup>(1)</sup> This includes members who chose to leave their contributions on deposit even though they have less than five years of service.

(2) Excludes liabilities held for STAR COLA.

<sup>(3)</sup> Excludes assets held for Unclaimed member deposit and Medicare medical insurance reserve.

# EXHIBIT I (continued) Summary of Actuarial Valuation Results

The determination of the recommended average employer contribution is as follows (amounts in 000s):

		<b>Dollar Amount</b>	% of Payroll
1.	Total normal cost	\$455,105	27.61%
2.	Expected employee contributions	-204,669	-12.42%
3.	Employer normal cost: $(1) + (2)$	\$250,436	15.19%
4.	Amortization of unfunded actuarial accrued liability	<u>366,301</u>	22.22%
5.	Total recommended average employer contribution: $(3) + (4)$	\$616,737	37.41%
6.	Projected compensation	\$1,648,160	



#### **EXHIBIT II**

Plan Year Ended December 31	Annual Required Contributions	Actu Contribu
2005	\$227,892,000	\$227,89

Schedule of Employer Contributions

Plan Year Ended December 31	Annual Required Contributions	Actual Contributions <sup>(1)</sup>	Percentage Contributed
2005	\$227,892,000	\$227,892,000	100.0%
2006	277,368,000	277,368,000	100.0%
2007	326,736,000	326,736,000	100.0%
2008	359,673,000	360,365,000 <sup>(2)</sup>	100.2%
2009	337,496,000	338,387,000 <sup>(3)</sup>	100.3%
2010	372,437,000	372,437,000	100.0%
2011	387,585,000	387,585,000	100.0%
2012	406,521,000	406,521,000	100.0%
2013	426,020,000	427,095,000 <sup>(4)</sup>	100.3%
2014	476,320,000	$625,520,000^{(5)}$	131.3%

<sup>(1)</sup> Excludes transfers from County Investment Account (funded by pension obligation bond proceeds held by OCERS). Those transfers are as follows:

Plan Year Ended December 31		Transfers from Coun Investment Account	
	2005	\$9,675,000	
	2006	0	
	2007	0	
	2008	0	
	2009	34,900,000	
	2010	11,000,000	
	2011	11,000,000	
	2012	5,500,000	
	2013	5,000,000	
	2014	5,000,000	

<sup>(2)</sup> Includes \$692,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.

<sup>(3)</sup> Includes \$891,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.

<sup>(4)</sup> Includes \$1,075,000 in additional contributions made by O.C. Fire Authority towards the reduction of their UAAL.

<sup>(5)</sup> Includes \$1,663,000 in additional contributions made by O.C. Cemetery District, \$22,537,000 in additional contributions made by O.C. Fire Authority and \$125,000,000 in additional contributions made by O.C. Sanitation District towards the reduction of their UAAL.



Actuarial Valuation Date December 31	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll [(b) - (a)] / (c)
2005	\$5,786,617,000	\$8,089,627,000	\$2,303,010,000	71.53%	\$1,276,764,000	180.38%
2006	6,466,085,000	8,765,045,000	2,298,960,000	73.77%	1,322,952,000	173.78%
2007	7,288,900,000	9,838,686,000	2,549,786,000	74.08%	1,457,159,000	174.98%
2008	7,748,380,000	10,860,715,000	3,112,335,000	71.34%	1,569,764,000	198.27%
2009	8,154,687,000	11,858,578,000	3,703,891,000	68.77%	1,618,491,000	228.85%
2010	8,672,592,000	12,425,873,000	3,753,281,000	69.79%	1,579,239,000	237.66%
2011	9,064,355,000	13,522,978,000	4,458,623,000	67.03%	1,619,474,000	275.31%
2012	9,469,208,000	15,144,888,000	5,675,680,000	62.52%	1,609,600,000	352.55%
2013	10,417,125,000	15,785,042,000	5,367,917,000	65.99%	1,604,496,000	334.55%
2014	11,449,911,000	16,413,124,000	4,963,213,000	69.76%	1,648,160,000	301.14%

### SECTION 4: Reporting Information for the Orange County Employees Retirement System

For informational purposes only, we have also developed the funded ratio determined using the historical market value of assets after adjustment for amounts in the County Investment Account (funded by pension obligation bond proceeds held by OCERS), prepaid employer contributions, unclaimed member reserve and Medicare Medical Insurance Reserve.

Actuarial Valuation Date December 31	Funded Ratio Based on Net Market Value of Assets
2005	73.07%
2006	77.69%
2007	78.43%
2008	57.51%
2009	62.94%
2010	67.25%
2011	62.60%
2012	63.17%
2013	67.65%
2014	69.63%

EXHIBIT III

# EXHIBIT IV

### Supplementary Information Required on Actuarial Determined Contribution by GASB

Valuation date	December 31, 2014			
Actuarial cost method	Entry Age Actuarial Cost Method			
Amortization method	Level percent of payroll for total unfunded liability (3.50% payroll growth assumed)			
Remaining amortization period	<ul> <li>Effective December 31, 2013, 20 years closed (declining) amortization of outstanding balance of December 31, 2012 UAAL. Any changes in UAAL due to actuarial gains or losses or due to changes in assumptions or methods will be amortized over separate 20-year periods. Any changes in UAAL due to plan amendments will be amortized over separate 15-year periods and any change in UAAL due to early retirement incentive programs will be amortized over a separate period of up to 5 years.</li> <li>Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected return on a market value basis, and is recognized over a five-year period. The Valuation Value of Assets is the Actuarial Value of Assets reduced by the value of the non-valuation reserves.</li> </ul>			
Asset valuation method				
Actuarial assumptions:				
Investment rate of return	7.25%			
Inflation rate	3.00%			
Real across-the-board salary increase	0.50%			
Projected salary increases (1)	4.25% to $13.50%$ for General members; $5.00%$ to $17.50%$ for Safety members based on service.			
Cost of living adjustments	3.00%			
Plan membership:				
Retired members and beneficiaries receiving benefits	15,169			
Terminated members entitled to, but not yet receiving benefits	4,789			
Active members	<u>21,459</u>			
Total	41,417			

<sup>(1)</sup> See Exhibit V for these increases, including inflation rate.



# EXHIBIT V

# Actuarial Assumptions and Actuarial Cost Method

# **Post – Retirement Mortality Rates:**

Healthy:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set back two years.
Disabled:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set forward six years for males and set forward three years for females.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020.
Beneficiaries:	Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who is receiving a service (non-disability) retirement.
•	ove were determined to contain sufficient provision appropriate to reasonably reflect future mortality w of the mortality experience in the January 1, 2011 through December 31, 2013 Actuarial Experience
Employee Contribution Rates:	For General Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 40% male and 60% female.
	For Safety Members: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set back two years weighted 80% male and 20% female.
Optional Forms of Benefits:	For General Service Retirees: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 40% male and 60% female.
	For Safety Service Retirees: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set back two years weighted 80% male and 20% female.
	For General Disabled Retirees: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 with ages set forward six years for males and set forward three years for females weighted 40% male and 60% female.
	For Safety Disabled Retirees: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 80% male and 20% female.
	For General Beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 60% male and 40% female.
	For Safety Beneficiaries: RP-2000 Combined Healthy Mortality Table projected with Scale BB to 2020 weighted 20% male and 80% female.

### SECTION 4: Reporting Information for the Orange County Employees Retirement System

Termination	Rates	Before	<b>Retirement:</b>
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	Rate (%)				
	Mortality				
	Ge	neral	Sa	fety	
Age	Male	Female	Male	Female	
25	0.04	0.02	0.04	0.02	
30	0.04	0.02	0.04	0.02	
35	0.07	0.04	0.06	0.04	
40	0.10	0.07	0.09	0.06	
45	0.14	0.11	0.12	0.09	
50	0.20	0.16	0.18	0.14	
55	0.34	0.25	0.27	0.21	
60	0.59	0.41	0.48	0.33	
65	1.00	0.76	0.82	0.60	

All General pre-retirement deaths are assumed to be non-service connected. For Safety, 90% of pre-retirement deaths are assumed to be non-service connected. The other 10% are assumed to be service connected.



### SECTION 4: Reporting Information for the Orange County Employees Retirement System

**Termination Rates Before Retirement (Continued):** 

	Rate (%) Disability				
Age	General All Other <sup>(1)</sup>	General OCTA <sup>(2)</sup>	Safety - Law & Fire <sup>(3)</sup>	Safety - Probation <sup>(3)</sup>	
20	0.00	0.00	0.00	0.00	
25	0.00	0.00	0.01	0.03	
30	0.01	0.03	0.04	0.08	
35	0.03	0.20	0.14	0.10	
40	0.08	0.36	0.26	0.10	
45	0.11	0.43	0.42	0.16	
50	0.14	0.48	0.92	0.20	
55	0.18	0.74	1.98	0.23	
60	0.29	1.41	5.20	0.10	

<sup>(1)</sup> 55% of General All Other disabilities are assumed to be service connected disabilities. The other 45% are assumed to be nonservice connected.

<sup>(2)</sup> 65% of General - OCTA disabilities are assumed to be service connected disabilities. The other 35% are assumed to be nonservice connected.

<sup>(3)</sup> 100% of Safety – Law Enforcement, Fire and Probation disabilities are assumed to be service connected disabilities.

		F	Rate (%)		
	Termination				
Years of Service	General All Other <sup>(1)</sup>	General OCTA <sup>(2)</sup>	Safety – Law & Fire <sup>(3)</sup>	Safety - Probation <sup>(4)</sup>	
0	11.00	17.50	4.00	16.00	
1	8.00	13.50	3.00	13.00	
2	7.00	10.50	2.00	10.00	
3	5.00	10.00	1.00	6.00	
4	4.00	9.00	1.00	4.00	
5	3.75	7.00	1.00	3.50	
6	3.50	5.00	0.95	3.00	
7	3.00	5.00	0.90	2.50	
8	2.75	4.00	0.85	2.25	
9	2.50	3.50	0.80	2.00	
10	2.25	3.50	0.75	1.75	
11	2.00	3.50	0.65	1.75	
12	2.00	3.00	0.60	1.50	
13	1.75	3.00	0.50	1.25	
14	1.75	3.00	0.50	1.00	
15	1.75	3.00	0.50	1.00	
16	1.50	3.00	0.50	1.00	
17	1.50	2.75	0.50	0.50	
18	1.50	2.75	0.50	0.50	
19	1.50	2.75	0.50	0.50	
20 +	1.25	1.75	0.25	0.50	

**Termination Rates Before Retirement (Continued):** 



- <sup>(1)</sup> 40% of all terminated members with less than 5 years of service and 25% of all terminated members with 5 or more years of service will choose a refund of contributions.
- <sup>(2)</sup> 45% of all terminated members with less than 5 years of service and 35% of all terminated members with 5 or more years of service will choose a refund of contributions.
- <sup>(3)</sup> 20% of all terminated members with less than 5 years of service and 20% of all terminated members with 5 or more years of service will choose a refund of contributions.
- <sup>(4)</sup> 40% of all terminated members with less than 5 years of service and 30% of all terminated members with 5 or more years of service will choose a refund of contributions.



SECTION 4:	Reporting Information for the Orange County Employees Retirement System
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	Rate (%)							
Age	General - Enhanced	General - Non-Enhanced <sup>(1)</sup>	General - SJC (31676.12)	Safety - Law (31664.1) <sup>(2)</sup>	Safety - Law (31664.2) <sup>(2)</sup>	Safety - Fire (31664.1) <sup>(2)</sup>	Safety - Fire (31664.2) <sup>(2)</sup>	Safety - Probation <sup>(2)</sup>
49	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
50	2.5	2.5	3.0	16.0	11.5	6.0	8.0	3.0
51	2.0	2.5	3.0	16.0	12.0	8.0	10.0	3.0
52	2.0	2.5	3.0	16.0	12.7	9.0	11.0	4.0
53	2.0	2.5	3.0	16.0	17.9	10.0	12.0	4.0
54	5.0	2.5	3.0	22.0	18.8	16.0	14.0	6.0
55	15.0	3.0	4.0	22.0	30.7	19.0	24.0	11.0
56	10.0	3.5	5.0	20.0	20.0	20.0	23.0	11.0
57	10.0	5.0	6.0	20.0	20.0	23.0	27.0	17.0
58	10.0	5.0	7.0	20.0	25.0	30.0	27.0	20.0
59	11.0	7.0	9.0	26.0	30.0	30.0	36.0	20.0
60	12.0	9.0	11.0	45.0	100.0	45.0	100.0	20.0
61	12.0	10.0	13.0	45.0	100.0	45.0	100.0	20.0
62	15.0	16.0	15.0	45.0	100.0	45.0	100.0	25.0
63	16.0	16.0	15.0	45.0	100.0	45.0	100.0	50.0
64	16.0	18.0	20.0	45.0	100.0	45.0	100.0	50.0
65	21.0	21.0	20.0	100.0	100.0	100.0	100.0	100.0
66	22.0	26.0	24.0	100.0	100.0	100.0	100.0	100.0
67	23.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
68	23.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
69	23.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
70	40.0	30.0	100.0	100.0	100.0	100.0	100.0	100.0
71	40.0	30.0	100.0	100.0	100.0	100.0	100.0	100.0
72	40.0	30.0	100.0	100.0	100.0	100.0	100.0	100.0
73	40.0	30.0	100.0	100.0	100.0	100.0	100.0	100.0
74	40.0	30.0	100.0	100.0	100.0	100.0	100.0	100.0
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## **Retirement Rates:**

<sup>(1)</sup> These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T).

<sup>(2)</sup> Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

**Retirement Rates (Continued):** 

		Rate	e (%)	
Age	CalPEPRA 2.5% @ 67 General Formula	CalPEPRA Safety - Probation Formula <sup>(1)</sup>	CaIPEPRA Safety - Law Formula <sup>(1)</sup>	CalPEPRA Safety - Fire Formula <sup>(1)</sup>
50	0.0	2.5	11.0	6.5
51	0.0	2.5	11.5	8.0
52	4.0	3.0	12.0	9.0
53	1.5	3.0	16.0	10.0
54	1.5	5.5	17.0	12.0
55	2.5	10.0	28.0	21.0
56	3.5	10.0	18.0	20.0
57	5.5	15.0	17.5	22.0
58	7.5	20.0	22.0	25.0
59	7.5	20.0	26.0	31.5
60	7.5	100.0	100.0	100.0
61	7.5	100.0	100.0	100.0
62	14.0	100.0	100.0	100.0
63	14.0	100.0	100.0	100.0
64	14.0	100.0	100.0	100.0
65	18.0	100.0	100.0	100.0
66	22.0	100.0	100.0	100.0
67	23.0	100.0	100.0	100.0
68	23.0	100.0	100.0	100.0
69	23.0	100.0	100.0	100.0
70	30.0	100.0	100.0	100.0
71	30.0	100.0	100.0	100.0
72	30.0	100.0	100.0	100.0
73	30.0	100.0	100.0	100.0
74	30.0	100.0	100.0	100.0
75	100.0	100.0	100.0	100.0

<sup>(1)</sup> *Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.* 

Retirement Age and Benefit for Deferred Vested Members:	For deferred vested members, we make the following retirement age assumptions:			
	General Age:	58		
	Safety Age:	53		
Liability Calculation for Current	We assume that 20% of future General and 30% of future Safety deferred vested members are reciprocal. For reciprocals, we assume 4.25% compensation increases for General and 5.00% for Safety per annum.			
Deferred Vested Members:	Liability for a current deferred vested member is calculated based on salary, service, and eligibility for reciprocal benefit as provided by the Retirement System. For those members without salary information that have 3 or more years of service, we used an average salary. For those members without salary information that have less than 3 years of service or for those members without service information, we assumed a refund of account balance.			
Future Benefit Accruals:	1.0 year of service per year of employment. There is no assumption to anticipat conversion of unused sick leave at retirement.			
Unknown Data for Members:	Same as those exhibited by members with similar known characteristics. specified, members are assumed to be male.			
Percent Married:	75% of male members and 50% of female members are assumed to be married at retirement or time of pre-retirement death.			
Age of Spouse:	Female (or male) three	e years younger (or older) than spouse.		
Net Investment Return:	7.25%; net of investm	ent and administrative expenses.		
Employee Contribution Crediting Rate:	5.00%, compounded s	emi-annually.		
Consumer Price Index:	Increase of 3.00% per year, retiree COLA increases due to CPI subject to a 3.0% maximum change per year.			



#### **Salary Increases:**

#### Annual Rate of Compensation Increase (%)

Inflation: 3.00% per year, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

General	Safety
10.00%	14.00%
7.25	10.00
6.00	8.50
4.75	6.75
4.00	5.25
3.25	4.50
2.25	3.50
2.00	3.25
1.50	2.25
1.25	2.25
1.25	1.75
1.25	1.75
1.25	1.75
1.25	1.75
1.25	1.75
1.25	1.75
0.75	1.50
0.75	1.50
0.75	1.50
0.75	1.50
0.75	1.50
	$\begin{array}{c} 10.00\% \\ 7.25 \\ 6.00 \\ 4.75 \\ 4.00 \\ 3.25 \\ 2.25 \\ 2.00 \\ 1.50 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 1.25 \\ 0.75 \\ 0.75 \\ 0.75 \\ 0.75 \\ 0.75 \end{array}$

#### **Additional Cashout Assumptions:**

*Non-CalPEPRA Formulas* Additional compensation amounts are expected to be received during a member's final average earnings period. The percentages used in this valuation are:

		Final One <u>Year Salary</u>	Final Three <u>Year Salary</u>
	General Members	3.50%	2.80%
	Safety - Probation	3.80%	2.80%
	Safety - Law	5.20%	4.70%
	Safety - Fire	2.00%	2.00%
	The additional cashout assu retirements.	imptions are the	same for service and disability
CalPEPRA Formulas	None		
Increase in Section 7522.10 Compensation Limit:	Increase of 3.00% per year	from the valuation	on date.
Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expecter return on a market value basis, and is recognized over a five-year period.		
Valuation Value of Assets:	The Valuation Value of As value of the non-valuation		rial Value of Assets reduced by the



Actuarial Cost Method:	Entry Age Actuarial Cost Method. Entry Age is the current age minus Vesting Credit. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are allocated by salaries, with Normal Cost determined as a level percentage of individual salary, as if the current benefit accrual rate had always been in effect. Effective December 31, 2013, the outstanding balance of the UAAL from the December 31, 2012 valuation was combined and re-amortized over a declining 20-year period. Any changes in UAAL due to actuarial gains or losses or due to changes in assumptions or methods will be amortized over separate 20-year periods. Any changes in UAAL due to plan amendments will be amortized over separate 15-year periods and any change in UAAL due to early retirement incentive programs will be amortized over a separate period of up to 5 years.
	Please note that for Probation members who have prior benefit service in another General OCERS plan, the normal cost rate for the current plan is calculated assuming their Entry Age is the date they entered service with their current plan.
Changes in Actuarial Assumptions and Methods:	Based on the actuarial experience study, the following actuarial assumptions were changed. Previously these assumptions were as follows:



<b>Changes in Actuarial Assum</b>	ntions and Methods – Pi	ior Assumptions (	(continued):
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### **Post – Retirement Mortality Rates:**

Healthy:	For General Members and all Beneficiaries: RP-2000 Combined Healthy Mortality Table set back three years.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table set back two years.			
Disabled:	For General Members: RP-2000 Combined Healthy Mortality Table set forward three years.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table set forward two years.			
	The mortality tables shown above were determined to contain sufficient provision appropriate to reasonably reflect future mortality improvement, based on a review of the mortality experience in the January 1, 2008 through December 31, 2010 Actuarial Experience Study.			
Employee Contribution Rates:	For General Members: RP-2000 Combined Healthy Mortality Table set back three years, weighted 40% male and 60% female.			
	For Safety Members: RP-2000 Combined Healthy Mortality Table set back two years, weighted 80% male and 20% female.			

#### Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):

**Termination Rates Before Retirement:** 

	Rate (%) Mortality					
	Ge	neral	Sa	fety		
Age	Male	Female	Male	Female		
25	0.04	0.02	0.04	0.02		
30	0.04	0.02	0.04	0.02		
35	0.06	0.04	0.06	0.04		
40	0.09	0.06	0.10	0.06		
45	0.12	0.09	0.13	0.09		
50	0.17	0.13	0.19	0.14		
55	0.27	0.20	0.29	0.22		
60	0.47	0.35	0.53	0.39		
65	0.88	0.67	1.00	0.76		

All pre-retirement deaths are assumed to be non-service connected.



#### **Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Termination Rates Before Retirement (Continued):** 

	Rate (%)						
	Disability						
Age	General All Other <sup>(1)</sup>	General OCTA <sup>(2)</sup>	Safety - Law & Fire <sup>(3)</sup>	Safety - Probation <sup>(3)</sup>			
20	0.00	0.00	0.01	0.00			
25	0.00	0.00	0.04	0.06			
30	0.02	0.03	0.08	0.16			
35	0.06	0.08	0.22	0.20			
40	0.11	0.28	0.36	0.20			
45	0.14	0.46	0.52	0.20			
50	0.15	0.56	0.96	0.20			
55	0.18	0.84	1.68	0.20			
60	0.32	1.30	3.80	0.08			

<sup>(1)</sup> 50% of General All Other disabilities are assumed to be service connected disabilities. The other 50% are assumed to be nonservice connected.

<sup>(2)</sup> 70% of General - OCTA disabilities are assumed to be service connected disabilities. The other 30% are assumed to be nonservice connected.

<sup>(3)</sup> 100% of Safety – Law Enforcement, Fire and Probation disabilities are assumed to be service connected disabilities.



#### **Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

**Termination Rates Before Retirement (Continued):** 

			Rate (%) < 5 Years of Service	)
Years of Service	General All Other <sup>(1)</sup>	General OCTA <sup>(1)</sup>	Safety – Law & Fire <sup>(2)</sup>	Safety - Probation <sup>(2)</sup>
0	13.0	20.0	4.0	20.0
1	8.0	16.0	3.0	15.0
2	7.0	12.0	2.0	10.0
3	6.0	9.0	2.0	5.0
4	5.0	7.0	1.0	4.0

		Termination (	5+ Years of Service)	
Age	General All Other <sup>(3)</sup>	General OCTA <sup>(3)</sup>	Safety – Law & Fire <sup>(3)</sup>	Safety – Probation <sup>(3)</sup>
20	5.0	4.0	1.0	4.0
25	4.4	4.0	1.0	4.0
30	4.0	4.0	1.0	3.4
35	3.4	4.0	0.9	3.0
40	3.0	3.4	0.6	2.4
45	2.4	3.0	0.5	2.0
50	2.3	3.0	0.2	2.0
55	2.5	3.0	0.0	1.4
60	2.5	3.0	0.0	0.4

- <sup>(1)</sup> 50% of all terminated members will choose a refund of contributions and 50% will choose a deferred vested benefit.
- <sup>(2)</sup> 40% of all terminated members will choose a refund of contributions and 60% will choose a deferred vested benefit.
- <sup>(3)</sup> 30% of terminated members will choose a refund of contributions and 70% will choose a deferred vested benefit.

SECTION 4:	Reporting Information for the Orange County Employees Retirement System
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## <u>Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):</u>

**Retirement Rates:** 

	Rate (%)							
Age	General - Enhanced	General - Non-Enhanced <sup>(1)</sup>	General - SJC (31676.12)	Safety - Law (31664.1) <sup>(2)</sup>	Safety - Law (31664.2) <sup>(2)</sup>	Safety - Fire (31664.1) <sup>(2)</sup>	Safety - Fire (31664.2) <sup>(2)</sup>	Safety - Probation <sup>(2)</sup>
49	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0
50	3.0	2.0	3.0	14.0	11.5	7.0	8.0	4.0
51	2.0	2.0	3.0	14.0	12.0	9.0	10.0	4.0
52	2.0	2.0	3.0	14.0	12.7	11.0	11.0	4.0
53	2.0	2.0	3.0	14.0	17.9	12.0	12.0	4.0
54	5.0	2.0	3.0	20.0	18.8	16.0	14.0	8.0
55	15.0	3.0	4.0	20.0	30.7	20.0	24.0	12.0
56	9.0	4.0	5.0	20.0	20.0	20.0	23.0	12.0
57	9.0	6.0	6.0	20.0	20.0	25.0	27.0	16.0
58	9.0	8.0	7.0	20.0	25.0	25.0	27.0	25.0
59	9.0	8.0	9.0	25.0	30.0	30.0	36.0	25.0
60	12.0	8.0	11.0	60.0	100.0	60.0	100.0	25.0
61	12.0	8.0	13.0	60.0	100.0	60.0	100.0	25.0
62	17.0	16.0	15.0	60.0	100.0	60.0	100.0	25.0
63	15.0	16.0	15.0	60.0	100.0	60.0	100.0	50.0
64	18.0	16.0	20.0	60.0	100.0	60.0	100.0	100.0
65	20.0	20.0	20.0	100.0	100.0	100.0	100.0	100.0
66	25.0	25.0	24.0	100.0	100.0	100.0	100.0	100.0
67	21.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
68	21.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
69	21.0	21.0	24.0	100.0	100.0	100.0	100.0	100.0
70	60.0	40.0	100.0	100.0	100.0	100.0	100.0	100.0
71	60.0	40.0	100.0	100.0	100.0	100.0	100.0	100.0
72	60.0	40.0	100.0	100.0	100.0	100.0	100.0	100.0
73	60.0	40.0	100.0	100.0	100.0	100.0	100.0	100.0
74	60.0	40.0	100.0	100.0	100.0	100.0	100.0	100.0
75	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>(1)</sup> These assumptions are also used for the CalPEPRA 1.62% @ 65 formula (Plan T).

<sup>(2)</sup> Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.

### Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):

**Retirement Rates (Continued):** 

Rate (%)				
Age	CalPEPRA 2.5% @ 67 General Formula	CalPEPRA Safety - Probation Formula <sup>(1)</sup>	CaIPEPRA Safety - Law Formula <sup>(1)</sup>	CalPEPRA Safety - Fire Formula <sup>(1)</sup>
50	0.0	3.0	10.0	7.0
51	0.0	3.0	10.5	8.5
52	4.0	3.0	11.0	9.5
53	1.5	3.0	15.5	10.5
54	1.5	7.0	16.5	12.0
55	2.5	10.5	27.0	21.0
56	3.5	10.5	17.5	20.0
57	5.5	14.0	18.0	23.5
58	7.5	22.0	22.0	23.5
59	7.5	22.0	26.0	31.5
60	7.5	100.0	100.0	100.0
61	7.5	100.0	100.0	100.0
62	15.0	100.0	100.0	100.0
63	15.0	100.0	100.0	100.0
64	15.0	100.0	100.0	100.0
65	19.0	100.0	100.0	100.0
66	25.0	100.0	100.0	100.0
67	21.0	100.0	100.0	100.0
68	21.0	100.0	100.0	100.0
69	21.0	100.0	100.0	100.0
70	40.0	100.0	100.0	100.0
71	40.0	100.0	100.0	100.0
72	40.0	100.0	100.0	100.0
73	40.0	100.0	100.0	100.0
74	40.0	100.0	100.0	100.0
75	100.0	100.0	100.0	100.0

<sup>(1)</sup> *Retirement rate is 100% after a member accrues a benefit of 100% of final average earnings.* 

Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):			
<b>Retirement Age and Benefit for Deferred Vested Members:</b>	For deferred vested members, we make the following retirement age assumptions:		
	General Age:	57	
	Safety Age:	53	
		of future General and 30% of future Safety deferred vested al. For reciprocals, we assume 4.75% compensation	
Percent Married:	80% of male members and 50% of female members are assumed to be married at retirement or time of pre-retirement death.		
Consumer Price Index:	Increase of 3.25% per year, retiree COLA increases due to CPI subject to a 3.0% maximum change per year.		



Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):

**Salary Increases:** 

**Annual Rate of Compensation Increase (%)** 

Inflation: 3.25% per year, plus "across the board" salary increases of 0.50% per year, plus the following merit and promotion increases:

Years of Service	General	Safety
Less than 1	10.00%	14.00%
1	7.00	9.00
2	6.00	8.00
3	5.00	7.00
4	4.00	5.00
5	3.00	4.00
6	2.00	3.00
7	1.75	3.00
8	1.50	2.00
9	1.25	2.00
10	1.25	1.50
11	1.25	1.50
12	1.25	1.50
13	1.25	1.50
14	1.25	1.50
15	1.25	1.50
16	1.00	1.00
17	1.00	1.00
18	1.00	1.00
19	1.00	1.00
20 & over	1.00	1.00



#### **Changes in Actuarial Assumptions and Methods – Prior Assumptions (continued):**

#### **Additional Cashout Assumptions:**

*Non-CalPEPRA Formulas* Additional compensation amounts are expected to be received during a member's final average earnings period. The percentages used in this valuation are:

	Final One <u>Year Salary</u>	Final Three <u>Year Salary</u>
General Members	4.00%	2.70%
Safety - Probation	5.20%	2.70%
Safety - Law	6.60%	4.50%
Safety - Fire	4.00%	2.00%

The additional cashout assumptions are the same for service and disability retirements.

CalPEPRA Formulas	None
Increase in Section 7522.10 Compensation Limit:	Increase of 3.25% per year from the valuation date.

#### EXHIBIT VI

#### **Summary of Plan Provisions**

This exhibit summarizes the major provisions of the OCERS included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Membership Eligibility:	Membership with OCERS begins with the day of employment in an eligible position by the County or a participating employer.
Non-CalPEPRA General P	lans
	<i>County Sanitation District and Law Library</i> <sup>(1)</sup> )
Plan G	General members hired before September 21, 1979.
Plan H	General members hired on or after September 21, 1979 (Sanitation District members within Supervisors and Professional unit hired on or
	after October 1, 2010 are in Plan B)
Orange (	in Juan Capistrano, Orange County Employees except bargaining unit AFSCME members, County Superior Court, Orange County Local Agency Formation Commission <sup>(1)</sup> , Orange Employees Retirement System <sup>(2)</sup> , Children and Family Commission <sup>(3)</sup> and Orange County Paority)
Plan I	General members hired before September 21, 1979.
Plan J	General members hired on or after September 21, 1979.
<sup>(2)</sup> Improvement for managen	ve only for service after June 23, 2005. ment employees is prospective only for service after June 30, 2005. we only for service after December 22, 2005.
· -	tation Corridor Agency, Cemetery District – future service effective December 7, 2007 and OCFA employees effective July 1, 2011)
Plan M	General members hired before September 21, 1979.
Plan N	General members hired on or after September 21, 1979.

	ty Employees, Orange County Superior Court, Local Agency Formation Commission Janagers unit)
Plan O	County OCEA members and Superior Court members rehired on or after May 7, 2010, LAFCO members rehired on or after July 1, 2010 and County Managers unit members rehired on or after August 17, 2010 and not electing to rejoin Plan I.
Plan P	County OCEA members and Superior Court members hired on or after May 7, 2010, LAFCO members hired on or after July 1, 2010 and County Managers unit members hired on or after August 17, 2010 and not electing Plan J.
2.0% @ 57 Plan (City of San Jua	n Capistrano)
Plan S	General members hired on or after July 1, 2012.
All Other General Employers	
Plan A	General members hired before September 21, 1979.
Plan B	General members hired on or after September 21, 1979 and Sanitation District members within Supervisors and Professional unit hired on or after October 1, 2010
Non-CalPEPRA Safety Plans	
3% @ 50 Plans (Law Enforcemen	nt, Fire Authority and Probation Members)
Plan E	Safety members hired before September 21, 1979.
Plan F	Safety members hired on or after September 21, 1979 and before April 9, 2010 for Law Enforcement, before July 1, 2011 for Safety employees of OCFA Executive Management, and before July 1, 2012 for other OCFA Safety employees.
3% @ 55 Plans (Law Enforcemer	nt, Fire Authority)
Plan Q	Safety Law Enforcement members rehired on or after April 9, 2010, Safety employees of OCFA Executive Management rehired on or after July 1, 2011, and other OCFA Safety employees rehired on or after July 1, 2012 and previously in Plan E.
Plan R	Safety Law Enforcement members hired on or after April 9, 2010, Safety employees of OCFA Executive Management hired on or after July 1, 2011, and other OCFA Safety employees hired on or after July 1, 2012.

#### **CalPEPRA General Plans**

	ange County Employees except County Attorneys, Orange County Employees Retirement System cept Management Employees, Children and Family Commission, Local Agency Formation
	mmission, and Orange County Superior Court)
Plan T	General members with membership dates on or after January 1, 2013.
	Other General Employers, Orange County Attorneys, Orange County Employees Retirement em Management Employees)
Plan U	General Non-Orange County Transportation Authority members with membership dates on or after January 1, 2013 and Orange County Transportation Authority members with membership dates on or after January 1, 2015.
CalPEPRA Safety Pl	ans
2.7% @ 57 Plan (Law	Enforcement, Fire Authority and Probation Members)
Plan V	Safety members with membership dates on or after January 1, 2013.
Final Compensation for Benefit Determination:	

Plans A, E, G, I, M, O and Q	Highest consecutive twelve months of compensation earnable. (§31462.1) (FAS1)
Plans B, F, H, J, N, P, R and S	Highest consecutive thirty-six months of compensation earnable. (§31462) (FAS3)
Plans T, U and V	Highest consecutive thirty-six months of pensionable compensation. (§7522.10(c), §7522.32 and §7522.34) (FAS3)
Service:	Years of service. (Yrs)

vice Retirement Eligibility:		
Plans A, B, G, H, I, J, M, N, O, P, S and T	Age 50 with 10 years of serv regardless of age. (§31672)	ice, or age 70 regardless of service, or after 30 years,
Plan U	Age 52 with 5 years of servic (§31672.3).	ce (§7522.20(a)) or age 70 regardless of service
Plans E, F, Q and R	Age 50 with 10 years of serv	ice, or after 20 years, regardless of age. (§31663.25)
	All part time employees over 5 years of service.	age 55 with 10 years of employment may retire with
Plan V	Age 50 with 5 years of servic (§31672.3).	ce. (§7522.20(d)) or age 70 regardless of service
nefit Formula:		
General Plans		
2.5% @ 55	<b>Retirement</b> Age	Benefit Formula
Plan G (§31676.18)	50	(2.00% x FAS1 x Yrs)
	55	(2.50% x FAS1 x Yrs)
	60	(2.50% x FAS1 x Yrs)
	62	(2.62% x FAS1 x Yrs)*
	65 or later	(2.62% x FAS1 x Yrs)*
Plan H (§31676.18)	50	(2.00% x FAS3 x Yrs)
	55	(2.50% x FAS3 x Yrs)
	60	(2.50% x FAS3 x Yrs)
	62	(2.50% x FAS3 x Yrs)

\* Reflects benefit factors from Plan A as they provide a better benefit than those under 2.5% @ 55.



2.7% @ 55	<b>Retirement</b> Age	Benefit Formula
Plan I (§31676.19)	50	(2.00% x FAS1 x Yrs)
	55	(2.70% x FAS1 x Yrs)
	60	(2.70% x FAS1 x Yrs)
	62	(2.70% x FAS1 x Yrs)
	65 or later	(2.70% x FAS1 x Yrs)
Plan J (§31676.19)	50	(2.00% x FAS3 x Yrs)
	55	(2.70% x FAS3 x Yrs)
	60	(2.70% x FAS3 x Yrs)
	62	(2.70% x FAS3 x Yrs)
	65 or later	(2.70% x FAS3 x Yrs)



2.0% @ 55	<b>Retirement Age</b>	Benefit Formula
Plan M (§31676.16)	50	(1.43% x FAS1 x Yrs)
	55	(2.00% x FAS1 x Yrs)
	60	(2.34% x FAS1 x Yrs)**
	62	(2.62% x FAS1 x Yrs)**
	65 or later	(2.62% x FAS1 x Yrs)**
Plan N (§31676.16)	50	(1.43% x FAS3 x Yrs)
	55	(2.00% x FAS3 x Yrs)
	60	(2.26% x FAS3 x Yrs)
	62	(2.37% x FAS3 x Yrs)
	65 or later	(2.43% x FAS3 x Yrs)***

\*\* Reflects benefit factors from Plan A as they provide a better benefit than those under 2.0% @ 55.

\*\*\* Reflects benefit factors from Plan B as they provide a better benefit than those under 2.0% @ 55.



1.62% @ 65	<b>Retirement Age</b>	Benefit Formula
Plan O (§31676.01)	50	(0.79% x FAS1 x Yrs)
	55	(0.99% x FAS1 x Yrs)
	60	(1.28% x FAS1 x Yrs)
	62	(1.39% x FAS1 x Yrs)
	65 or later	(1.62% x FAS1 x Yrs)
Plan P and Plan T (§31676.01)	50	(0.79% x FAS3 x Yrs)
	55	(0.99% x FAS3 x Yrs)
	60	(1.28% x FAS3 x Yrs)
	62	(1.39% x FAS3 x Yrs)
	65 or later	(1.62% x FAS3 x Yrs)



2.0% @ 57	<b>Retirement Age</b>	Benefit Formula
Plan S (§31676.12)	50	(1.34% x FAS3 x Yrs)
	55	(1.77% x FAS3 x Yrs)
	60	(2.34% x FAS3 x Yrs)
	62	(2.62% x FAS3 x Yrs)
	65 or later	(2.62% x FAS3 x Yrs)



	<b>Retirement</b> Age	Benefit Formula
Plan A (§31676.12)	50	(1.34% x FAS1 x Yrs)
	55	(1.77% x FAS1 x Yrs)
	60	(2.34% x FAS1 x Yrs)
	62	(2.62% x FAS1 x Yrs)
	65 or later	(2.62% x FAS1 x Yrs)
Plan B (§31676.1)	50	(1.18% x FAS3 x Yrs)
	55	(1.49% x FAS3 x Yrs)
	60	(1.92% x FAS3 x Yrs)
	62	(2.09% x FAS3 x Yrs)
	65 or later	(2.43% x FAS3 x Yrs)
Plan U (§7522.20(a))	52	(1.00% x FAS3 x Yrs)
	55	(1.30% x FAS3 x Yrs)
	60	(1.80% x FAS3 x Yrs)
	62	(2.00% x FAS3 x Yrs)
	65	(2.30% x FAS3 x Yrs)
	67 or later	(2.50% x FAS3 x Yrs)



Safety Plans		
3% @ 50	<b>Retirement Age</b>	Benefit Formula
Plan E (§31664.1)	50	(3.00% x FAS1 x Yrs)
	55	(3.00% x FAS1 x Yrs)
	60 or later	(3.00% x FAS1 x Yrs)
Plan F (§31664.1)	50	(3.00% x FAS3 x Yrs)
	55	(3.00% x FAS3 x Yrs)
	60 or later	(3.00% x FAS3 x Yrs)
3% @ 55		
Plan Q (§31664.2)	50	(2.29% x FAS1 x Yrs)
	55	(3.00% x FAS1 x Yrs)
	60 or later	(3.00% x FAS1 x Yrs)
Plan R (§31664.2)	50	(2.29% x FAS3 x Yrs)
	55	(3.00% x FAS3 x Yrs)
	60 or later	(3.00% x FAS3 x Yrs)
Plan V (§7522.25(d))	50	(2.00% x FAS3 x Yrs)
	55	(2.50% x FAS3 x Yrs)
	57 or later	(2.70% x FAS3 x Yrs)



### Maximum Benefit:

Plans A, B, E, F, G, H, I, J, M, N, O, P, Q, R, S, and T	100% of Highest Average Compensation. (§31676.01, §31676.1, §31676.12, §31676.16, §31676.18, §31676.19, §31664.1, §31664.2)
Plans U and V	None.
Ordinary Disability:	
General Plans	
Plans A, B, G, H, I, J, M, N, O, P,	S, T and U
Eligibility	Five years of service. (§31720)
Benefit Formula	Plans A, G, I, M and O: 1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 62, but the total benefit cannot be more than one-third of Final Compensation. (§31727.1)
	Plans B, H, J, N, P, S, T and U: 1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total benefit cannot be more than one-third of Final Compensation. (§31727)
Safety Plans	
Plans E, F, Q, R and V	
Eligibility	Five years of service. (§31720)
Benefit Formula	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total benefit cannot be more than one-third of Final Compensation. (§31727.2)
	For all members, 100% of the Service Retirement benefit will be paid, if greater.



ne-of-Duty Disability:	
All Members	
Eligibility	No age or service requirements. (§31720)
Benefit Formula	50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4)
e-Retirement Death:	
All Members	
Eligibility	None.
Benefit	Refund of employee contributions with interest plus one month's compensation for each year of service to a maximum of six month's compensation. (§31781) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790)
Death in line of duty	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children. (§31787)
	OR
Vested Members	
Eligibility	Five years of service.
Benefit	60% of the greater of Service or Ordinary Disability Retirement benefit payable t eligible surviving spouse (§31765.1, §31781.1), in lieu of §31781.



Death After Retirement:	
All Members	
Service or	
Ordinary Disability Retirement	60% of member's unmodified allowance continued to eligible spouse. (§31760.1) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790) An eligible spouse is a surviving spouse who was married to or registered with the member one year prior to the effective retirement date. Certain surviving spouses or domestic partners may also be eligible if marriage or domestic partnership was at least two years prior to the date of death and the surviving spouse or domestic partner has attained age 55.
Line-of-Duty Disability	100% of member's allowance continued to eligible spouse. (§31786) A lump sum benefit in the amount of \$1,000 is payable upon the death of a member (with 10 years of service) to his/her eligible beneficiary. (§31790)
Withdrawal Benefits:	
Less than Five Years of Service	Refund of accumulated employee contributions with interest or earned benefit at age 70. (§31628) Effective January 1, 2003, a member may also elect to leave contributions on deposit in the retirement fund. (§31629.5)
Five or More Years of Service	If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire. (§31700)
Post-retirement	
Cost-of-Living Benefits:	Future changes based on Consumer Price Index to a maximum of 3% per year, excess "banked." (§31870.1)
Supplemental Benefit:	Non-vested supplemental COLA and medical benefits are also paid by the System to eligible retirees and survivors. These benefits have been excluded from this valuation.

Member Contributions:	Please refer to Appendix B for the specific rates.
Non-CalPEPRA General Plans	
Plan A	
Basic	Provide for an average annuity payable at age 60 equal to 1/200 of FAS1. (§31621.5)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
Plan B	
Basic	Provide for an average annuity payable at age 60 equal to 1/120 of FAS3. (§31621)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
Plans G, H, I and J	
Basic	Provide for an average annuity payable at age 55 equal to 1/100 of FAS3 (FAS1 for Plans G and I). (§31621.8)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
Plan M, N, O and P	
Basic	Provide for an average annuity payable at age 60 equal to $1/120$ of FAS3 (FAS1 for Plans M and O). ( $\$31621$ )
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
Plan S	
Basic	Provide for an average annuity at age 60 equal to 1/100 of FAS3. (§31621.2)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.



#### Member Contributions (Continued):

#### **Non-CalPEPRA Safety Plans**

Plans E and Q	
Basic	Provide for an average annuity payable at age 50 equal to 1/200 FAS1. (§31639.5)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
Plans F and R	
Basic	Provide for an average annuity payable at age 50 equal to 1/100 of FAS3. (§31639.25)
Cost-of-Living	Provide for 50% of future Cost-of-Living costs.
CalPEPRA Plans	
Plans T, U and V	50% of total Normal Cost rate.
Other Information:	Non-CalPEPRA Safety members with 30 or more years of service are exempt from paying member contributions. This also applies for General members hired on or before March 7, 1973.

**NOTE:** The summary of major plan provisions is designed to outline principal plan benefits as interpreted for purposes of the actuarial valuation. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so that both can be sure the proper provisions are valued.



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
General Members						
Rate Group #1 – Plans A,	B and U (non-OCTA, non-	OCSD)				
	12/31/2012	Restart amortization	\$116,996,000	19	\$117,035,000	\$8,648,000
	12/31/2013	Actuarial (gain) or loss	(9,575,000)	19	(9,578,000)	(708,000)
	12/31/2014	Actuarial (gain) or loss	(4,568,000)	20	(4,568,000)	(326,000)
	12/31/2014	Assumption changes	(10,895,000)	20	(10,895,000)	(777,000)
Subtotal					\$91,994,000 <sup>(1)</sup>	\$6,837,000 <sup>(1)</sup>

<sup>(1)</sup> Included in the remaining base is an estimated liability of \$2.8 million due to the withdrawal of Vector Control from OCERS. After adjusting for this liability, the amortization amount is reduced to \$6.6 million.



### Appendix A (Continued) UAAL Amortization Schedule as of December 31, 2014

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #2 – Plans I,	J, O, P, S, T and U					
	12/31/2012	Restart amortization	\$3,438,555,000	19	\$3,439,702,000	\$254,157,000
	12/31/2013	Actuarial (gain) or loss	(173,790,000)	19	(173,848,000)	(12,845,000)
	12/31/2014	Actuarial (gain) or loss	(78,001,000)	20	(78,001,000)	(5,562,000)
	12/31/2014	Assumption changes	(246,714,000)	20	(246,714,000)	(17,593,000)
Subtotal					\$2,941,139,000	\$218,157,000



#### Appendix A (Continued) UAAL Amortization Schedule as of December 31, 2014

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #3 – Plans H	3, G, H and U (Law Lit	orary, OCSD)				
	12/31/2012	Restart amortization	\$213,425,000	19	\$213,496,000	\$15,775,000
	12/31/2013	Actuarial (gain) or loss	(15,594,000)	19	(15,599,000)	(1,153,000)
	12/31/2014	OCSD additional UAAL contribution	(126,350,000)	20	(126,350,000)	(1)
	12/31/2014	Actuarial (gain) or loss	(2,345,000)	20	(2,345,000)	(167,000)
	12/31/2014	Assumption changes	(13,379,000)	20	(13,379,000)	<u>(954,000)</u>
Subtotal					\$55,823,000	\$13,501,000

<sup>(1)</sup> This additional UAAL contribution has been amortized as a level percent of pay over a period of twenty years effective on January 1, 2015 and used to reduce O.C. Sanitation District's UAAL rates for one-half of 2014/2015 and all of 2015/2016. The amortization credit available from annuitizing the remaining balance of the additional UAAL contributions over 18.5 years is about \$9.5 million in 2016/2017.



### Appendix A (Continued) UAAL Amortization Schedule as of December 31, 2014

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #5 – Plans A	, B and U (OCTA)					
	12/31/2012	Restart amortization	\$232,513,000	19	\$232,591,000	\$17,186,000
	12/31/2013	Actuarial (gain) or loss	(13,471,000)	19	(13,475,000)	(996,000)
	12/31/2014	Actuarial (gain) or loss	4,522,000	20	4,522,000	322,000
	12/31/2014	Assumption changes	(19,944,000)	20	<u>(19,944,000)</u>	(1,422,000)
Subtotal					\$203,694,000	\$15,090,000



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #9 – Plans M	I, N and U (TCA)					
	12/31/2012	Restart amortization	\$11,906,000	19	\$11,910,000	\$880,000
	12/31/2013	Actuarial (gain) or loss	(684,000)	19	(684,000)	(51,000)
	12/31/2014	Actuarial (gain) or loss	496,000	20	496,000	35,000
	12/31/2014	Assumption changes	(1,032,000)	20	(1,032,000)	<u>(74,000)</u>
Subtotal					\$10,690,000	\$790,000



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #10 – Plans I	I, J, M, N and U (OCFA)	)				
	12/31/2012	Restart amortization	\$72,750,000	19	\$72,774,000	\$5,377,000
	12/31/2013	Actuarial (gain) or loss	(2,659,000)	19	(2,660,000)	(197,000)
	12/31/2014	Actuarial (gain) or loss	(3,755,000)	20	(3,755,000)	(268,000)
	12/31/2014	Assumption changes	(4,489,000)	20	(4,489,000)	(320,000)
Subtotal					\$61,870,000	\$4,592,000



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #11 – Plans I	M and N, future service, an	d U (Cemetery)				
Subtotal					\$(73,000)	\$0



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
•	Latabilation	oource	Initial Dase	Remaining	Dase	Amount
Safety Members						
Rate Group #6 – Plans E	, F and V (Probation)					
	12/31/2012	Restart amortization	\$192,912,000	19	\$192,976,000	\$14,259,000
	12/31/2013	Actuarial (gain) or loss	(14,039,000)	19	(14,044,000)	(1,038,000
	12/31/2014	Actuarial (gain) or loss	(2,596,000)	20	(2,596,000)	(185,000
	12/31/2014	Assumption changes	36,260,000	20	36,260,000	2,586,000
Subtotal					\$212,596,000	\$15,622,000

Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #7 – Plans E	E, F, Q, R and V (Law I	Enforcement)				
	12/31/2012	Restart amortization	\$988,833,000	19	\$989,163,000	\$73,088,000
	12/31/2013	Actuarial (gain) or loss	(51,652,000)	19	(51,669,000)	(3,818,000)
	12/31/2014	Actuarial (gain) or loss	(34,729,000)	20	(34,729,000)	(2,476,000)
	12/31/2014	Assumption changes	102,262,000	20	102,262,000	7,292,000
Subtotal					\$1,005,027,000	\$74,086,000



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
Rate Group #8 – Plans E,	, F, Q, R and V (Fire Au	thority)				
	12/31/2012	Restart amortization	\$399,947,000	19	\$400,080,000	\$29,562,000
	12/31/2013	Actuarial (gain) or loss	(20,177,000)	19	(20,184,000)	(1,491,000)
	12/31/2014	Actuarial (gain) or loss	(35,400,000)	20	(35,400,000)	(2,524,000)
	12/31/2014	Assumption changes	35,957,000	20	35,957,000	2,564,000
Subtotal					\$380,453,000	\$28,111,000



Rate Groups	Date Established	Source	Initial Base	Years Remaining	Remaining Base	Amortization Amount
All Rate Groups Combined						
	12/31/2012	Restart amortization	\$5,669,830,000	19	\$5,669,740,000	\$418,932,000
	12/31/2013	Actuarial (gain) or loss	(301,913,000)	19	(301,754,000)	(22,297,000)
	12/31/2014	OCSD additional UAAL contribution	(126,350,000)	20	(126,350,000)	(1)
	12/31/2014	Actuarial (gain) or loss	(156,250,000)	20	(156,250,000)	(11,151,000)
	12/31/2014	Assumption changes	(122,173,000)	20	(122,173,000)	<u>(8,698,000)</u>
Grand Total					\$4,963,213,000	\$376,786,000

(1) This additional UAAL contribution has been amortized as a level percent of pay over a period of twenty years effective on January 1, 2015 and used to reduce O.C. Sanitation District's UAAL rates for one-half of 2014/2015 and all of 2015/2016. The amortization credit available from annuitizing the remaining balance of the additional UAAL contributions over 18.5 years is about \$9.5 million in 2016/2017.



### Appendix B

#### **Member Contribution Rates**

		Calcula	ted Under Recom	mended Assum	ptions			
	Plan I (2.7% @	55 Non-OCFA)	<b>Plan G (2.5</b>	% @ 55)	Plan M (2.0	)% @ 55)*	Plan A (	OCTA)
Entry Age	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	Total	<u>Normal</u>	Tota
15	6.99%	9.66%	6.99%	9.52%	5.01%	7.21%	3.00%	4.90%
16	6.99%	9.66%	6.99%	9.52%	5.01%	7.21%	3.00%	4.90%
17	7.12%	9.83%	7.12%	9.68%	5.09%	7.34%	3.06%	4.99%
18	7.24%	10.01%	7.24%	9.85%	5.18%	7.47%	3.11%	5.08%
19	7.37%	10.18%	7.37%	10.03%	5.28%	7.60%	3.17%	5.17%
20	7.50%	10.36%	7.50%	10.20%	5.37%	7.73%	3.22%	5.26%
21	7.63%	10.55%	7.63%	10.38%	5.46%	7.87%	3.28%	5.35%
22	7.77%	10.73%	7.77%	10.57%	5.56%	8.01%	3.34%	5.45%
23	7.90%	10.92%	7.90%	10.75%	5.66%	8.15%	3.40%	5.54%
24	8.04%	11.11%	8.04%	10.94%	5.76%	8.29%	3.46%	5.64%
25	8.18%	11.31%	8.18%	11.13%	5.86%	8.44%	3.52%	5.74%
26	8.33%	11.51%	8.33%	11.33%	5.96%	8.59%	3.58%	5.84%
27	8.48%	11.71%	8.48%	11.53%	6.07%	8.74%	3.64%	5.94%
28	8.63%	11.92%	8.63%	11.74%	6.17%	8.89%	3.70%	6.05%
29	8.78%	12.13%	8.78%	11.95%	6.28%	9.05%	3.77%	6.15%
30	8.94%	12.35%	8.94%	12.16%	6.39%	9.21%	3.84%	6.26%
31	9.10%	12.57%	9.10%	12.38%	6.51%	9.37%	3.90%	6.37%
32	9.26%	12.80%	9.26%	12.60%	6.62%	9.54%	3.97%	6.49%
33	9.43%	13.03%	9.43%	12.83%	6.74%	9.71%	4.04%	6.60%
34	9.61%	13.28%	9.61%	13.07%	6.86%	9.88%	4.12%	6.72%
35	9.79%	13.52%	9.79%	13.32%	6.98%	10.06%	4.19%	6.84%
36	9.97%	13.78%	9.97%	13.57%	7.11%	10.24%	4.27%	6.96%
37	10.17%	14.05%	10.17%	13.83%	7.24%	10.42%	4.34%	7.09%
38	10.37%	14.32%	10.37%	14.10%	7.37%	10.62%	4.42%	7.22%
39	10.53%	14.54%	10.53%	14.32%	7.51%	10.81%	4.50%	7.35%

	Diam I (2 70/ @		lated Under Recor	-		<b>)</b> 0/ @ <b>55</b> )*	Dlan A	
Entry Ago	Plan I (2.7% @ :	· · · · · · · · · · · · · · · · · · ·	Plan G (2.5	<i>.</i>	Plan M (2.0			(OCTA) Total
Entry Age 40	<u>Normal</u> 10.69%	<u>Total</u> 14.77%	<u>Normal</u> 10.69%	<u>Total</u> 14.54%	<u>Normal</u> 7.65%	<u>Total</u> 11.01%	<u>Normal</u> 4.59%	<u>10tal</u> 7.49%
40 41	10.86%	14.77%	10.86%	14.34%	7.03%	11.01%	4.59%	7.63%
41 42	11.04%	15.26%	11.04%	15.02%	7.94%	11.22%	4.08%	7.03%
43	11.23%	15.52%	11.23%	15.28%	8.10%	11.67%	4.86%	7.93%
44	11.44%	15.80%	11.44%	15.56%	8.22%	11.84%	4.93%	8.05%
45	11.66%	16.11%	11.66%	15.86%	8.35%	12.03%	5.01%	8.18%
46	11.87%	16.41%	11.87%	16.15%	8.49%	12.22%	5.09%	8.31%
47	12.06%	16.66%	12.06%	16.41%	8.63%	12.43%	5.18%	8.45%
48	12.24%	16.92%	12.24%	16.66%	8.78%	12.64%	5.27%	8.60%
49	12.35%	17.06%	12.35%	16.80%	8.94%	12.87%	5.36%	8.75%
50	12.40%	17.13%	12.40%	16.87%	9.11%	13.12%	5.47%	8.92%
51	12.40%	17.13%	12.40%	16.87%	9.28%	13.36%	5.57%	9.09%
52	12.30%	16.99%	12.30%	16.73%	9.42%	13.57%	5.65%	9.23%
53	12.08%	16.70%	12.08%	16.44%	9.57%	13.78%	5.74%	9.37%
54	11.56%	15.97%	11.56%	15.73%	9.65%	13.90%	5.79%	9.45%
55	11.56%	15.97%	11.56%	15.73%	9.69%	13.95%	5.81%	9.49%
56	11.56%	15.97%	11.56%	15.73%	9.69%	13.95%	5.81%	9.49%
57	11.56%	15.97%	11.56%	15.73%	9.61%	13.84%	5.76%	9.41%
58	11.56%	15.97%	11.56%	15.73%	9.44%	13.60%	5.67%	9.25%
59	11.56%	15.97%	11.56%	15.73%	9.03%	13.01%	5.42%	8.84%
60	11.56%	15.97%	11.56%	15.73%	9.03%	13.01%	5.42%	8.84%
OLA Loading:		38.17%		36.05%		44.02%		63.22

Interest:7.25%Salary Increases:See Exhibit V, page 79Mortality:See Exhibit V, page 72

\* Payable by members in Rate Group #9 and Rate Group #11.



	Plan A (No	on-OCTA)	Plan I (2.7% (	55 OCFA)	
Entry Age	<u>Normal</u>	Total	<u>Normal</u>	<u>Total</u>	
15	3.00%	4.80%	6.99%	9.67%	
16	3.00%	4.80%	6.99%	9.67%	
17	3.06%	4.89%	7.12%	9.84%	
18	3.11%	4.98%	7.24%	10.02%	
19	3.17%	5.06%	7.37%	10.19%	
20	3.22%	5.15%	7.50%	10.37%	
21	3.28%	5.25%	7.63%	10.56%	
22	3.34%	5.34%	7.77%	10.74%	
23	3.40%	5.43%	7.90%	10.93%	
24	3.46%	5.53%	8.04%	11.12%	
25	3.52%	5.62%	8.18%	11.32%	
26	3.58%	5.72%	8.33%	11.52%	
27	3.64%	5.82%	8.48%	11.72%	
28	3.70%	5.93%	8.63%	11.93%	
29	3.77%	6.03%	8.78%	12.15%	
30	3.84%	6.14%	8.94%	12.36%	
31	3.90%	6.25%	9.10%	12.59%	
32	3.97%	6.36%	9.26%	12.81%	
33	4.04%	6.47%	9.43%	13.05%	
34	4.12%	6.58%	9.61%	13.29%	
35	4.19%	6.70%	9.79%	13.54%	
36	4.27%	6.82%	9.97%	13.80%	
37	4.34%	6.95%	10.17%	14.06%	
38	4.42%	7.07%	10.37%	14.34%	
39	4.50%	7.21%	10.53%	14.56%	
40	4.59%	7.34%	10.69%	14.79%	
41	4.68%	7.48%	10.86%	15.03%	
42	4.77%	7.62%	11.04%	15.27%	

	Plan A (Non-OCTA)		<b>Plan I (2.7%</b>	55 OCFA)	
Entry Age	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>	
43	4.86%	7.77%	11.23%	15.54%	
44	4.93%	7.89%	11.44%	15.82%	
45	5.01%	8.02%	11.66%	16.13%	
46	5.09%	8.15%	11.87%	16.42%	
47	5.18%	8.28%	12.06%	16.68%	
48	5.27%	8.42%	12.24%	16.93%	
49	5.36%	8.58%	12.35%	17.08%	
50	5.47%	8.74%	12.40%	17.15%	
51	5.57%	8.90%	12.40%	17.15%	
52	5.65%	9.04%	12.30%	17.01%	
53	5.74%	9.18%	12.08%	16.72%	
54	5.79%	9.26%	11.56%	15.99%	
55	5.81%	9.30%	11.56%	15.99%	
56	5.81%	9.30%	11.56%	15.99%	
57	5.76%	9.22%	11.56%	15.99%	
58	5.67%	9.06%	11.56%	15.99%	
59	5.42%	8.67%	11.56%	15.99%	
60	5.42%	8.67%	11.56%	15.99%	
COLA Loading:		59.97%		38.32%	
Interest:	7.25%				
Salary Increases:	See Exhibit	V, page 79			
Mortality:		V, page 72			

	General Her	2 wienders Contri			nder Recommen		-	is a r er centage	of Monthly Payroll)	
	Plan J (2.7% @	2 55 non-OCFA)	Plan H (2.5	5% @ 55)	<b>Plan N (2.0</b>	% @ 55)*	Plan B	(OCTA)	Plan B (non-OCT	TA, non-OCSD
Entry Age	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>
15	6.66%	9.21%	6.66%	9.06%	4.77%	6.87%	4.77%	6.58%	4.77%	6.48%
16	6.66%	9.21%	6.66%	9.06%	4.77%	6.87%	4.77%	6.58%	4.77%	6.48%
17	6.78%	9.37%	6.78%	9.22%	4.85%	6.99%	4.85%	6.69%	4.85%	6.60%
18	6.90%	9.53%	6.90%	9.39%	4.94%	7.11%	4.94%	6.81%	4.94%	6.72%
19	7.02%	9.70%	7.02%	9.55%	5.03%	7.24%	5.03%	6.93%	5.03%	6.84%
20	7.14%	9.87%	7.14%	9.72%	5.12%	7.37%	5.12%	7.06%	5.12%	6.96%
21	7.27%	10.04%	7.27%	9.89%	5.21%	7.50%	5.21%	7.18%	5.21%	7.08%
22	7.40%	10.22%	7.40%	10.06%	5.30%	7.63%	5.30%	7.31%	5.30%	7.20%
23	7.53%	10.40%	7.53%	10.24%	5.39%	7.76%	5.39%	7.43%	5.39%	7.33%
24	7.66%	10.58%	7.66%	10.42%	5.48%	7.90%	5.48%	7.57%	5.48%	7.46%
25	7.79%	10.77%	7.79%	10.60%	5.58%	8.04%	5.58%	7.70%	5.58%	7.59%
26	7.93%	10.96%	7.93%	10.79%	5.68%	8.18%	5.68%	7.83%	5.68%	7.72%
27	8.07%	11.15%	8.07%	10.98%	5.78%	8.32%	5.78%	7.97%	5.78%	7.86%
28	8.21%	11.35%	8.21%	11.17%	5.88%	8.47%	5.88%	8.11%	5.88%	8.00%
29	8.36%	11.55%	8.36%	11.37%	5.98%	8.62%	5.98%	8.25%	5.98%	8.14%
30	8.51%	11.75%	8.51%	11.57%	6.09%	8.77%	6.09%	8.40%	6.09%	8.28%
31	8.66%	11.97%	8.66%	11.78%	6.20%	8.92%	6.20%	8.55%	6.20%	8.43%
32	8.82%	12.18%	8.82%	11.99%	6.31%	9.08%	6.31%	8.70%	6.31%	8.57%
33	8.98%	12.40%	8.98%	12.21%	6.42%	9.24%	6.42%	8.85%	6.42%	8.73%
34	9.14%	12.63%	9.14%	12.44%	6.53%	9.41%	6.53%	9.01%	6.53%	8.88%
35	9.31%	12.86%	9.31%	12.67%	6.65%	9.57%	6.65%	9.17%	6.65%	9.04%
36	9.49%	13.11%	9.49%	12.91%	6.77%	9.74%	6.77%	9.33%	6.77%	9.20%
37	9.65%	13.34%	9.65%	13.13%	6.89%	9.92%	6.89%	9.50%	6.89%	9.37%
38	9.81%	13.56%	9.81%	13.35%	7.01%	10.10%	7.01%	9.67%	7.01%	9.54%
39	9.96%	13.76%	9.96%	13.55%	7.14%	10.29%	7.14%	9.85%	7.14%	9.71%
40	10.11%	13.97%	10.11%	13.76%	7.27%	10.48%	7.27%	10.03%	7.27%	9.89%
41	10.27%	14.19%	10.27%	13.98%	7.41%	10.67%	7.41%	10.22%	7.41%	10.08%
42	10.44%	14.43%	10.44%	14.20%	7.54%	10.86%	7.54%	10.40%	7.54%	10.26%



	Plan J (2.7% @	9 55 non-OCFA)	Plan H (2.	5% @ 55)	<b>Plan N (2.0</b>	<b>%</b> @ 55)*	Plan B (C	DCTA)	Plan B (non-OCT	A, non-OCSD
<u>Entry Age</u>	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>	Normal	<u>Total</u>	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>
43	10.62%	14.67%	10.62%	14.44%	7.67%	11.04%	7.67%	10.57%	7.67%	10.42%
44	10.80%	14.92%	10.80%	14.69%	7.78%	11.21%	7.78%	10.73%	7.78%	10.58%
45	10.97%	15.15%	10.97%	14.92%	7.90%	11.38%	7.90%	10.90%	7.90%	10.75%
46	11.12%	15.36%	11.12%	15.13%	8.03%	11.56%	8.03%	11.07%	8.03%	10.92%
47	11.23%	15.52%	11.23%	15.28%	8.16%	11.75%	8.16%	11.25%	8.16%	11.09%
48	11.30%	15.62%	11.30%	15.38%	8.30%	11.95%	8.30%	11.44%	8.30%	11.28%
49	11.31%	15.63%	11.31%	15.39%	8.44%	12.15%	8.44%	11.64%	8.44%	11.47%
50	11.25%	15.54%	11.25%	15.30%	8.57%	12.34%	8.57%	11.82%	8.57%	11.65%
51	11.10%	15.34%	11.10%	15.11%	8.69%	12.51%	8.69%	11.98%	8.69%	11.81%
52	10.82%	14.95%	10.82%	14.72%	8.78%	12.64%	8.78%	12.11%	8.78%	11.94%
53	11.18%	15.45%	11.18%	15.21%	8.83%	12.72%	8.83%	12.18%	8.83%	12.01%
54	11.56%	15.97%	11.56%	15.73%	8.84%	12.73%	8.84%	12.19%	8.84%	12.02%
55	11.56%	15.97%	11.56%	15.73%	8.79%	12.66%	8.79%	12.12%	8.79%	11.95%
56	11.56%	15.97%	11.56%	15.73%	8.68%	12.50%	8.68%	11.97%	8.68%	11.80%
57	11.56%	15.97%	11.56%	15.73%	8.45%	12.17%	8.45%	11.66%	8.45%	11.49%
58	11.56%	15.97%	11.56%	15.73%	8.73%	12.58%	8.73%	12.05%	8.73%	11.88%
59	11.56%	15.97%	11.56%	15.73%	9.03%	13.01%	9.03%	12.46%	9.03%	12.28%
60	11.56%	15.97%	11.56%	15.73%	9.03%	13.01%	9.03%	12.46%	9.03%	12.28%

Interest:7.25%Salary Increases:See Exhibit V, page 79Mortality:See Exhibit V, page 72

\* Payable by members in Rate Group #9 and Rate Group #11.



	Plan I (2 70/	6 @ 55 OCFA)	Plan P (1.6	(20/ @ 65)	Plan B (		Plan N (	(OCEA)	Plan S (Ci	ty of SIC)
Entry Age	Normal	<u>Total</u>	Normal	Total	Normal	Total	Normal	Total	Normal	Total
15	6.66%	9.22%	4.77%	5.97%	4.77%	6.54%	4.77%	6.84%	5.72%	7.82%
16	6.66%	9.22%	4.77%	5.97%	4.77%	6.54%	4.77%	6.84%	5.72%	7.82%
17	6.78%	9.38%	4.85%	6.08%	4.85%	6.65%	4.85%	6.96%	5.82%	7.96%
18	6.90%	9.54%	4.94%	6.18%	4.94%	6.77%	4.94%	7.08%	5.93%	8.10%
19	7.02%	9.71%	5.03%	6.29%	5.03%	6.89%	5.03%	7.21%	6.03%	8.24%
20	7.14%	9.88%	5.12%	6.40%	5.12%	7.01%	5.12%	7.33%	6.14%	8.39%
21	7.27%	10.05%	5.21%	6.52%	5.21%	7.13%	5.21%	7.46%	6.25%	8.54%
22	7.40%	10.23%	5.30%	6.63%	5.30%	7.26%	5.30%	7.60%	6.36%	8.69%
23	7.53%	10.41%	5.39%	6.75%	5.39%	7.39%	5.39%	7.73%	6.47%	8.84%
24	7.66%	10.59%	5.48%	6.87%	5.48%	7.52%	5.48%	7.86%	6.58%	8.99%
25	7.79%	10.78%	5.58%	6.99%	5.58%	7.65%	5.58%	8.00%	6.70%	9.15%
26	7.93%	10.97%	5.68%	7.11%	5.68%	7.78%	5.68%	8.14%	6.82%	9.31%
27	8.07%	11.16%	5.78%	7.24%	5.78%	7.92%	5.78%	8.29%	6.93%	9.48%
28	8.21%	11.36%	5.88%	7.36%	5.88%	8.06%	5.88%	8.43%	7.06%	9.64%
29	8.36%	11.56%	5.98%	7.49%	5.98%	8.20%	5.98%	8.58%	7.18%	9.81%
30	8.51%	11.77%	6.09%	7.62%	6.09%	8.34%	6.09%	8.73%	7.31%	9.99%
31	8.66%	11.98%	6.20%	7.76%	6.20%	8.49%	6.20%	8.88%	7.44%	10.16%
32	8.82%	12.19%	6.31%	7.89%	6.31%	8.64%	6.31%	9.04%	7.57%	10.34%
33	8.98%	12.42%	6.42%	8.03%	6.42%	8.79%	6.42%	9.20%	7.70%	10.52%
34	9.14%	12.64%	6.53%	8.18%	6.53%	8.95%	6.53%	9.36%	7.84%	10.71%
35	9.31%	12.88%	6.65%	8.32%	6.65%	9.11%	6.65%	9.53%	7.98%	10.90%
36	9.49%	13.12%	6.77%	8.47%	6.77%	9.27%	6.77%	9.70%	8.12%	11.10%
37	9.65%	13.35%	6.89%	8.62%	6.89%	9.44%	6.89%	9.88%	8.27%	11.30%
38	9.81%	13.57%	7.01%	8.78%	7.01%	9.61%	7.01%	10.06%	8.42%	11.50%
39	9.96%	13.78%	7.14%	8.94%	7.14%	9.79%	7.14%	10.24%	8.57%	11.71%
40	10.11%	13.99%	7.27%	9.11%	7.27%	9.97%	7.27%	10.43%	8.73%	11.93%
41	10.27%	14.21%	7.41%	9.28%	7.41%	10.16%	7.41%	10.63%	8.89%	12.15%
42	10.44%	14.44%	7.54%	9.44%	7.54%	10.34%	7.54%	10.81%	9.05%	12.37%



	Plan J (2.7%	6 @ 55 OCFA)	<b>Plan P</b> (1.6	62% @ 65)	Plan B	(OCSD)	Plan N (	OCFA)	Plan S (Ci	ity of SJC)
<u>Entry Age</u>	<u>Normal</u>	Total	Normal	<u>Normal</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	Total
43	10.62%	14.69%	7.67%	9.60%	7.67%	10.51%	7.67%	10.99%	9.20%	12.57%
44	10.80%	14.93%	7.78%	9.74%	7.78%	10.66%	7.78%	11.16%	9.34%	12.769
45	10.97%	15.17%	7.90%	9.89%	7.90%	10.83%	7.90%	11.33%	9.48%	12.969
46	11.12%	15.38%	8.03%	10.05%	8.03%	11.00%	8.03%	11.51%	9.63%	13.169
47	11.23%	15.54%	8.16%	10.21%	8.16%	11.18%	8.16%	11.70%	9.79%	13.389
48	11.30%	15.63%	8.30%	10.39%	8.30%	11.37%	8.30%	11.89%	9.95%	13.609
49	11.31%	15.64%	8.44%	10.56%	8.44%	11.56%	8.44%	12.10%	10.12%	13.839
50	11.25%	15.56%	8.57%	10.73%	8.57%	11.74%	8.57%	12.29%	10.28%	14.05
51	11.10%	15.36%	8.69%	10.88%	8.69%	11.91%	8.69%	12.46%	10.43%	14.25
52	10.82%	14.96%	8.78%	10.99%	8.78%	12.03%	8.78%	12.59%	10.53%	14.399
53	11.18%	15.46%	8.83%	11.06%	8.83%	12.10%	8.83%	12.66%	10.60%	14.48
54	11.56%	15.99%	8.84%	11.06%	8.84%	12.11%	8.84%	12.67%	10.60%	14.499
55	11.56%	15.99%	8.79%	11.00%	8.79%	12.05%	8.79%	12.60%	10.55%	14.41
56	11.56%	15.99%	8.68%	10.86%	8.68%	11.89%	8.68%	12.44%	10.41%	14.239
57	11.56%	15.99%	8.45%	10.58%	8.45%	11.58%	8.45%	12.12%	10.14%	13.869
58	11.56%	15.99%	8.73%	10.94%	8.73%	11.97%	8.73%	12.52%	10.48%	14.32
59	11.56%	15.99%	9.03%	11.31%	9.03%	12.38%	9.03%	12.95%	10.84%	14.81
60	11.56%	15.99%	9.03%	11.31%	9.03%	12.38%	9.03%	12.95%	10.84%	14.81

Interest:	7.25%
Salary Increases:	See Exhibit V, page 79
Mortality:	See Exhibit V, page 72



			Calculated Unde	r Recommende	d Assumptions			
	Rate Group	o 1 – Plan U	Rate Group	o 2 – Plan T	Rate Group	o 2 – Plan U	Rate Group	o 3 – Plan U
Entry Age	Normal	<u>Total</u>	Normal	<u>Total</u>	Normal	<u>Total</u>	Normal	<u>Total</u>
15	5.39%	7.34%	3.47%	4.65%	4.97%	6.78%	5.19%	7.11%
16	5.39%	7.34%	3.47%	4.65%	4.97%	6.78%	5.19%	7.11%
17	5.14%	7.00%	3.53%	4.73%	4.74%	6.47%	4.95%	6.78%
18	4.88%	6.64%	3.59%	4.82%	4.50%	6.14%	4.70%	6.43%
19	4.97%	6.76%	3.66%	4.90%	4.58%	6.25%	4.79%	6.55%
20	5.05%	6.88%	3.72%	4.99%	4.66%	6.36%	4.87%	6.67%
21	5.15%	7.01%	3.79%	5.08%	4.74%	6.48%	4.96%	6.79%
22	5.24%	7.13%	3.85%	5.17%	4.83%	6.59%	5.05%	6.91%
23	5.33%	7.26%	3.92%	5.26%	4.91%	6.71%	5.14%	7.03%
24	5.43%	7.39%	3.99%	5.35%	5.00%	6.83%	5.23%	7.16%
25	5.52%	7.52%	4.06%	5.45%	5.09%	6.95%	5.32%	7.28%
26	5.62%	7.65%	4.13%	5.54%	5.18%	7.07%	5.42%	7.41%
27	5.72%	7.79%	4.21%	5.64%	5.27%	7.20%	5.51%	7.54%
28	5.82%	7.93%	4.28%	5.74%	5.36%	7.33%	5.61%	7.68%
29	5.92%	8.07%	4.36%	5.84%	5.46%	7.46%	5.71%	7.81%
30	6.03%	8.21%	4.43%	5.94%	5.55%	7.59%	5.81%	7.95%
31	6.13%	8.35%	4.51%	6.05%	5.65%	7.72%	5.91%	8.09%
32	6.24%	8.50%	4.59%	6.16%	5.75%	7.86%	6.02%	8.23%
33	6.35%	8.65%	4.67%	6.27%	5.85%	8.00%	6.12%	8.38%
34	6.46%	8.80%	4.76%	6.38%	5.96%	8.14%	6.23%	8.52%
35	6.58%	8.96%	4.84%	6.49%	6.06%	8.28%	6.34%	8.68%
36	6.69%	9.12%	4.93%	6.61%	6.17%	8.43%	6.45%	8.83%
37	6.81%	9.28%	5.02%	6.73%	6.28%	8.58%	6.57%	8.98%
38	6.93%	9.44%	5.11%	6.86%	6.39%	8.73%	6.68%	9.14%
39	7.06%	9.61%	5.21%	6.98%	6.50%	8.88%	6.80%	9.31%
40	7.18%	9.78%	5.31%	7.11%	6.62%	9.04%	6.92%	9.47%
41	7.31%	9.96%	5.41%	7.25%	6.74%	9.20%	7.05%	9.64%
42	7.44%	10.13%	5.50%	7.38%	6.86%	9.37%	7.17%	9.81%
43	7.58%	10.32%	5.60%	7.50%	6.98%	9.54%	7.30%	9.99%
44	7.71%	10.51%	5.68%	7.62%	7.11%	9.71%	7.44%	10.17%



			(Expressed as a l Calculated Unde	-				
	Rate Group	o 1 – Plan U	Rate Grou	o 2 – Plan T	Rate Grou	o 2 – Plan U	Rate Group	o 3 – Plan U
Entry Age	Normal	Total	Normal	Total	Normal	Total	Normal	Total
45	7.86%	10.70%	5.77%	7.74%	7.24%	9.89%	7.57%	10.36%
46	8.00%	10.90%	5.87%	7.87%	7.37%	10.07%	7.71%	10.55%
47	8.15%	11.10%	5.96%	8.00%	7.51%	10.26%	7.86%	10.75%
48	8.31%	11.31%	6.07%	8.14%	7.66%	10.46%	8.01%	10.96%
49	8.46%	11.52%	6.18%	8.28%	7.79%	10.65%	8.15%	11.15%
50	8.60%	11.71%	6.28%	8.42%	7.92%	10.82%	8.29%	11.34%
51	8.73%	11.89%	6.37%	8.55%	8.05%	10.99%	8.42%	11.51%
52	8.87%	12.08%	6.45%	8.64%	8.17%	11.16%	8.55%	11.70%
53	9.01%	12.27%	6.50%	8.71%	8.31%	11.35%	8.69%	11.89%
54	9.16%	12.48%	6.52%	8.74%	8.45%	11.54%	8.84%	12.09%
55	9.33%	12.70%	6.50%	8.71%	8.59%	11.74%	8.99%	12.30%
56	9.49%	12.93%	6.44%	8.64%	8.75%	11.95%	9.15%	12.52%
57	9.65%	13.14%	6.31%	8.47%	8.89%	12.15%	9.30%	12.72%
58	9.79%	13.34%	6.53%	8.75%	9.03%	12.33%	9.44%	12.92%
59	9.91%	13.49%	6.75%	9.05%	9.13%	12.47%	9.55%	13.07%
60	9.98%	13.59%	6.75%	9.05%	9.20%	12.57%	9.62%	13.17%
61	10.01%	13.63%	6.75%	9.05%	9.23%	12.60%	9.65%	13.20%
62	9.98%	13.60%	6.75%	9.05%	9.20%	12.57%	9.63%	13.17%
63	9.90%	13.48%	6.75%	9.05%	9.12%	12.46%	9.54%	13.05%
64	9.70%	13.21%	6.75%	9.05%	8.94%	12.21%	9.35%	12.80%
65	10.03%	13.65%	6.75%	9.05%	9.24%	12.62%	9.67%	13.22%
6 and thereafter	10.37%	14.12%	6.75%	9.05%	9.55%	13.05%	9.99%	13.67%
COLA Loading:		36.25%		34.08%		36.78%		36.99%
nterest:	7.25%							
alary Increases:	See Exhibit V	', page 79						
<i>Iortality:</i>	See Exhibit V	', page 72						

It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula, the compensation that can be taken into account for 2015 is equal to \$140,424 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2015 (reference: Section 7522.10(d)).

Calculated Under Recommended Assumptions											
			Calculated Under	r Recommende	d Assumptions						
	Rate Group	p 5 – Plan U	Rate Group	9 – Plan U	Rate Group	10 – Plan U	Rate Group	11 – Plan U			
<u>Entry Age</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>			
15	5.40%	7.36%	5.10%	6.89%	5.35%	7.29%	6.17%	7.42%			
16	5.40%	7.36%	5.10%	6.89%	5.35%	7.29%	6.17%	7.42%			
17	5.16%	7.02%	4.86%	6.57%	5.10%	6.95%	5.89%	7.08%			
18	4.89%	6.66%	4.61%	6.24%	4.84%	6.60%	5.59%	6.72%			
19	4.98%	6.78%	4.70%	6.35%	4.93%	6.72%	5.69%	6.84%			
20	5.07%	6.90%	4.78%	6.46%	5.02%	6.84%	5.79%	6.96%			
21	5.16%	7.03%	4.87%	6.58%	5.11%	6.96%	5.89%	7.09%			
22	5.25%	7.15%	4.95%	6.70%	5.20%	7.08%	6.00%	7.21%			
23	5.35%	7.28%	5.04%	6.81%	5.29%	7.21%	6.10%	7.34%			
24	5.44%	7.41%	5.13%	6.94%	5.38%	7.34%	6.21%	7.47%			
25	5.54%	7.54%	5.22%	7.06%	5.48%	7.47%	6.32%	7.61%			
26	5.64%	7.68%	5.32%	7.18%	5.58%	7.60%	6.44%	7.74%			
27	5.74%	7.81%	5.41%	7.31%	5.68%	7.74%	6.55%	7.88%			
28	5.84%	7.95%	5.51%	7.44%	5.78%	7.87%	6.67%	8.02%			
29	5.94%	8.09%	5.60%	7.57%	5.88%	8.01%	6.78%	8.16%			
30	6.05%	8.23%	5.70%	7.71%	5.98%	8.15%	6.90%	8.30%			
31	6.15%	8.38%	5.80%	7.84%	6.09%	8.30%	7.02%	8.45%			
32	6.26%	8.53%	5.90%	7.98%	6.19%	8.44%	7.15%	8.60%			
33	6.37%	8.68%	6.01%	8.12%	6.30%	8.59%	7.27%	8.75%			
34	6.48%	8.83%	6.11%	8.26%	6.41%	8.74%	7.40%	8.90%			
35	6.60%	8.98%	6.22%	8.41%	6.53%	8.90%	7.53%	9.06%			
36	6.72%	9.14%	6.33%	8.56%	6.64%	9.06%	7.67%	9.22%			
37	6.83%	9.31%	6.44%	8.71%	6.76%	9.22%	7.80%	9.38%			
38	6.95%	9.47%	6.56%	8.86%	6.88%	9.38%	7.94%	9.55%			
39	7.08%	9.64%	6.67%	9.02%	7.00%	9.55%	8.08%	9.72%			
40	7.20%	9.81%	6.79%	9.18%	7.13%	9.72%	8.22%	9.89%			
41	7.33%	9.99%	6.92%	9.35%	7.25%	9.89%	8.37%	10.07%			
42	7.47%	10.16%	7.04%	9.51%	7.38%	10.07%	8.52%	10.25%			
43	7.60%	10.35%	7.17%	9.69%	7.52%	10.25%	8.68%	10.43%			
44	7.74%	10.54%	7.30%	9.86%	7.66%	10.44%	8.83%	10.62%			

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			(Expressed as a l Calculated Unde	e				
	Rate Group			o 9 – Plan U	•	10 – Plan U	Rate Group	11 – Plan II
Entry Age	Normal	<u>Total</u>	Normal	<u>Total</u>	Normal	<u>Total</u>	Normal	<u>Total</u>
45	7.88%	10.73%	7.43%	10.04%	7.80%	10.63%	9.00%	10.82%
46	8.03%	10.93%	7.57%	10.23%	7.94%	10.82%	9.16%	11.02%
47	8.18%	11.14%	7.71%	10.42%	8.09%	11.03%	9.34%	11.23%
48	8.33%	11.35%	7.86%	10.62%	8.24%	11.24%	9.51%	11.44%
49	8.48%	11.55%	8.00%	10.81%	8.39%	11.44%	9.68%	11.65%
50	8.62%	11.74%	8.13%	10.99%	8.53%	11.63%	9.85%	11.84%
51	8.76%	11.93%	8.26%	11.16%	8.66%	11.81%	10.00%	12.02%
52	8.90%	12.11%	8.39%	11.34%	8.80%	12.00%	10.16%	12.22%
53	9.04%	12.31%	8.53%	11.52%	8.94%	12.19%	10.32%	12.41%
54	9.19%	12.52%	8.67%	11.72%	9.09%	12.40%	10.50%	12.62%
55	9.36%	12.74%	8.82%	11.92%	9.25%	12.62%	10.68%	12.84%
56	9.52%	12.96%	8.98%	12.13%	9.42%	12.84%	10.87%	13.07%
57	9.68%	13.18%	9.13%	12.33%	9.57%	13.05%	11.05%	13.29%
58	9.82%	13.38%	9.26%	12.52%	9.72%	13.25%	11.21%	13.49%
59	9.94%	13.53%	9.37%	12.66%	9.83%	13.40%	11.34%	13.64%
60	10.01%	13.64%	9.44%	12.76%	9.91%	13.50%	11.43%	13.75%
61	10.04%	13.67%	9.47%	12.80%	9.93%	13.54%	11.46%	13.79%
62	10.02%	13.64%	9.45%	12.76%	9.91%	13.51%	11.43%	13.75%
63	9.93%	13.52%	9.36%	12.65%	9.82%	13.39%	11.33%	13.63%
64	9.73%	13.25%	9.18%	12.40%	9.63%	13.12%	11.11%	13.36%
65	10.06%	13.70%	9.48%	12.82%	9.95%	13.56%	11.48%	13.81%
6 and thereafter	10.40%	14.16%	9.81%	13.25%	10.29%	14.02%	11.87%	14.28%
OLA Loading:		36.23%		35.12%		36.21%		30.79%
terest:	7.25%							
alary Increases:	See Exhibit V	', page 79						
lortality:	See Exhibit V	', page 72						

It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula, the compensation that can be taken into account for 2015 is equal to \$140,424 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2015 (reference: Section 7522.10(d)).

	Plan F (Fire	e Authority)	Plan E (Law I	(nforcomont)	Plan E (P	robation)	
Entry Age	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>	Normal	<u>Total</u>	
15	4.54%	<u>10tar</u> 10.49%	4.68%	<u>10tar</u> 10.97%	4.62%	<u>10.11%</u>	
15	4.54%	10.49%	4.68%	10.97%	4.62%	10.11%	
10	4.60%	10.49%	4.74%	11.11%	4.68%	10.25%	
18	4.66%	10.03%	4.81%	11.26%	4.74%	10.38%	
10	4.73%	10.91%	4.87%	11.20%	4.81%	10.52%	
20	4.79%	11.06%	4.93%	11.41%	4.87%	10.66%	
20	4.85%	11.20%	5.00%	11.71%	4.94%	10.80%	
22	4.92%	11.35%	5.07%	11.87%	5.00%	10.94%	
22	4.98%	11.51%	5.14%	12.03%	5.07%	11.09%	
23	4.98% 5.05%	11.66%	5.21%	12.03%	5.14%	11.24%	
25	5.12%	11.82%	5.28%	12.15%	5.21%	11.40%	
26	5.12%	11.99%	5.35%	12.53%	5.28%	11.55%	
20	5.27%	12.16%	5.42%	12.71%	5.35%	11.72%	
28	5.34%	12.33%	5.50%	12.89%	5.43%	11.88%	
28	5.42%	12.51%	5.58%	13.07%	5.51%	12.05%	
30	5.50%	12.51%	5.66%	13.26%	5.59%	12.23%	
30	5.58%	12.89%	5.75%	13.20%	5.67%	12.42%	
32	5.67%	12.89%	5.84%	13.40%	5.76%	12.42%	
33	5.76%	13.09%	5.93%	13.89%	5.85%	12.81%	
33	5.84%	13.48%	6.01%	13.89%	5.94%	12.99%	
35	5.93%	13.48%	6.10%	14.29%	6.02%	13.18%	
36	6.02%	13.89%	6.19%	14.20%	6.12%	13.38%	
30 37	6.12%	13.89%	6.29%	14.50%	6.21%	13.60%	
37	6.22%	14.12%	6.40%	14.74%	6.32%	13.83%	
38 39	6.22% 6.34%	14.30% 14.63%	6.52%	14.99%	6.32% 6.44%	13.85%	
39 40	6.44%	14.03% 14.87%	6.62%	15.27%	6.44% 6.54%	14.31%	
41 42	6.55% 6.63%	15.13% 15.30%	6.74% 6.81%	15.78% 15.94%	6.66% 6.73%	14.56% 14.72%	

Safety Tier 1 Members' Contribution Rates from the December 31, 2014 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)

	Plan E (Fir	e Authority)	Plan E (Law l	Enforcement)	Plan E (F	robation)	
Entry Age	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	
43	6.70%	15.48%	6.88%	16.12%	6.80%	14.89%	
44	6.74%	15.57%	6.92%	16.20%	6.84%	14.97%	
45	6.76%	15.61%	6.93%	16.22%	6.85%	15.00%	
46	6.72%	15.52%	6.87%	16.10%	6.81%	14.89%	
47	6.61%	15.27%	6.74%	15.80%	6.69%	14.63%	
48	6.45%	14.89%	6.54%	15.33%	6.50%	14.23%	
49	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
50	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
51	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
52	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
53	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
54	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
55	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
56	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
57	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
58	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
59	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
60	6.11%	14.11%	6.11%	14.31%	6.11%	13.37%	
OLA Loading:		130.88%		134.24%		118.80%	
iterest:	7.25%						
alary Increases:	See Exhibit	t V, page 79					
lortality:	See Exhibit	t V, page 72					



				Calculated Und	er Recommende	ed Assumptions				
	Plan F (Fire	e Authority)	Plan F (Law l	Enforcement)	Plan F (P	robation)	Plan R (Fire	e Authority)	Plan R (Law	Enforcement
Entry Age	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<b>Total</b>	<u>Normal</u>	<u>Total</u>	Normal	<b>Total</b>	Normal	<u>Total</u>
15	8.66%	14.32%	8.87%	14.82%	8.72%	13.90%	8.66%	13.70%	8.87%	13.97%
16	8.66%	14.32%	8.87%	14.82%	8.72%	13.90%	8.66%	13.70%	8.87%	13.97%
17	8.77%	14.51%	8.98%	15.01%	8.83%	14.08%	8.77%	13.88%	8.98%	14.16%
18	8.88%	14.70%	9.10%	15.21%	8.95%	14.26%	8.88%	14.06%	9.10%	14.34%
19	9.00%	14.89%	9.22%	15.41%	9.07%	14.45%	9.00%	14.25%	9.22%	14.53%
20	9.12%	15.09%	9.34%	15.61%	9.18%	14.64%	9.12%	14.44%	9.34%	14.72%
21	9.24%	15.29%	9.46%	15.82%	9.31%	14.83%	9.24%	14.63%	9.46%	14.91%
22	9.36%	15.49%	9.59%	16.02%	9.43%	15.03%	9.36%	14.82%	9.59%	15.11%
23	9.49%	15.70%	9.72%	16.24%	9.56%	15.23%	9.49%	15.02%	9.72%	15.31%
24	9.62%	15.91%	9.85%	16.46%	9.69%	15.44%	9.62%	15.23%	9.85%	15.52%
25	9.75%	16.13%	9.98%	16.68%	9.82%	15.65%	9.75%	15.43%	9.98%	15.73%
26	9.88%	16.35%	10.12%	16.91%	9.95%	15.86%	9.88%	15.65%	10.12%	15.94%
27	10.02%	16.58%	10.26%	17.14%	10.09%	16.09%	10.02%	15.87%	10.26%	16.16%
28	10.16%	16.82%	10.40%	17.38%	10.23%	16.31%	10.16%	16.09%	10.40%	16.39%
29	10.31%	17.06%	10.55%	17.63%	10.38%	16.55%	10.31%	16.32%	10.55%	16.62%
30	10.46%	17.31%	10.70%	17.88%	10.53%	16.79%	10.46%	16.56%	10.70%	16.86%
31	10.62%	17.57%	10.86%	18.14%	10.69%	17.04%	10.62%	16.81%	10.86%	17.11%
32	10.77%	17.82%	11.01%	18.40%	10.84%	17.29%	10.77%	17.06%	11.01%	17.35%
33	10.93%	18.08%	11.17%	18.66%	11.00%	17.53%	10.93%	17.30%	11.17%	17.59%
34	11.08%	18.33%	11.32%	18.92%	11.15%	17.77%	11.08%	17.54%	11.32%	17.83%
35	11.24%	18.60%	11.48%	19.18%	11.31%	18.03%	11.24%	17.80%	11.48%	18.09%
36	11.41%	18.88%	11.65%	19.47%	11.48%	18.30%	11.41%	18.07%	11.65%	18.35%
37	11.59%	19.18%	11.83%	19.77%	11.66%	18.59%	11.59%	18.36%	11.83%	18.64%
38	11.77%	19.48%	12.00%	20.06%	11.84%	18.88%	11.77%	18.64%	12.00%	18.92%
39	11.95%	19.78%	12.18%	20.35%	12.02%	19.16%	11.95%	18.93%	12.18%	19.19%
40	12.10%	20.02%	12.32%	20.59%	12.17%	19.40%	12.10%	19.16%	12.32%	19.41%
41	12.23%	20.24%	12.44%	20.79%	12.29%	19.59%	12.23%	19.36%	12.44%	19.60%
42	12.31%	20.36%	12.50%	20.89%	12.36%	19.71%	12.31%	19.48%	12.50%	19.69%
43	12.34%	20.41%	12.51%	20.91%	12.39%	19.75%	12.34%	19.54%	12.51%	19.72%
44	12.29%	20.34%	12.44%	20.79%	12.34%	19.67%	12.29%	19.46%	12.44%	19.60%

 $\star$  Segal Consulting

	Plan F (Fire	e Authority)	Plan F (Law I	Enforcement)	Plan F (P	robation)	Plan R (Fire	e Authority)	Plan R (Law	Enforcement
<u>Entry Age</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	Normal	<u>Total</u>	<u>Normal</u>	<u>Total</u>
45	12.15%	20.10%	12.26%	20.49%	12.18%	19.42%	12.15%	19.23%	12.26%	19.32%
46	11.89%	19.67%	11.96%	19.98%	11.91%	18.98%	11.89%	18.82%	11.96%	18.84%
47	11.45%	18.94%	11.45%	19.14%	11.45%	18.25%	11.45%	18.13%	11.45%	18.04%
48	11.82%	19.56%	11.82%	19.76%	11.82%	18.85%	11.82%	18.72%	11.82%	18.63%
49	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
50	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
51	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
52	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
53	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
54	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
55	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
56	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
57	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
58	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
59	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
60	12.22%	20.22%	12.22%	20.42%	12.22%	19.48%	12.22%	19.35%	12.22%	19.25%
OLA Loading:		65.44%		67.12%		59.40%		58.32%		57.57%

Interest:7.25%Salary Increases:See Exhibit V, page 79Mortality:See Exhibit V, page 72



Calculated Under Recommended Assumptions							
Rate Group 6 – Plan V Rate Group 7 – Plan V Rate Group 8 – Plan V							
Entry Age	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	
15	9.30%	13.32%	10.76%	15.43%	9.07%	13.04%	
16	9.30%	13.32%	10.76%	15.43%	9.07%	13.04%	
17	9.42%	13.49%	10.90%	15.63%	9.18%	13.21%	
18	9.54%	13.66%	11.04%	15.83%	9.30%	13.38%	
19	9.66%	13.84%	11.19%	16.04%	9.43%	13.55%	
20	9.79%	14.02%	11.33%	16.25%	9.55%	13.73%	
21	9.92%	14.20%	11.48%	16.46%	9.67%	13.91%	
22	10.05%	14.39%	11.63%	16.68%	9.80%	14.09%	
23	10.18%	14.58%	11.78%	16.89%	9.93%	14.28%	
24	10.31%	14.77%	11.94%	17.12%	10.06%	14.46%	
25	10.45%	14.96%	12.10%	17.34%	10.19%	14.65%	
26	10.58%	15.16%	12.26%	17.57%	10.32%	14.85%	
27	10.72%	15.36%	12.42%	17.80%	10.46%	15.04%	
28	10.87%	15.57%	12.58%	18.04%	10.60%	15.24%	
29	11.01%	15.78%	12.75%	18.28%	10.74%	15.45%	
30	11.16%	15.99%	12.93%	18.53%	10.89%	15.66%	
31	11.31%	16.21%	13.10%	18.78%	11.04%	15.87%	
32	11.47%	16.43%	13.28%	19.04%	11.19%	16.09%	
33	11.63%	16.66%	13.47%	19.31%	11.34%	16.32%	
34	11.79%	16.90%	13.66%	19.58%	11.50%	16.55%	
35	11.96%	17.14%	13.85%	19.86%	11.67%	16.78%	
36	12.14%	17.39%	14.05%	20.15%	11.84%	17.03%	
37	12.32%	17.64%	14.26%	20.45%	12.01%	17.28%	
38	12.50%	17.91%	14.48%	20.76%	12.20%	17.54%	
39	12.69%	18.18%	14.69%	21.07%	12.38%	17.80%	
40	12.87%	18.44%	14.91%	21.37%	12.56%	18.06%	
41	13.06%	18.70%	15.12%	21.68%	12.74%	18.32%	
42	13.25%	18.98%	15.34%	22.00%	12.93%	18.59%	
43	13.46%	19.28%	15.58%	22.34%	13.13%	18.88%	
44	13.68%	19.59%	15.84%	22.71%	13.34%	19.19%	



Safety CalPEPRA Members' Contribution Rates from the December 31, 2014 Actuarial Valuation (Expressed as a Percentage of Monthly Payroll)						on	
Calculated Under Recommended Assumptions							
	Rate G	roup 6	Rate G	Froup 7	Rate G	roup 8	
Entry Age	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	<u>Normal</u>	<u>Total</u>	
45	13.90%	19.91%	16.09%	23.07%	13.56%	19.49%	
46	14.12%	20.22%	16.35%	23.44%	13.77%	19.80%	
47	14.30%	20.49%	16.56%	23.74%	13.95%	20.06%	
48	14.46%	20.72%	16.75%	24.01%	14.11%	20.29%	
49	14.57%	20.87%	16.87%	24.18%	14.21%	20.43%	
50	14.62%	20.94%	16.93%	24.27%	14.26%	20.51%	
51	14.59%	20.90%	16.89%	24.22%	14.23%	20.46%	
52	14.44%	20.69%	16.72%	23.98%	14.09%	20.26%	
53	14.18%	20.31%	16.41%	23.53%	13.83%	19.89%	
54	13.71%	19.65%	15.88%	22.77%	13.38%	19.24%	
55	14.16%	20.29%	16.40%	23.51%	13.82%	19.87%	
56 and thereafter	14.63%	20.96%	16.95%	24.29%	14.28%	20.53%	
COLA Loading:		46.07%		43.37%		43.86%	
Interest: Salary Increases: Mortality:	7.25% See Exhibit V See Exhibit V	10					

It is our understanding that in the determination of pension benefits under the CalPEPRA 2.5% at 67 formula, the compensation that can be taken into account for 2015 is equal to \$140,424 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2015 (reference: Section 7522.10(d)).



# Appendix C Funded Percentages

The funded percentages on a valuation value of assets basis by rate group provided for informational purposes only are as follows:

	Funded Percentage		
	December 31, 2014 Valuation	December 31, 2013 Valuation	
General Members			
Rate Group #1 – Plans A, B and U (non-OCTA, non-OCSD)	78.07%	74.42%	
Rate Group #2 – Plans I, J, O, P, S, T and U	68.17%	64.05%	
Rate Group #3 – Plans B, G, H and U (Law Library, OCSD)	90.01%	63.44%	
Rate Group #5 – Plans A, B and U (OCTA)	74.03%	71.06%	
Rate Group #9 – Plans M, N and U (TCA)	69.65%	66.09%	
Rate Group #10 – Plans I, J, M, N and U (OCFA)	65.99%	59.89%	
Rate Group #11 – Plans M and N, future service, and U (Cemetery)	100.94%	76.53%	
Safety Members			
Rate Group #6 – Plans E, F and V (Probation)	67.21%	68.71%	
Rate Group #7 – Plans E, F, Q, R and V (Law Enforcement)	68.26%	68.08%	
Rate Group #8 – Plans E, F, Q, R and V (Fire Authority)	72.25%	69.95%	



#### Appendix D

#### **Reconciliation of Employer Contribution Rates (by Rate Group)**

The reconciliation of the employer contribution rates for the General rate groups are as follows:

	Rate Group						
	#1	#2	#3	#5	<b>#9</b>	#10	#11
Recommended Contribution Rate as of							
December 31, 2013 (before UAAL credit)	21.03%	36.72%	34.33%	27.03%	25.95%	36.92%	22.10%
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions	0.00%	0.00%	<u>-13.74%</u>	0.00%	0.00%	<u>0.00%</u>	<u>-9.87%</u>
Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	21.03%	36.72%	20.59%	27.03%	25.95%	36.92%	12.23%
Effect of investment gain	-0.03%	-0.04%	-0.04%	-0.03%	-0.02%	-0.03%	N/A <sup>(1)</sup>
Effect of additional UAAL contributions	0.00%	0.00%	0.00%	0.00%	0.00%	-1.17%	N/A <sup>(1)</sup>
Effect of actual contributions (more)/less than expected	0.12%	0.38%	0.65%	0.29%	0.45%	0.20%	N/A <sup>(1)</sup>
Effect of COLA increases less than expected	-0.39%	-0.58%	-0.50%	-0.48%	-0.29%	-0.41%	N/A <sup>(1)</sup>
Effect of actual individual salary increases more/(less) than expected	-0.12%	-0.56%	0.13%	0.17%	-0.12%	-0.41%	N/A <sup>(1)</sup>
Effect of growth in total payroll (more)/less than expected	-0.12%	0.16%	-0.09%	0.19%	1.05%	-0.41%	N/A <sup>(1)</sup>
Effect of changes in actuarial assumptions	-1.01%	-1.68%	-1.82%	-2.06%	-1.47%	-1.40%	-0.01%
Effect of including terminal pay assumptions in legacy plan member rates	-0.10%	-0.16%	-0.15%	-0.13%	-0.13%	-0.16%	-0.16%
Effect of other experience (gain)/loss <sup>(2)</sup>	<u>-0.63%</u> <sup>(3)</sup>	0.07%	<u>-0.27%</u>	0.20%	0.30%	0.14%	<u>-0.27%</u>
Subtotal	-2.99%	-2.41%	-2.09%	-1.85%	-0.23%	-3.65%	-0.44%
Recommended Contribution Rate as of December 31, 2014	18.04%	34.31%	18.50%	25.18%	25.72%	33.27%	11.79%

(1) N/A because RG #11 has become overfunded and under CalPEPRA, the employer's contribution rate cannot be less than the Normal Cost unless the funded ratio is over 120% and other conditions in CalPEPRA are met. If that restriction did not apply, the UAAL rate would have been -0.31% if the overfunded amount is amortized over 30 years.

<sup>(2)</sup> Net of an adjustment to reflect 18-month delay between date of valuation and date of rate implementation for all actuarial experience.

(3) Effect of other experience (gain)/loss includes a rate reduction of -0.28% due to the recognition of \$2.8 million in estimated withdrawal liability as of December 31, 2014 that would be paid by Vector Control.



# Appendix D (Continued) Reconciliation of Employer Contribution Rates (by Rate Group)

The reconciliation of the employer contribution rates for the Safety rate groups are as follows:

	Rate Group		
	#6	#7	#8
Recommended Contribution Rate as of			
December 31, 2013 (before UAAL credit)	40.70%	56.23%	49.53%
Adjustment to contribution rates for 2015-2016 for additional UAAL contributions	0.00%	0.00%	<u>0.00%</u>
Recommended Contribution Rate as of December 31, 2013 (after UAAL credit)	40.70%	56.23%	49.53%
Effect of investment gain	-0.04%	-0.06%	-0.05%
Effect of additional UAAL contributions	0.00%	0.00%	-1.19%
Effect of actual contributions (more)/less than expected	0.38%	0.55%	0.43%
Effect of COLA increases less than expected	-0.54%	-1.17%	-0.88%
Effect of actual individual salary increases more/(less) than expected	-0.58%	-1.10%	-0.60%
Effect of growth in total payroll (more)/less than expected	0.70%	1.55%	-0.10%
Effect of changes in actuarial assumptions	6.51%	6.40%	4.26%
Effect of including terminal pay assumptions in legacy plan member rates	-0.22%	-0.35%	-0.13%
Effect of other experience (gain)/loss <sup>(1)</sup>	0.25%	$0.61\%^{(2)}$	<u>-0.38%</u>
Subtotal	6.46%	6.43%	1.36%
Recommended Contribution Rate as of December 31, 2014	47.16%	62.66%	50.89%

<sup>(1)</sup> Net of an adjustment to reflect 18-month delay between date of valuation and date of rate implementation for all actuarial experience.

<sup>(2)</sup> Effect of other experience (gain)/loss includes a rate increase of 0.83% due to a loss from retirement.



# Appendix E Reconciliation of UAAL (by Rate Group)

The reconciliation of UAAL for the General rate groups are as follows:

	Rate Group (\$000s)						
	#1	#2	#3	#5	<b>#9</b>	#10	#11
1. UAAL as of December 31, 2013	\$107,421	\$3,264,765	\$197,831	\$219,042	\$11,222	\$70,091	\$1,721
2. Total normal cost at middle of year	12,547	248,658	15,838	21,862	1,609	5,534	269
3. Expected employer and member contributions	-20,054	-476,814	-29,664	-37,170	-2,395	-10,432	-391
4. Interest	7,543	<u>229,245</u>	<u>13,892</u>	<u>15,382</u>	<u>790</u>	4,921	<u>123</u>
5. Expected UAAL as of December 31, 2014	\$107,457	\$3,265,854	\$197,897	\$219,116	\$11,226	\$70,114	\$1,722
6. Actuarial (gain)/loss and other changes:							
(a) Gain on investment return	-\$274	-\$5,265	-\$420	-\$485	-\$21	-\$100	-\$7
(b) Gain from additional UAAL contributions	0	0	-126,350	0	0	-3,746	-1,723
(c) (Gain)/loss from actual contributions less than expected	1,241	54,161	2,335	4,320	399	648	101
(d) (Gain)/loss on lower than expected salary increases	-1,235	-80,190	1,274	2,585	-104	-1,315	62
(e) Gain on lower than expected COLA increases	-4,172	-82,827	-4,775	-7,116	-253	-1,313	-45
(f) Other experience (gain)/loss	-128	36,120 <sup>(1)</sup>	-759	5,218	475	2,071	14
(g) Changes in actuarial assumptions	-10,895	-246,714	<u>-13,379</u>	-19,944	-1,032	-4,489	<u>-197</u>
Total Changes	-\$15,463	-\$324,715	-\$142,074	-\$15,422	-\$536	-\$8,244	-\$1,795
7. UAAL as of December 31, 2014	<u>\$91,994</u>	<u>\$2,941,139</u>	<u>\$55,823</u>	<u>\$203,694</u>	<u>\$10,690</u>	<u>\$61,870</u>	<u>-\$73</u>

<sup>(1)</sup> Effect of other experience (gain)/loss includes:

Rate Group #2 Primarily due to retirement loss offset by other gains

# Appendix E (Continued) Reconciliation of UAAL (by Rate Group)

The reconciliation of UAAL for the Safety rate groups are as follows:

	Rate Group (\$000s)		
	#6	#7	#8
1. UAAL as of December 31, 2013	\$178,873	\$937,181	\$379,770
2. Total normal cost at middle of year	22,871	80,037	44,996
3. Expected employer and member contributions	-35,373	-145,533	-71,535
4. Interest	<u>12,561</u>	<u>65,809</u>	26,665
5. Expected UAAL as of December 31, 2014	\$178,932	\$937,494	\$379,896
6. Actuarial (gain)/loss and other changes:			
(a) Gain on investment return	-\$364	-\$1,806	-\$828
(b) Gain from additional UAAL contributions	0	0	-19,666
(c) (Gain)/loss from actual contributions less than expected	3,439	15,660	7,103
(d) (Gain)/loss on lower than expected salary increases	-5,272	-31,687	-9,864
(e) Gain on lower than expected COLA increases	-4,936	-33,462	-14,585
(f) Other experience (gain)/loss	4,537	16,566 <sup>(1)</sup>	2,440
(g) Changes in actuarial assumptions	36,260	102,262	<u>35,957</u>
Total Changes	\$33,664	\$67,533	\$557
7. UAAL as of December 31, 2014	<u>\$212,596</u>	<u>\$1,005,027</u>	<u>\$380,453</u>

<sup>(1)</sup> Effect of other experience (gain)/loss includes:

Rate Group #7 Retirement loss \$23,951



#### Appendix F

### Reconciliation of Impact of Assumption Changes on Employer Contribution Rates (by Rate Group)

The reconciliation of the impact of assumption changes on employer contribution rates for the General rate groups are as follows:

				Rate Group			
	#1	#2	#3	#5	<b>#9</b>	#10	#11
Effect of changes in mortality rates <sup>(1)</sup>	-0.84%	-1.17%	-0.96%	-0.74%	-0.75%	-1.00%	-0.09%
Effect of changes in merit and promotional salary increases <sup>(2)</sup>	-0.41%	-0.58%	-0.46%	-0.39%	-0.22%	-0.51%	-0.09%
Effect of changes in retirement rates <sup>(3)</sup>	-0.12%	-0.35%	-0.30%	-0.15%	-0.43%	-0.30%	-0.04%
Effect of changes in termination rates <sup>(4)</sup>	0.94%	1.07%	0.90%	0.01%	0.56%	1.00%	0.57%
Effect of 18-month delay	-0.14%	-0.18%	-0.18%	-0.20%	-0.15%	-0.15%	0.00%
Effect of new lower inflation component of individual salary increases <sup>(5)</sup>	-0.55%	-0.74%	-0.63%	-0.52%	-0.44%	-0.65%	-0.30%
Effect of amortization of established UAAL bases using new							
lower payroll growth rate <sup>(5)</sup>	0.19%	0.45%	0.11%	0.30%	0.26%	0.41%	0.00%
Effect of other changes in actuarial assumptions <sup>(6)</sup>	<u>-0.08%</u>	<u>-0.18%</u>	<u>-0.30%</u>	<u>-0.37%</u>	<u>-0.30%</u>	<u>-0.20%</u>	<u>-0.06%</u>
Total	-1.01%	-1.68%	-1.82%	-2.06%	-1.47%	-1.40%	-0.01%
Liability Volatility Index (AAL/Payroll)	5.6	9.3	8.5	7.6	5.7	8.2	6.0

<sup>(1)</sup> Includes pre-retirement mortality, healthy post-retirement mortality and disabled post-retirement mortality.

<sup>(2)</sup> Includes salary increase assumption for deferred vested members with reciprocity.

<sup>(3)</sup> Includes deferred vested retirement age.

<sup>(4)</sup> Includes percent assumed to elect a refund and percent assumed to be reciprocal.

<sup>(5)</sup> These two changes are the result from lowering the inflation assumption from 3.25% to 3.00%.

<sup>(6)</sup> Includes changes in disability rates, percent married at retirement and annual leave assumptions.



#### Appendix F (Continued)

Reconciliation of Impact of Assumption Changes on Employer Contribution Rates (by Rate Group)

The reconciliation of the impact of assumption changes on employer contribution rates for the Safety rate groups are as follows:

	Rate Group		
	#6	<b>#7</b>	#8
Effect of changes in mortality rates <sup>(1)</sup>	2.76%	3.33%	2.77%
Effect of changes in merit and promotional salary increases <sup>(2)</sup>	2.04%	1.82%	1.52%
Effect of changes in retirement rates	-0.71%	0.40%	-0.42%
Effect of changes in termination rates <sup>(3)</sup>	1.90%	0.20%	0.12%
Effect of 18-month delay	0.59%	0.56%	0.38%
Effect of new lower inflation component of individual salary increases <sup>(4)</sup>	-1.01%	-0.98%	-0.84%
Effect of amortization of established UAAL bases using new lower payroll growth rate <sup>(4)</sup>	0.39%	0.64%	0.42%
Effect of other changes in actuarial assumptions <sup>(5)</sup>	0.55%	<u>0.43%</u>	<u>0.31%</u>
Subtotal	6.51%	6.40%	4.26%
Liability Volatility Index (AAL/Payroll)	10.1	15.8	11.8

<sup>1</sup> Includes pre-retirement mortality, healthy post-retirement mortality and disabled post-retirement mortality as well as percent of pre-retirement deaths that are assumed to be duty related.

<sup>(2)</sup> Includes salary increase assumption for deferred vested members with reciprocity.

<sup>(3)</sup> Includes percent assumed to elect a refund.

<sup>(4)</sup> These two changes are the result from lowering the inflation assumption from 3.25% to 3.00%.

<sup>(5)</sup> Includes changes in disability rates, percent married at retirement and annual leave assumptions.



### Appendix G

### Phase-in of Increase in Contribution Rates for Safety Rate Groups

The contribution rates reflecting the phase-in for the Safety rate groups are as follows:

	Rate Group		
	#6	#7	#8
2015/2016 Employer Contribution Rate	40.70%	56.23%	49.53%
2016/2017 Employer Contribution Rate before Changes in Actuarial Assumptions	40.65%	56.26%	46.63%
2016/2017 Employer Contribution Rate after Changes in Actuarial Assumptions	47.16%	62.66%	50.89%
Phase-in of Cost Impact of All the Changes in Actuarial Assumptions			
2016/2017 Employer Contribution Rate after Change in Actuarial Assumptions (First Year of a <b>Two Year Phase-in</b> )	43.91%	59.46%	48.76%
2016/2017 Employer Contribution Rate after Change in Actuarial Assumptions (First Year of a <b>Three Year Phase-in</b> )	42.82%	58.39%	48.05%
Phase-in of Cost Impact of Only the Mortality Assumption Change			
2016/2017 Employer Contribution Rate after Change in Actuarial Assumptions (First Year of a <b>Two Year Phase-in</b> )	45.78%	61.00%	49.51%
2016/2017 Employer Contribution Rate after Change in Actuarial Assumptions (First Year of a <b>Three Year Phase-in</b> )	45.32%	60.44%	49.04%



Appendix G (Continued) Phase-in of Increase in Contribution Rates for Safety Rate Groups

A copy of our letter dated May 19, 2015 follows this page.

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100 Montgomery Street Suite 500 San Francisco, CA 94104-4308 T 415.263.8200 www.segalco.com

May 19, 2015

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

# Re: Orange County Employees Retirement System Phase-in of Increase in Employer Contribution Rate for Safety Rate Groups Due to Changes in Actuarial Assumptions Implemented in the December 31, 2014 Actuarial Valuation

Dear Steve:

We have been requested to provide information on the operation of a "phase-in" of the employer contribution rates for the Safety Rate Groups due to changes in actuarial assumptions implemented in the December 31, 2014 valuation. The assumption changes include an increase in the life expectancy for Safety members, as well as an overall increase in the merit and promotional salary increase together with other changes.

This letter provides an illustration of a phased-in contribution rate and discusses the impact of any possible phase-in on the ultimate employer contribution rate after the phase-in is over. As requested, we have provided the results under four scenarios:

- (1) phase-in over two years of the cost impact of all the changes in actuarial assumptions,
- (2) phase-in over three years of the cost impact of all the changes in actuarial assumptions,
- (3) phase-in over two years of the cost impact of only the mortality assumption change and
- (4) phase-in over three years of the cost impact of only the mortality assumption change.

#### **Impact of Phase-in on Employer Contribution Rate**

Throughout this letter, we are assuming that the phase-in would only apply to the portion of the employer contribution rate increase due to changes in actuarial assumptions and not to other changes in the employer contribution rate due to other actuarial experience that occurred in calendar year 2014. The estimated impact on the average employer contribution rate measured using the membership data reported for the December 31, 2014 valuation for each of the Safety Rate Groups for all the changes in actuarial assumptions as well as for only the mortality assumption change is shown in the following table. These are the amounts that would be phased-in over two or three-year periods depending on the scenario chosen.

### **Table One**

	Rate Group #6	Rate Group #7	Rate Group #8
	(Probation)	<u>(Law)</u>	(Fire)
All Assumptions	6.51%	6.40%	4.26%
Mortality Only	2.76%	3.33%	2.77%

To illustrate the mechanics of a phase-in, based on a hypothetical change in the average employer contribution rate of 6.00% of payroll, the three-year phase-in would work as follows:

- The portion of the employer contribution rate to be phased in would be determined one time, as part of the December 31, 2014 valuation. That total fixed amount would not be re-determined in later valuations. In this illustration that amount is 6.00% of payroll.
- The actual employer contribution rate in the December 31, 2014 valuation would only reflect <u>one-third</u> of the total impact of the assumption changes (i.e., 1/3 x 6.00% or 2.00% of payroll in this illustration). The way this would work is that the actual employer rate would defer recognition of two-thirds of the impact (i.e., 2/3 of 6.00% or 4.00%) by deducting 4.00% from the employer rate produced in the 2014 valuation.
- The employer contribution rate in the December 31, 2015 valuation would only reflect two-thirds of the total impact of the assumption changes as originally determined in the 2014 valuation ( 4.00% of payroll in this illustration). Again, the way this would work is that the actual employer rate would defer recognition of one-third of the original impact (i.e., 1/3 x 6.00% or 2.00%) by deducting 2.00% from the employer rate produced in the 2015 valuation.
- Finally, the employer contribution rate in the December 31, 2016 valuation would reflect the <u>full</u> impact of the assumption changes shown above (6.00% of payroll). None of the original impact would be deferred and there would be no deduction from the employer rate produced in the 2016 valuation.

Note that during the phase-in period, the plan is not receiving the full Unfunded Actuarial Accrued Liability (UAAL) amortization payments. That means that in the next actuarial valuation (for a two-year phase-in) or the next two actuarial valuations (for a three-year phase-in) there will be an actuarial loss that will increase the future UAAL and future UAAL contributions. Each of these contribution losses will be amortized and paid off over a period of 20 years starting with the actuarial valuation that follows the contribution losses" due to phase-ins are usually relatively small and so are not identified separately, but simply become part of "other gains and losses".

Mr. Steve Delaney May 19, 2015 Page 3

An illustrative comparison of the cumulative <u>incremental</u> contribution rates based on the hypothetical change of 6.00% both before and after applying the two-year and three-year phase-in is provided in the table below:

Table Two								
Fiscal Year	Without <u>Phase-in</u>	With Two-year <u>Phase-in</u>	With Three-year <u>Phase-in</u>					
2016/17	6.00%	3.00%	2.00%					
2017/18	6.00%	6.21%	4.29%					
2018/19 and later	6.00%	6.21%	6.41%					

For the hypothetical 6.00% rate increase, the table above shows that the rate impact for the second year of the two-year phase-in and the second or the third year of the three-year phase-in are somewhat higher than simply adding another one-half or one-third to the contribution rates for the preceding year. This is because of the contribution losses discussed earlier.

Based on the actual rate impact provided in Table One, we have provided the cumulative incremental contribution rate impact for each of the three Safety Rate Groups in Exhibit A.

As we previously discussed with the Board, phase-in of the contribution rate impact of assumption changes is a common practice here in California and has been offered by the OCERS Board during the last several years. Some systems routinely phase-in such rate changes whenever assumptions are changed while other retirement boards generally consider a phase-in only at the request of the primary plan sponsor.

There is a technical detail that we mention here only for completeness. The increase in the employer contribution rate due to these proposed assumption changes has both Normal Cost and UAAL amortization components. However, the phase-in is applied by reducing only the UAAL component of the employer contributions. This does not change the total amount of the phased-in contributions, only the allocation of the phased-in rates between Normal Cost and UAAL amortization.

As we also discussed with the Board, any changes in employee rates due to the assumption changes would not be phased-in. First, because employee contribution rates are based solely on Normal Cost and are unaffected by changes in the UAAL, the effect on employee rates is much smaller than for employer rates. Second, because the phase-in increases the UAAL which is funded only be the employer, a phase-in of the employee rates would in effect shift cost from the employees to the employers.

Mr. Steve Delaney May 19, 2015 Page 4

Please let us know if you have any questions.

Sincerely,

2

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

AW/bqb Enclosure

cc: Brenda Shott

Mang Andy

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

#### Exhibit A

#### Cumulative Incremental Contribution Rate Impact of Assumption Changes Percentage of Payroll

	Rate	Group #6 - All A	ssumptions	Rate Group #6 - Mortality Only (of the 6.51%, 2.76% is due to mortality)			
Fiscal	Without	With Two-Year	With Three-Year	Without	With Two-Year	With Three-Year	
Year	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in	
2016/17	6.51%	3.26%	2.17%	6.51%	5.13%	4.67%	
2017/18	6.51%	6.74%	4.65%	6.51%	6.61%	5.72%	
2018/19	6.51%	6.74%	6.95%	6.51%	6.61%	6.70%	
and later							

	Rate	Group #7 - All A	Rate Group #7 - Mortality Only (of the 6.40%, 3.33% is due to mortality)			
Fiscal	Without	With Two-Year	With Three-Year	Without	With Two-Year	With Three-Year
Year	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in
2016/17	6.40%	3.20%	2.13%	6.40%	4.74%	4.18%
2017/18	6.40%	6.63%	4.57%	6.40%	6.52%	5.45%
2018/19	6.40%	6.63%	6.83%	6.40%	6.52%	6.63%
and later						

				Rate Group #8 - Mortality Only				
	Rate	Group #8 - All A	ssumptions	(of the 4.2	26%, 2.77% is du	ie to mortality)		
Fiscal	Without	With Two-Year	With Three-Year	Without	With Two-Year	With Three-Year		
Year	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in	Phase-in		
2016/17	4.26%	2.13%	1.42%	4.26%	2.88%	2.41%		
2017/18	4.26%	4.41%	3.04%	4.26%	4.36%	3.47%		
2018/19	4.26%	4.41%	4.55%	4.26%	4.36%	4.45%		
and later								



#### Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 3C Consent Calendar

#### **Quarterly Change Order Report**

#### **Contact**(s) for Further Information

Lori Zeller, Assistant Chief Business Services Department	lorizeller@ocfa.org	714.573.6020
Debbie Casper, Purchasing & Materials Manager	debbiecasper@ocfa.org	714.573.6641

#### **Summary**

This agenda item is a routine quarterly report for review by the Budget and Finance Committee, prior to submittal to the Executive Committee, to summarize change orders issued within the dollar limits delegated to management.

#### **Prior Board/Committee Action(s)**

See background.

#### **Recommended Action(s)**

Review the proposed agenda item and direct staff to place the item on the agenda for the Executive Committee meeting of July 16, 2015, with the Budget and Finance Committee's recommendation that the Executive Committee receive and file the report.

# Impact to Cities/County

Not Applicable.

**Fiscal Impact** Not Applicable.

#### Background

At the February 26, 2015, Board of Director's meeting, the Board requested that a quarterly report be submitted to the Executive Committee to summarize change orders issued by management within the dollar limits delegated to Authority management Attached is the first report prepared for quarterly submittal to the Committee.

#### Attachment(s)

Quarterly Report Change Orders - March - June 2015

	Date of Change Order	Vendor	Section	Commodity or Service	Original Amount	Amount of Change	Amount after Change Order	Reason for Change Order
1	3/10/15	Morrow Meadows Corporation B01357-3 05/01/14 – 04/30/15	Property Management	Electrical maintenance & repairs <i>Bid MD1768</i>	\$30,000	\$20,000	\$50,000	Increased volume of repairs on flag pole lighting and exterior lighting, and increased volume of replacements of ballasts
2	3/12/15	Honeywell International B01328-5 03/17/14 – 03/16/15	Air Operations	Flight following and satellite phone service for (4) helicopters Sole Source	\$5,000	\$1,227	\$6,227	Increase in flight time and additional services used
3	3/20/15	PH & S Products B01191-7 04/01/14 – 03/31/15	EMS	Latex & Nitrile Gloves Bid MP1622	\$90,000	\$9,033	\$99,033	Purchase of additional gloves while bid was prepared and new contract awarded
4	4/1/15	Warren Distributing B01183-5 02/01/14 – 04/30/15	Fleet Services	Auto parts (55% discount off list)	\$10,000	\$3,500	\$13,500	Purchase of additional parts and extension of expiration date while specifications were being developed for bid process and new contract award.
5	4/1/15	Kimball Midwest B01265-4 02/01/14 – 04/30/15	Fleet Services	Auto repair parts and misc. products (volume discounts based on GSA up to 34% off list price)	\$10,000	\$16,000	\$26,000	Purchase of additional parts and extension of expiration date while specifications were being developed for bid process and new contract award.
6	4/20/15	Saddleback College B01227-5 08/01/14 – 07/31/15	EMS	EMS text books	\$10,000	\$2,226	\$12,226	Purchase of additional books due to a higher number of students.
7	5/4/15	PlanetBids B01339-4	Purchasing	Vendor and online bid management system	\$20,752	\$2,500	\$23,252	Additional cost for first year of "vendor prequalification

# Orange County Fire Authority Quarterly Report Change Orders to Blanket Orders & Purchase Orders March – June 2015

	Date of Change Order	Vendor	Section	Commodity or Service	Original Amount	Amount of Change	Amount after Change Order	Reason for Change Order
		03/19/15 - 03/18/16		software				module" (Public Works projects as required by CUPCCA)
8	5/11/15	Commercial Restaurant Service B01517 06/01/14 – 05/31/15	Property Management	Wolf range repair services at Fire stations - as needed <i>Bid MD1916</i>	\$10,000	\$3,000	\$13,000	More repairs were required during the first year than anticipated
9	5/28/15	Honeywell International B01328-6 03/17/15 – 03/16/16	Air Operations	Flight following and satellite phone service for (4) helicopters Sole Source	\$5,000	\$2,500	\$7,500	Increase in flight hours and additional services from prior year history.
10	6/23/15	Laerdal Medical Group B01056-7 02/01/15 – 01/31/16	EMS	CPR/AHA training materials and books (10% discount off list)	\$5,000	\$1,888	\$6,888	Purchase of additional training items



#### Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 3D Consent Calendar

### Grant Acceptance - Federal Emergency Management Agency Assistance to Firefighter Grant (AFG)

#### **Contact(s) for Further Information**

Sandy Cooney, Director Communications and Public Affairs	sandycooney@ocfa.org	714.573.6801
Jay Barkman, Grants Administrator Communications & Public Affairs	jaybarkman@ocfa.org	714.573.6048

#### **Summary**

This item is submitted to make adjustments to the budget and formally accept an AFG award from Federal Emergency Management Agency (FEMA).

#### **Prior Board/Committee Action**

In 2014 and 2015, the Board of Directors adopted grant priorities that included extrication gloves and firefighter protective equipment as items approved for grant application.

#### **Recommended Action(s)**

Accept the grant award and approve a FY 2015/16 budget adjustment to revenues and expenditures in the amount of \$43,022 in Fund 121.

#### **Impact to Cities/County**

Not Applicable.

#### **Fiscal Impact**

Acceptance of the grant award and approval of the budget adjustment will increase revenues and expenditures in Fund 121 by \$43,022. The match requirement of \$6,453 can be accommodated in the approved FY 2015/16 budget.

#### Background

OCFA's Equipment Committee is comprised of OCFA staff, safety and non-safety personnel, representatives from the firefighter's labor group, and chief officers who review and recommend equipment needs. This includes personal protective equipment. Over the last two years, the committee identified and gained approval to seek grants for specialized gloves for use in vehicle extrications. The gloves are intended to provide flexibility and protection in using specialized tools, where the standard structure and wildland fire gloves are not adequate.

This Assistance to Firefighters Grant award will provide \$43,022 of federal funds with a commitment for OCFA to provide a match of \$6,453. With these funds, OCFA will purchase gloves for all safety personnel.

#### Attachment(s)

FEMA Award Letter

U.S. Department of Homeland Security Washington, D.C. 20472



Mr. Jay Barkman Orange County Fire Authority P.O. Box 57115 Irvine, California 92619-7115

Re: Award No.EMW-2014-FO-05840

Dear Mr. Barkman:

Congratulations, on behalf of the Department of Homeland Security, your application for financial assistance submitted under the Fiscal Year (FY) 2014 Assistance to Firefighters Grant has been approved in the amount of \$43,022.00. As a condition of this award, you are required to contribute a cost match in the amount of \$6,453.00 of non-Federal funds, or 15 percent of the Federal contribution of \$43,022.00.

Before you request and receive any of the Federal funds awarded to you, you must establish acceptance of the award through the Assistance to Firefighters Grant Programs' e-grant system. By accepting this award, you acknowledge that the terms of the following documents are incorporated into the terms of your award:

- Summary Award Memo
- Agreement Articles (attached to this Award Letter)
- Obligating Document (attached to this Award Letter)
- FY 2014 Assistance to Firefighters Grant Funding Opportunity Announcement.

Please make sure you read, understand, and maintain a copy of these documents in your official file for this award.

**Prior to requesting Federal funds, all recipients are required to register in the System for Award Management (SAM.gov)**. As the recipient, you must register and maintain current information in SAM.gov until you submit the final financial report required under this award or receive the final payment, whichever is later. This requires that the recipient review and update the information annually after the initial registration, and more frequently for changes in your information. There is no charge to register in SAM.gov. Your registration must be completed on-line at <u>https://www.sam.gov/portal/public/SAM/</u>. It is your entity's responsibility to have a valid DUNS number at the time of registration.

In order to establish acceptance of the award and its terms, please follow these instructions:

**Step 1:** Please go to <u>https://portal.fema.gov</u> to accept or decline your award. This will take you to the Assistance to Firefighters eGrants system. Enter your User Name and Password as requested on the login screen. Your User Name and Password are the same as those used to complete the application on-line.

Once you are in the system, the Status page will be the first screen you see. On the right side of the Status screen, you will see a column entitled Action. In this column, please select the View Award Package from the drop down menu. Click Go to view your award package and indicate your acceptance or declination of award. PLEASE NOTE: your period of performance has begun. If you wish to accept your grant, you should do so immediately. When you have finished, we recommend printing your award package for your records.

**Step 2:** If you accept your award, you will see a link on the left side of the screen that says "Update 1199A" in the Action column. Click this link. This link will take you to the SF-1199A, Direct Deposit Sign-up Form. Please complete the SF-1199A on-line if you have not done so already. When you have finished, you must submit

the form electronically. Then, using the Print 1199A Button, print a copy and take it to your bank to have the bottom portion completed. Make sure your application number is on the form. After your bank has filled out their portion of the form, you must fax a copy of the form to FEMA's SF-1199 Processing Staff at 301-998-8699. You should keep the original form in your grant files. After the faxed version of your SF 1199A has been reviewed you will receive an email indicating the form is approved. Once approved you will be able to request payments online. If you have any questions or concerns regarding your 1199A, or the process to request your funds, please call (866) 274-0960.

Sincerely,

Brian E. Kamoie Assistant Administrator for Grant Programs



#### Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 4A Discussion Calendar

#### **Updated Cost Reimbursement Rates**

Contact(s) for Further Information Lori Zeller, Assistant Chief Business Services Department	lorizeller@ocfa.org	714.573.6020
Jim Ruane, Finance Manager/Auditor	jimruane@ocfa.org	714.573.6304

#### **Summary**

This agenda item is submitted to review and approve the proposed update to the Cost Reimbursement rates.

#### **Recommended Action(s)**

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of July 23, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors approve and adopt the proposed Cost Reimbursement Rate schedules effective retroactively July 1, 2015.

#### **Impact to Cities/County**

Not Applicable

#### **Fiscal Impact**

The fiscal impact of the new rates will be based on the number of incidents that occur throughout the year and will be incorporated into the mid-year budget update.

#### Background

The California Fire and Rescue Mutual Aid System Operating Plan outlines the methodologies and formulas participating agencies (including OCFA) are to use when developing cost reimbursement rates. These rates will be used when OCFA resources are ordered by various Federal (Cleveland National Park Forest Service) and State (CAL FIRE) agencies. The California Office of Emergency Services (Cal OES) requires a different method to calculate reimbursement rates for non-suppression personnel only. Both methods are designed to only reimburse OCFA for the marginal cost of providing the resources and are calculated in three separate components, the indirect (overhead) cost rate, personnel rate and equipment rate.

#### Reimbursement Rate Calculation (Other than Cal OES)

Based on the agreed-upon calculation, OCFA's proposed Indirect Cost Rate for FY 2015/16 is 13.89%, increasing from the current rate of 13.22%. This change is attributable to increased use of professional services and number of contractors providing project related and day-to-day support to the Information Technology Section. The average percentage increase in the proposed suppression Personnel Cost Reimbursement Rates is 0.02%. The full list of proposed reimbursement rates by position (including the indirect cost rate) is listed on Attachment 1A. A majority of the rate increase for each position is a result of the indirect cost rate increase of

0.67% (from 13.22% to 13.89%). Most of the equipment reimbursement rates (Attachment 2) remain unchanged from last year except for seven support vehicles and the helicopters. The support vehicle rates were changed to daily rates based on California Fire Assistance Agreement. The Bell Super Huey helicopter (acquired as federal excess property and placed in service in 1996) hourly rate decreased by 19.39%, due to an increase in average flight hours along with decreases in maintenance, insurance and depreciation cost. The Bell 412 helicopter (acquired in 2008) hourly rate decreased 5.36% as a result of an increase in average flight hours. The rates were updated to reflect an average, based on four year history.

#### Cal OES Reimbursement Rates

The Cal OES rate calculation is the same as above except for personnel. Cal OES requires that the reimbursement rate calculation blends all specialty pays (i.e. paramedic and hazmat pays) when developing the rate calculation to derive one average hourly rate for each suppression classification. For non-suppression staff, they require both regular and overtime reimbursement rates to be calculated. The Cal OES personnel reimbursement rates are listed as Attachment 1B.

#### Mutually Beneficial Hourly Rates (Handcrew and Dozer Operator)

These rates, with a methodology originally approved in 2010, are used to recover base salary costs of the handcrew and dozer operators when projects are deemed beneficial to both the requesting entity and OCFA.

#### Summary

Upon approval of the proposed rates, included as Attachment 1A, 1B and 2, OCFA Finance/Cost Recovery Section will use them for the following activity or program:

#### Activity or Program

- CAL FIRE, Cal OES, Cleveland National Forest (CNF) Fire/Incident response- Generally referred to as Assistance by Hire (ABH) Rates
- Fire/Incident Restitution (including Hazmat)
- Special Event Stand-By
- Other Miscellaneous Billing

#### Attachment(s)

- 1. Proposed Cost Reimbursement Rates Personnel
  - a. Proposed Cost Reimbursement Rates All Agencies except Cal OES
  - b. Proposed Cost Reimbursement Rates Cal OES
- 2. Proposed Cost Reimbursement Rates Equipment

#### ORANGE COUNTY FIRE AUTHORITY COST REIMBURSEMENT RATES FOR ALL BILLING AGENCIES (EXCEPT CAL OES) PERSONNEL EFFECTIVE JULY 1, 2015

	2014/15	2015/16	\$	%
CLASSIFICATION		PROPOSED RATE	-	
		TROTOSED RATE	CHANGE	CHARGE
SUPPRESSION FIRE DIVISION CHIEF	\$151.01	\$149.59	(\$1.42)	-0.94%
FIRE BATTALION CHIEF	\$90.57	\$90.04	(\$1.42)	-0.94%
FIRE CAPTAIN	\$68.46	\$69.57	\$1.11	1.63%
FIRE APPARATUS ENGINEER	\$59.93	\$60.57	\$0.63	1.05%
FIREFIGHTER	\$59.93	\$52.13	\$0.03	-0.07%
FC/PARAMEDIC	\$76.48	\$77.73	\$1.26	1.64%
FAE/PARAMEDIC	\$67.95	\$68.73	\$0.78	1.14%
FF/PARAMEDIC	\$60.18	\$60.29	\$0.78	0.18%
FC/HAZMAT	\$72.47			
FC/HAZMAT	\$72.47	\$73.64 \$64.64	\$1.18 \$0.70	1.62% 1.09%
			\$0.03	0.00%
FF/HAZMAT	\$56.17	\$56.20		
FF/HAZMAT PARAMEDIC	\$61.52	\$61.64	\$0.12	0.20%
HAND CREW (FIREFIGHTER)	\$31.14	\$35.26	\$4.12	13.23%
HAND CREW SUPERVISOR (STAFF FIRE CAPTAIN)	\$97.19	\$99.92	\$2.73	2.81%
HAND CREW SUPERVISOR (STAFF FIRE APP. ENGINEER)	\$83.93	\$85.35	\$1.42	1.69%
HAND CREW SUPERVISOR (STAFF FIREFIGHTER)	\$71.45	\$52.13	(\$19.32)	-27.04%
HEAVY FIRE EQUIPMENT OPERATOR	\$98.27	\$94.69	(\$3.58)	-3.64%
FIRE PILOT	\$87.54	\$65.99	(\$21.55)	-24.62%
LEAD FIRE PILOT NON-SUPPRESSIO	\$97.08	\$76.29	(\$20.79)	-21.42%
		054.05	¢0.40	0.700/
SR. ACCT. SUPPORT SPEC.	\$53.63	\$54.05	\$0.42	0.78%
ACCOUNTANT	\$71.44	\$70.53	(\$0.92)	-1.28%
ASST. FIRE APPARATUS TECHNICIAN	\$54.32	\$54.75	\$0.43	0.79%
ASSISTANT FIRE MARSHAL	\$90.51	\$92.48	\$1.97	2.18%
ASSISTANT IT MANAGER	\$83.03	\$83.20	\$0.17	0.21%
COMMUNICATIONS TECHNICIAN	\$58.68	\$60.42	\$1.74	2.97%
EMERGENCY TRANSPORTATION TECH.	\$22.70	\$25.61	\$2.91	12.82%
FIRE APPARATUS TECHNICIAN	\$63.05	\$61.28	(\$1.77)	-2.81%
FIRE COMM RELAT/ED SUPERVISOR	\$73.18	\$69.46	(\$3.72)	-5.09%
FIRE COMMUNICATIONS DISPATCHER	\$62.01	\$63.83	\$1.82	2.94%
FIRE COMMUNICATIONS SUPERVISOR	\$69.12	\$71.16	\$2.03	2.94%
FIRE COMM RELAT/ED SPECIALIST	\$63.64	\$59.88	(\$3.76)	-5.91%
FIRE EQUIPMENT TECHNICIAN	\$41.75	\$41.84	\$0.09	0.23%
FIRE HELICOPTER TECHNICIAN	\$73.56	\$77.22	\$3.66	4.97%
FLEET SERVICES COORDINATOR	\$72.86	\$75.01	\$2.15	2.95%
FLEET SERVICES SUPERVISOR	\$77.01	\$78.67	\$1.66	2.16%
GENERAL LABORER	\$31.63	\$32.39	\$0.75	2.38%
GIS ANALYST	\$64.32	\$72.40	\$8.07	12.55%
INFORMATION TECHNOLOGY ANALYST	\$86.09	\$88.63	\$2.54	2.95%
INFORMATION TECHNOLOGY SUPERVISOR	n/a	\$112.54	n/a	n/a
MEDICAL DIRECTOR	\$84.27	\$84.44	\$0.17	0.21%
ASST. PURCHASING AGENT	n/a	\$62.87	n/a	n/a
PURCHASING MANAGER	n/a	\$84.44	n/a	n/a
RESERVE FIREFIGHTER	\$2.01	\$2.01	\$0.00	0.06%
SERVICE CENTER LEAD	\$67.16	\$69.16	\$1.99	2.97%
SERVICE CENTER SUPERVISOR	\$81.65	\$83.44	\$1.79	2.19%
SR. ACCOUNTANT	\$63.91	\$61.39	(\$2.52)	-3.95%
SR. COMMUNICATIONS TECHNICIAN	\$66.93	\$68.90	\$1.97	2.95%
SR. FIRE APPARATUS TECHNICIAN	\$67.18	\$65.78	(\$1.40)	-2.09%
SR. FIRE COMMUNICATIONS SUPV.	\$77.00	\$79.28	\$2.28	2.97%
SR. FIRE EQUIPMENT TECHNICIAN	\$54.07	\$55.26	\$1.19	2.20%
SR. FIRE HELICOPTER TECHNICIAN	\$82.11	\$83.90	\$1.79	2.18%
SR. INFO TECHNOLOGY ANALYST	\$103.52	\$105.16	\$1.64	1.58%
WILDLAND FIRE DEFENSE PLANNER	\$78.85	\$81.19	\$2.34	2.97%

MUTUALLY BENEFICIAL RATES:							
HAND CREW (FIREFIGHTER)	\$16.55	\$18.80	\$2.25	13.60%			
HAND CREW SUPERVISOR (STAFF FIRE CAPTAIN)	\$51.65	\$53.27	\$1.62	3.14%			
HAND CREW SUPERVISOR (STAFF FIRE APP. ENGINEER)	\$44.60	\$45.50	\$0.90	2.02%			
HAND CREW SUPERVISOR (STAFF FIREFIGHTER)	\$37.97	\$27.79	(\$10.18)	-26.81%			
HEAVY FIRE EQUIPMENT OPERATOR	\$52.22	\$50.48	(\$1.74)	-3.33%			
SWAMPER	n/a	\$16.71	N/A	N/A			

#### ORANGE COUNTY FIRE AUTHORITY COST REIMBURSEMENT RATES FOR CAL OES BILLINGS ONLY PERSONNEL EFFECTIVE JULY 1, 2015

	2014/15 ADOPTED			2015/16 PROPOSED	\$	%
CLASSIFICATION	RATE (1)			RATE (1)	CHANGE	CHANGE
	PPRESSION I	POSITIONS				
FIRE DIVISION CHIEF	\$151.01			\$149.59	(\$1.42)	-0.94%
FIRE BATTALION CHIEF	\$90.57			\$90.04	(\$0.53)	-0.59%
HAND CREW (FIREFIGHTER)	\$31.14			\$35.26	\$4.12	13.23%
HAND CREW SUPERVISOR (STAFF FIRE CAPTAIN)	\$97.19			\$99.92	\$2.73	2.81%
HAND CREW SUPERVISOR (STAFF FIRE APP. ENGINEER)	\$83.93			\$85.35	\$1.42	1.69%
HAND CREW SUPERVISOR (STAFF FIREFIGHTER)	\$71.45			\$52.13	(\$19.32)	-27.04%
HEAVY FIRE EQUIPMENT OPERATOR	\$98.27			\$94.69	(\$3.58)	-3.64%
FIRE PILOT	\$87.54			\$65.99	(\$21.55)	-24.62%
LEAD FIRE PILOT	\$97.08			\$76.29	(\$20.79)	-21.42%
NON-	SUPPRESSIO	N POSITIONS				
	2014/15	2014/15	2015/16	2015/16	\$	%
		ADOPTED	PROPOSED	PROPOSED	Ŷ	70
CLASSIFICATION	ADOPTED	OVERTIME	REGULAR	OT RATE (1)	CHANGE	CHANGE
	RATE (1)	RATE	RATE (1)	- ()	CHILICOL	CHINGE
SR. ACCT. SUPPORT SPEC.	\$55.77	\$53.63	\$55.63	\$54.05	\$0.42	0.78%
ACCOUNTANT	\$72.32	\$71.44	\$70.73	\$70.53	(\$0.92)	-1.28%
ASST. FIRE APPARATUS TECHNICIAN	\$56.91	\$54.32	\$56.73	\$54.75	\$0.43	0.79%
ASSISTANT FIRE MARSHAL	\$90.03	\$90.51	\$90.84	\$92.48	\$1.97	2.18%
ASSISTANT IT MANAGER	\$130.12	\$83.03	\$131.26	\$83.20	\$0.17	0.21%
COMMUNICATIONS TECHNICIAN	\$60.46	\$58.68	\$61.46	\$60.42	\$1.74	2.97%
EMERGENCY TRANSPORTATION TECH.	\$27.04	\$22.70	\$29.56	\$25.61	\$2.91	12.82%
FIRE APPARATUS TECHNICIAN	\$65.03	\$63.05	\$62.72	\$61.28	(\$1.77)	-2.81%
FIRE COMM RELAT/ED SUPERVISOR	\$73.94	\$73.18	\$69.74	\$69.46	(\$3.72)	-5.09%
FIRE COMMUNICATIONS DISPATCHER	\$63.54	\$62.01	\$64.58	\$63.83	\$1.82	2.94%
FIRE COMMUNICATIONS SUPV.	\$70.15	\$69.12	\$71.31	\$71.16	\$2.03	2.94%
FIRE COMM RELAT/ED SPECIALIST	\$65.07	\$63.64	\$60.97	\$59.88	(\$3.76)	-5.91%
FIRE EQUIPMENT TECHNICIAN	\$45.23	\$41.75	\$44.90	\$41.84	\$0.09	0.23%
FIRE HELICOPTER TECHNICIAN	\$74.78	\$73.56	\$77.31	\$77.22	\$3.66	4.97%
FLEET SERVICES COORDINATOR	\$73.63	\$72.86	\$74.84	\$75.01	\$2.15	2.95%
FLEET SERVICES SUPERVISOR	\$77.99	\$77.01	\$78.65	\$78.67	\$1.66	2.16%
GENERAL LABORER	\$35.83	\$31.63	\$36.23	\$32.39	\$0.75	2.38%
GIS ANALYST	\$65.70	\$64.32	\$72.43	\$72.40	\$8.07	12.55%
INFORMATION TECHNOLOGY ANALYST	\$85.91	\$86.09	\$87.31	\$88.63	\$2.54	2.95%
INFORMATION TECHNOLOGY SUPERVISOR	n/a	n/a	\$109.23	\$112.54	n/a	n/a
MEDICAL DIRECTOR	\$131.84	\$84.27	\$133.00	\$84.44	\$0.17	0.21%
ASST. PURCHASING AGENT	n/a	n/a	\$63.70	\$62.87	n/a	n/a
PURCHASING MANAGER	n/a	n/a	\$133.00	\$84.44	n/a	n/a
RESERVE FIREFIGHTER	\$2.80	\$2.01	\$2.80	\$2.01	\$0.00	0.06%
SERVICE CENTER LEAD	\$68.33	\$67.16	\$69.47	\$69.16	\$1.99	2.97%
SERVICE CENTER SUPERVISOR	\$82.30	\$81.65	\$83.02	\$83.44	\$1.79	2.19%
SR. ACCOUNTANT	\$103.50	\$63.91	\$100.80	\$61.39	(\$2.52)	-3.95%
SR. COMMUNICATIONS TECHNICIAN	\$68.12	\$66.93	\$69.23	\$68.90	\$1.97	2.95%
SR. FIRE APPARATUS TECHNICIAN	\$68.86	\$67.18	\$66.83	\$65.78	(\$1.40)	-2.09%
SR. FIRE COMMUNICATIONS SUPV.	\$77.47	\$77.00	\$78.74	\$79.28	\$2.28	2.97%
SR. FIRE EQUIPMENT TECHNICIAN	\$56.68	\$54.07	\$57.19	\$55.26	\$1.19	2.20%
SR. FIRE HELICOPTER TECHNICIAN	\$82.73	\$82.11	\$83.44	\$83.90	\$1.79	2.18%
SR. INFO TECHNOLOGY ANALYST	\$102.12	\$103.52	\$102.47	\$105.16	\$1.64	1.58%
WILDLAND FIRE DEFENSE PLANNER	\$79.20	\$78.85	\$80.50	\$81.19	\$2.34	2.97%

Notes:

1 Includes OCFA Proposed Indirect Cost Rate of 13.89%. (13.22% for FY 2014/15)

2 Paramedic (\$4.35/hr), HazMat (\$2.17/hr) and HazMat Paramedic (\$5.07/hr) specialty pays are now included in the FC, FAE

and FF average rates per Cal EMA approved methodology.

#### ORANGE COUNTY FIRE AUTHORITY COST REIMBURSEMENT RATES EQUIPMENT EFFECTIVE JULY 1, 2015

	2014/15	2015/16	\$	%	
DESCRIPTION	RATE	RATE	CHANGE	CHANGE	SOURCE
TYPE 1 ENGINE	\$85.00	\$85.00	\$0.00	0.00%	FEMA
TYPE 2 ENGINE	\$70.00	\$70.00	\$0.00	0.00%	FEMA
TYPE 3 ENGINE	\$70.00	\$70.00	\$0.00	0.00%	FEMA
TRUCK/QUINT	\$85.00	\$85.00	\$0.00	0.00%	FEMA
PATROL UNIT ( Type 6/ Swift Water Rescue)	\$70.00	\$70.00	\$0.00	0.00%	FEMA
AIRPORT CRASH UNIT	\$85.00	\$85.00	\$0.00	0.00%	FEMA
CREW CARRYING VEHICLE	\$20.00	\$20.00	\$0.00	0.00%	FEMA
DOZER TRANSPORT	\$65.25	\$65.25	\$0.00	0.00%	FEMA
DOZER	\$65.00	\$65.00	\$0.00	0.00%	FEMA
DOZER TRAILER	\$12.50	\$12.50	\$0.00	0.00%	FEMA
DOZER TENDER	\$20.00	\$20.00	\$0.00	0.00%	FEMA
GRADER	\$58.00	\$58.00	\$0.00	0.00%	FEMA
LOADER	\$40.00	\$40.00	\$0.00	0.00%	FEMA
DUMP TRUCK	\$65.00	\$65.00	\$0.00	0.00%	FEMA
CHIPPER	\$21.75	\$21.75	\$0.00	0.00%	FEMA
COMPACT TRACK LOADER	\$22.00	\$22.00	\$0.00	0.00%	FEMA
MEDIC UNIT	\$4.54	\$96.00	n/a	n/a	Cal OES
MECHANIC SERVICE TRUCK	\$3.58	\$96.00	\$92.42	n/a	Cal OES
WATER TENDER	\$31.00	\$31.00	\$0.00	0.00%	FEMA
FUEL TENDER	\$31.00	\$31.00	\$0.00	0.00%	FEMA
AIR/LIGHT UTILITY	\$24.00	\$24.00	\$0.00	0.00%	FEMA
FIRE COMMAND UNIT	\$20.00	\$20.00	\$0.00	0.00%	FEMA
SPORT UTILITY VEHICLE	\$4.00	\$96.00	\$92.00	n/a	Cal OES
PICKUP (less than 3/4 ton)	\$3.58	\$96.00	\$92.42	n/a	Cal OES
SEDAN	\$1.96	\$47.00	\$45.04	n/a	Cal OES
VAN	\$4.54	\$109.00	\$104.46	n/a	Cal OES
OTHER (3/4 ton and above)	n/a	\$96.00	n/a	n/a	Cal OES
HAZMAT (Unit 4)	\$85.00	\$85.00	\$0.00	0.00%	FEMA
HAZMAT (Unit 79)	\$85.00	\$85.00	\$0.00	0.00%	FEMA
HAZMAT (Unit 204)	\$20.00	\$20.00	\$0.00	0.00%	FEMA
HELICOPTER - BELL SUPER HUEY	\$1,473.29	\$1,187.68	(\$285.61)	-19.39%	OCFA
HELICOPTER - BELL 412	\$5,090.51	\$4,817.79	(\$272.72)	-5.36%	OCFA

Notes:

1. Helicopter rates are based on 20 years useful life without the pilot and crew chief (Captain). The new rate reflects average usage for the past four years.

2. FY15/16 vehicle rates are hourly except for those from Cal OES source are daily rates



#### **Orange County Fire Authority** AGENDA STAFF REPORT

**Budget and Finance Committee Meeting** July 15, 2015

Agenda Item No. 4B **Discussion Calendar** 

### **Approval of the Updated OCFA Advanced Life Support (ALS) Paramedic** and Basic Life Support (BLS) Medical Supplies Reimbursement Rates

#### **Contact(s) for Further Information**

Lori Zeller, Assistant Chief Business Services Department	lorizeller@ocfa.org	714.573.6020
Jim Ruane, Finance Manager/Auditor	jimruane@ocfa.org	714.573.6304
Bill Lockhart, Battalion Chief Emergency Medical Services	billlockhart@ocfa.org	714.573.6071

#### **Summarv**

This agenda item is submitted for approval of the updated OCFA Advanced Life Support (ALS) paramedic and Basic Life Support (BLS) Medical Supplies Reimbursement Rates to be effective upon approval by the County Board of Supervisors of the revised ALS/BLS Rates.

#### **Recommended** Action(s)

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of July 23, 2015, with the Budget and Finance Committee's recommendation that the Board of Directors take the following actions:

- 1. Conduct a Public Hearing.
- 2. Upon approval of the proposed increase to the maximum BLS emergency 9-1-1 transportation billing rate by the Orange County Board of Supervisors, authorize staff to increase OCFA's Advanced Life Support (ALS) and Basic Life Support (BLS) Medical Supply Reimbursement Rates by the same percentage increase.

#### **Impact to Cities/County** Not Applicable

#### Background

See extended background.

#### **Fiscal Impact**

If the proposed reimbursement rate increase of 2.4% is approved, we anticipate that ALS/BLS revenue for 2015/16 will remain unchanged from 2014/15 projections due to the anticipated reduction in Medicare reimbursements, as described herein. If the proposed reimbursement rate increase is not approved, we anticipate that ALS/BLS revenue for 2015/16 will decrease by approximately \$40,000, which includes the anticipated reduction in Medicare reimbursements.

#### Attachment(s)

- 1. Lance, Soll, & Lunghard Independent Accountants' Report on Applying Agreed-Upon Procedures (Evaluation of Advanced Life Support & Medical Supply reimbursement rates)
- 2. 2014 Survey of California County ALS Rates

#### **Background:**

The County of Orange currently establishes the maximum county-wide billing rates for Advanced Life Support (ALS) and Basic Life Support (BLS) services. These rates are the maximum amounts that ambulance providers can charge patients for 9-1-1 emergency transportation services.

The 9-1-1 Emergency Ambulance Contracts include the rates at which the OCFA will be reimbursed for paramedic services and expendable medical supplies. Under the terms of the 9-1-1 Emergency Ambulance Contracts and OCFA cost recovery policy, those rates may be updated annually and are limited by the following parameters:

- Increases to the reimbursement rates are limited by the annual percentage increase in the BLS maximum emergency 9-1-1 transportation billing rate as revised annually by the County Board of Supervisors.
- The reimbursement rates cannot exceed the OCFA's actual cost of providing the services.

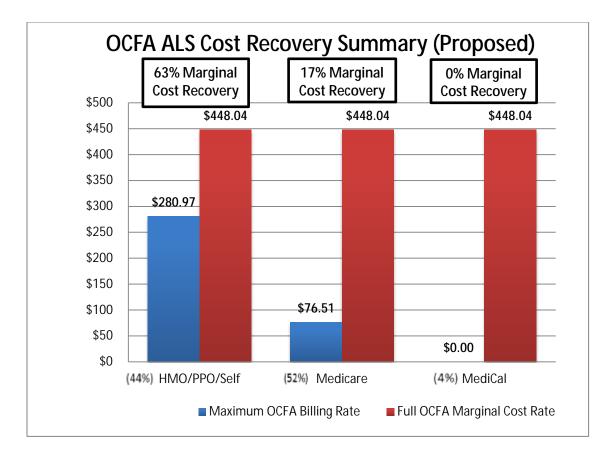
#### FY 2015/16 Reimbursement Rates Calculation

The County's 2015/16 proposed increase to the BLS and ALS maximum emergency 9-1-1 transportation billing rate is 2.4% (a combination of 1.1% from 2012/13 and 1.30% from 2013/14), which reflects the adjustments utilizing the Orange County Board of Supervisors (BOS) approved BLS/ALS rate setting policy. The BOS did not approve an increase in these two years and Orange County Emergency Medical Services (OCEMS) staff is recommending that the 2015/16 increase incorporates both of these prior years' adjustments.

The County BOS may approve an adjustment that is different than the proposed rate. This item is tentatively scheduled for consideration at the July 21, 2015, Board of Supervisors meeting. In the event the County BOS approves the rates, staff's recommendation is to approve implementation of the OCFA reimbursement rates to become effective the first day of the following month, rather than wait for the next OCFA Board of Directors meeting.

Below is a chart showing the current and proposed OCFA reimbursement rates, which can be approved by the OCFA Board of Directors, with the effective date pending subsequent approval by the County Board of Supervisors:

	ALS Paramedic Services	BLS Expendable Medical Supplies
Current OCFA Maximum Reimbursement Rates	\$274.38	\$30.65
<b>Proposed Maximum Reimbursement Rates for 2015/16</b> (per County's 2.4% calculated increase)	\$280.97	\$31.39
Change in Dollars (per County's 2.4% calculated increase)	\$6.59	\$0.74
OCFA Full Marginal Cost Recovery Rate for 2015/16 (for reference only)	\$448.04	\$34.51



#### **OCFA ALS Cost Recovery by Category of Insurance**

OCFA receives pass-through reimbursements from ambulance providers per the 9-1-1 Emergency Ambulance Contracts, depending upon the category of insurance held by the patient. These three categories are summarized in the chart above, and described below.

- HMO/PPO/Self This category represents all patients transported, with the exception of those covered by Medicare or Medi-Cal. Costs for transports in this category are billed by the ambulance provider to either the insurance company or the patient, and a portion of the amount billed is passed-through to OCFA. The amount passed-through is equivalent to the reimbursement rate approved by the OCFA Board, which is proposed to be \$280.97 for FY 2015/16. This represents reimbursement to OCFA for 63% of marginal costs for providing paramedic services.
- Medicare This category represents all patients transported who are covered under Medicare. Costs for transports in this category are billed by the ambulance provider to either Medicare or a Medicare approved provider and a portion of the amount billed is passed-through to OCFA. The maximum allowable reimbursable amount is set annually by Medicare and has been steadily declining. In 2004, the Medicare reimbursement rate for ALS treatment was \$121.76 as compared to the current rate of \$76.51. This represents reimbursement to OCFA for 17% of marginal costs for providing paramedic services. Staff anticipates a reduction in Medicare reimbursements in 2015/16 of another 1-2% based on the historical trend.

 Medi-Cal – This category represents patients that are covered by Medi-Cal (Caloptima). Costs for transports are billed by the ambulance provider to Medi-Cal (CalOptima in Orange County). The maximum reimbursement amount to ambulance providers is set annually by Medi-Cal and is approximately \$125 for both paramedic treatment and ALS transport, which is well below market value. As a result, per the OCFA contracts with the ambulance providers, OCFA does not receive any pass-through reimbursement for providing paramedic services when the patient is covered by Medi-Cal insurance and therefore, none of the marginal costs are recovered.

#### **Review of Proposed Reimbursement Rates:**

Staff has taken the following actions to validate the proposed OCFA ALS paramedic and BLS medical supplies reimbursement rates:

- **Review by an Independent Certified Public Accounting firm** The proposed reimbursement rates were developed by OCFA staff based on the FY 2015/16 proposed budget for salaries and employee benefits, services and supplies, and equipment and vehicle replacement costs. Those rate calculations were reviewed by Lance, Soll, & Lunghard (LSL), an independent firm of certified public accountants. LSL determined that the proposed rates are a reasonable representation of the OCFA's marginal costs to provide the services. Although the OCFA's actual costs exceed the amounts to be reimbursed under the proposed rates, LSL determined that those rates have been appropriately limited by the maximum 2.4% increase (1.1% increase for 2012/2013 and 1.3% for 2013/2014) to the BLS billing rate proposed by the County Healthcare Agency. A copy of LSL's report is included as Attachment 1.
- Survey of ALS Rates California Counties A 2014 survey of California County ALS Rates compared OCFA's rate to 30 counties within the State. Orange County's maximum ALS billing rate is the seventh lowest of 30 counties in California with a population in excess of 200,000. OCFA's proposed ALS incremental billing rate is consistent with the average of the four surrounding counties. Is included as Attachment 2.



• David E. Hale, CPA, CFP • Deborah A. Harper, CPA Donald G. Slater, CPA • Richard K. Kikuchi, CPA • Michael D. Mangold, CPA Susan F. Matz, CPA Brvan S. Gruber, CPA

• Gary A. Cates, CPA

• David S. Myers, CPA

#### INDEPENDENT ACCOUNTANTS' REPORT ON APPLYING AGREED-UPON PROCEDURES

Jim Ruane, Finance Manager/Auditor **Orange County Fire Authority** Irvine, California

The County of Orange ("County') establishes the maximum county-wide billing rates for Advanced Life Support ("ALS") and Basic Life Support ("BLS") services. Since 2004, the reimbursement rates have been updated annually at public hearings by the Orange County Board of Supervisors, in conjunction with the adoption of the County's maximum ALS and BLS billing rates. These rates are the maximum amounts that ambulance providers can charge patients for 911 emergency transportation services. The ambulance providers reimburse a portion of the ALS and BLS charges to the Orange County Fire Authority ("OCFA"). Each year, the OCFA calculates the ALS and BLS billing rates to be used for the forthcoming fiscal year. OCFA's paramedic and medical supplies reimbursement rates are approved by the OCFA Board of Directors at a public hearing.

We have performed the procedures enumerated below, which were agreed to by the management of the OCFA, solely to assist the OCFA in evaluating the ALS and BLS Cost Calculations (Calculations) for providing ALS and BLS services to ambulance companies. The calculations are to be used during the fiscal year ending June 30, 2016. The OCFA's management is responsible for the Calculations. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in the report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The procedures performed and the results of those procedures are as follows:

- 1. The County's Emergency Medical Services ("EMS") Division determined that the OCFA's reimbursement rates are specific to the OCFA and should not be combined with the countywide maximum billing rate. The County determined that any updates to the OCFA's paramedic and medical supplies reimbursement rates should be approved by the OCFA's Board of Directors, while the County will continue to determine the maximum emergency 911 ambulance transportation billing rates each year. The OCFA contracts with ambulance providers to establish the rates at which the OCFA will be reimbursed for paramedic services and medical supplies. Under the terms of the existing 911 Emergency Ambulance Contracts, those rates may be updated annually and are limited by the following:
  - Reimbursement rates cannot exceed the OCFA's actual cost of providing the services.
  - Reimbursement rates are limited by the annual percentage increase in the BLS maximum emergency 911 transportation billing rate as updated by the Orange County Board of Supervisors.



We obtained the ALS and BLS Cost Calculations to be used for the year ending June 30, 2016. We compared our understanding of the requirements of the calculations to the formats used by the OCFA to calculate the billing rates.

Findings: We noted no exceptions as a result of our procedures.

2. The ALS Cost Calculation (Exhibit 1) included three sections: non-vehicle costs, vehicle costs and rate comparison. We obtained a copy of the proposed budget for the year ending June 30, 2016, to support certain costs in the non-vehicle section.

Non-vehicle costs reported in the ALS Cost Calculation included amounts for salaries and employee benefits (91.22%), services and supplies (0.86%), and equipment replacement costs (7.92%). For salaries and benefits, we compared those amounts reported on the Calculation to the OCFA's proposed budget for the fiscal year ending June 30, 2015. For services and supplies, we compared the amount reported on the Calculation for EMS Section - Direct to the budget. We noted that amounts reported for equipment replacement costs were for costs associated for cardiac defibrillators/monitors and OCMEDS tablets to collect patient information.

For the non-vehicle costs section, we recalculated the \$400.10 reported under the column "Cost per ALS Assessment Transport".

Findings: We noted no exceptions as a result of our procedures.

3. The vehicle costs section of the ALS Cost Calculation included amounts for maintenance and fuel costs and replacement costs.

The maintenance and fuel costs for the fifteen (15) paramedic vans ("vans") was calculated by taking the mileage driven for the year to arrive at the total mileage. The costs were then determined by taking the total mileage and multiplying it by the IRS 2014 mileage rate of \$0.56 to arrive at the maintenance and fuel costs for these vans. We compared the annual mileage reported to a paramedic van mileage log maintained by the OCFA. We ascertained the mathematical accuracy of the \$138,715 reported as maintenance and fuel costs.

The replacement cost was determined by taking the replacement cost of the fifteen (15) vans and dividing it by the estimated useful life of four years for each vehicle. We agreed the reported replacement costs to list of vehicles to be replaced. We ascertained the mathematical accuracy of the \$453,506 reported as replacement costs.

Findings: We noted no exceptions as a result of our procedures.

4. Reimbursement rates cannot exceed the OCFA's actual cost of providing the services. We compared the anticipated cost of OCFA providing these services of \$448.04 to the proposed OCFA ALS reimbursement rate of \$280.97.

Findings: We noted no exceptions as a result of our procedures.



Jim Ruane, Finance Manager/Auditor Orange County Fire Authority Page 3

5. The County establishes the maximum county-wide billing rates that ambulance providers can charge patients for 911 emergency transportation services. We compared the proposed County maximum ALS billing rate of \$396.60 to the proposed OCFA ALS reimbursement rate of \$280.97.

**Findings:** We noted no exceptions as a result of our procedures. The calculated reimbursement rate for ALS did not appear to exceed the OCFA's actual cost of providing the service.

6. The BLS Cost Calculation (Exhibit 2) included an amount for projected 2015/2016 BLS costs and a projection for the number of transports. It also included a comparison of the projected cost per transport to the maximum BLS billing rate allowed by the County.

For 2015/2016 BLS costs reported on the BLS Cost Calculation, we compared that amount to the OCFA's proposed budget for the fiscal year ending June 30, 2016. For the number of transports reported on the BLS Cost Calculation, we compared that number to an "Estimated Transports by Pay Category" worksheet prepared by the OCFA.

Findings: We noted no exceptions as a result of our procedures.

7. BLS reimbursement rates are limited by the annual percentage increase in the BLS maximum emergency 911 transportation billing rate as updated by the Orange County Board of Supervisors. That proposed maximum percentage increase of BLS Base Rate is 2.40% per year and the overall increase is 2.40% by the County.

We verified the mathematical accuracy of the cost per transport of \$34.51. We verified that the calculation of the maximum reimbursement rate of \$31.39 was mathematically correct. We verified that the cost per transport met or exceeded the maximum reimbursement rate calculated by the OCFA.

**Findings:** We noted no exceptions as a result of our procedures. The calculated reimbursement rate for BLS did not appear to exceed the OCFA's actual cost of providing the service.

We were not engaged to, and did not; perform an audit, the objective of which would be the expression of an opinion on the specified elements, accounts, or items. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to the OCFA.

This report is intended solely for the use of the OCFA's management and should not be used by those who have not agreed to the procedures and taken responsibility for the sufficiency of the procedures for their purpose.

Lane, Soll & Lunghard, LLP

Brea, California June 16, 2015

#### Orange County Fire Authority ALS and BLS Cost Calculation For Fiscal Year 2015/16

Prepared by the OCFA

Salaries and Employee Benefits: EMS Section - Direct		FY 2015/16 Proposed Budget \$ 1,107,278	Cost ALS Asse Trans	ssment/
Paramedic Pay		7,866,760		
Support Staff		63,491		
Subtotal		9,037,529		
Services and Supplies: EMS Section - Direct		84,957		
Auditing Costs - Ambulance Providers		-		
Legal/Quality Assurance/Admin Costs				
Subtotal		84,957		
Equipment Replacement Costs (OCMEDS Tablets)		237,333 *		
Equipment Replacement Costs (Defibrillators)		547,857 *		
* annual replacement costs Subtotal - Non-Vehicle Costs		9,907,676	\$	<b>400.10</b> (1)
Vehicle Costs:				
Annual Mileage for 15 Paramedic Vans	247,706			
Average # of Miles per Vehicle	16,514 15			
Number of Operating Paramedic Vans Mileage Rate as Allowed by IRS (2014)	0.56			
Maintenance and Fuel Costs (Mileage for 15 Paramedic Vans x IRS Rate)		138,715		
Replacement - paramedic vans				
Per 5-Year CIP Budget	1,814,025			
Estimated Life per Vehicle	4 years			
Replacement Cost		453,506		
Subtotal - Vehicle Costs		592,222		<b>47.95</b> (2)
TOTAL COSTS		\$ 10,499,897		
OCFA ALS MARGINAL COSTS PER ASSESSMENT/ TRANSPORT			\$	448.04
PROPOSED OCFA ALS REIMBURSEMENT RATE			\$	<b>280.97</b> (3)
Ambulance provider administrative and contractual write-off collection costs				115.63
PROPOSED MAXIMUM ALS BILLING RATE			\$	<b>396.60</b> (4)

- (1) Represents non-vehicle costs, net of \$923,070 (D-1) of Medicare recovery, prorated for the non-vehicle costs, divided by 22,586 (E-1 p.1) applicable ALS transports (billable non-Medicare transports, mutual aid transports and transports for Buena Park, San Clemente, Santa Ana, and Westminster)
- (2) Represents vehicle costs, net of \$53,268 (D-1) of Medicare recovery, prorated for the vehicle costs, divided by 11,265 (E-1 p.1) applicable ALS transports (billable non-Medicare transports and mutual aid transports). Transports in Buena Park, San Clemente, Santa Ana, and Westminster are excluded from this calculation because paramedic van services are not provided in these cities.
- (3) The proposed updated marginal ALS paramedic reimbursement rate is limited to the percentage increase in the BLS Base Rate set by the Orange County Board of Supervisors and cannot exceed the cost of providing the services. The BLS Base Rate increase for FY 2015-16 has been proposed as 2.40%. (F-2, 1.1% from FY12-13 and 1.3% from FY13-14)
- (4) Proposed ALS Rate based on BLS increase of 2.40%

2015 - 16		
2015 Medicare ALS1 Reimbursement Rate	\$ 76.51	
Estimated # of Medicare Transports	12,065	
Estimated Medicare Recovery Revenues		923,070
Transports:		
ALS Transports - Billable, non-Medicare and		22,586
mutual aid transports, and transports for Buena Park,		
San Clemente, Santa Ana, and Westminster		
ALS Transports - Billable, non-Medicare		11,265
transports, and mutual aid transports		

#### Orange County Fire Authority Finance/Cost Accounting Paramedic Program marginal cost Medical Supplies Rates

#### Prepared by the OCFA

51/00/5//0	•	1 000 100	13/	14 rate	% increase		2013/14 LS Base Rate		2014/15 LS Base Rate	% increase	Мах	Reimb
FY 2015/16 costs	\$	1,838,169										
transports		53,271										
Per transport	\$	34.51	\$	30.65	12.58%	\$	731.41	\$	739.46	2.40%	\$	31.39
Recoverable costs Unrecoverable costs:	\$	1,147,830					ual % of in unty's Prop		e based on Rate	I	\$	9.10% 33.44
Mutual Aid Buena Park San Clemente Santa Ana Westminster		47,204 113,949 76,810 325,820 126,556			NOTE: The pro reimbursement i in the BLS Base Supervisors and services.	rate i Rate	s limited to e set by the	o the p e Ora	percentage nge County	increase Board of		
Total		1,838,168										
Potential revenue		1,147,830										
Estimated subsidy	\$	690,338										

Emergency A	LS Rate
	2014
Butte	\$2,471.00
Monterey	\$2,266.00
Santa Barbara	\$2,097.82
San Mateo	\$2,309.65
San Luis Obispo	\$2,277.37
Stanislaus	\$1,780.79
Santa Cruz	\$1,799.62
Alameda	\$1,536.12
San Francisco	\$1,847.53
Merced	\$2,000.00
Placer	\$1,546.34
Ventura	\$1,638.00
Los Angeles County	\$1,609.00
Shasta	\$1,523.74
Yolo	\$1,975.00
Contra Costa	\$1,633.04
San Joaquin	\$2,283.89
El Dorado	\$1,234.00
Marin	\$985.91
San Bernardino	\$1,937.93
Sonoma	\$1,715.13
Riverside	\$1,255.14
Santa Clara	\$999.75
Orange County	\$1,118.76
Sacramento	\$1,659.30
Tulare	\$1,124.25
Kern	\$1,729.33
Solana	\$1,500.00
San Diego County	\$1,925.54
Fresno	\$911.57

2014 ALS Rate Comparison by County Emergency Rate

ALS & ALS Increment Rate Comparison With Nearby Counties					
Proposed Orange County (OCFA)	\$1,145.61	(OCFA) \$396.65			
San Diego County	\$1,925.54	\$1,019.82			
Los Angeles County	\$1,609.00	\$565.25			
Riverside	\$1,255.14	\$377.34			
San Bernardino	\$1,937.93	\$1,003.08			
Average	\$1,681.90	\$741.37			
OCFA Compared to 4 Surrounding counties	(\$536.29)	(\$344.72)			
	-31.89%	-46.50%			

 $\ensuremath{^*}$  Counties with a population excess of 200,000



#### Orange County Fire Authority AGENDA STAFF REPORT

**Budget and Finance Committee Meeting July 15, 2015**  Agenda Item No. 4C Discussion Calendar

Community Risk Reduction Fee Study and Adoption of Associated Fee Schedules

Contact(s) for Further Information Lori Zeller, Assistant Chief Business Services Department	lorizeller@ocfa.org	714.573.6020
Lori Smith, Assistant Chief, Fire Marshal Community Risk Reduction Department	lorismith@ocfa.org	714-573-6016
Jim Ruane, Finance Manager	jimruane@ocfa.org	714.573.6304

#### **Summary**

This agenda item is submitted for approval of the proposed Community Risk Reduction and Miscellaneous Fees.

#### **Prior Board/Committee Action**

Not Applicable.

#### **Recommended** Action(s)

Review the proposed agenda item and direct staff to place the item on the agenda for the Board of Directors meeting of July 23, 2015, 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 Resolution and Exemption Policy approving changes in Community Risk Reduction and Miscellaneous fees and effective date.

#### **Impact to Cities/County**

Not Applicable.

#### **Fiscal Impact**

The proposed fee schedule (including the exemptions policy) is estimated to result in an approximate \$175,753 increase in Fiscal Year 2015/16 cost recovery from the current projection of \$6.3 million, depending upon volume of activity.

#### Attachment(s)

- 1. Resolution Approving Changes in Community Risk Reduction and Miscellaneous Fees
  - a. Proposed Exemptions and Exceptions Policy
  - b. Proposed Fee Schedule (with comparisons)
  - c. Miscellaneous Fee Schedule
- 2. Revenue & Cost Specialists' Opinion Letter
- 3. Proposed Fee Schedule Final version (for publication without comparisons)
- 4. Detailed analysis schedules from the 2015 Fee Study (On file at the Office of the Clerk of the Authority)

#### **Background**

Fee-related Community Risk Reduction (CRR) activities, which are generally completed by the OCFA staff in the Planning and Development Services Section (P&D), the Prevention Field Services (formerly Safety and Environmental Services Section) or PFS, and the Operations Department, include the following:

- Plan reviews and inspections for initial construction or improvement of facilities
- Issuance of operating and special event permits as required by the Fire Code

The OCFA's Community Risk Reduction fees were first adopted by the County effective July 1, 1991, and were subsequently updated in 1997, 2002, 2007, 2012, and 2014. As a result of direction from the OCFA Board of Directors in 1996 to pursue action to establish new cost recovery methods, staff conducted a more comprehensive study in 2002 and the Board subsequently adopted a policy of full cost recovery, with certain exceptions, for fee funded Community Risk Reduction services. The last comprehensive fee study occurred in 2014 and the changes were implemented on September 29, 2014.

#### 2015 Community Risk Reduction Fee Study

In February 2015, OCFA issued a Request for Proposals (RFP) to solicit proposals from qualified consulting firms to provide fee study consulting services. Proposals were received from three consulting firms and Revenue & Cost Specialists (RCS) was selected as our fee consultant to oversee the process for the 2015 fee study.

OCFA staff worked with RCS to conduct the fee study and identify the costs associated with the services provided. Attachment 2 is a letter from RSC summarizing the significant activities performed by RCS, confirming that the methodology utilized for the fee study was reasonable, and confirming that the proposed fees do not exceed the cost of providing services.

#### Summary of Results

Staff anticipates that the proposed changes in fees will increase cost recovery by approximately **\$175,753** annually. The estimated changes are summarized in the table below:

Cost Recovery by Section	FY 2015/16 Proposed, Based on <u>Fee Study</u>	FY 2015/16 Adopted <u>Revenue</u>	\$ Increase (Decrease)	% Increase (Decrease)
Planning & Development	\$4,384,737	\$4,036,602	\$348,135	8.62%
Prevention Field Services	<u>\$2,081,220</u>	<u>\$2,253,602</u>	<u>(\$172,382)</u>	<u>(7.64%)</u>
Total CRR Cost Recovery	<u>\$6,465,957</u>	<u>\$6,290,204</u>	<u>\$175,753</u>	<u>2.79%</u>

Planning and Development Cost Recovery Levels		% of Total
Fee Funded Activities	<u>Costs</u> \$4,502,906	<u>Costs</u> 93.39%
Less Exemptions	<u>(\$118,169)</u>	<u>(2.45%)</u>
Total Net Fee Funded Activities	\$4,384,737	90.94%
<ul> <li>Non Fee Funded Activities</li> <li>1. Two Dedicated Community Risk Reduction Positions These positions were included as part of the Service Level Agreement with the City of Irvine to enhance service levels in response to high volume of activity.</li> </ul>	<u>\$318,549</u>	<u>6.61%</u>
Total Costs	<u>\$4,821,455</u>	<u>100.00%</u>
Prevention Field Services Cost Recovery Levels	Costs	% of Total <u>Costs</u>
Fee Funded Activities	\$2,272,406	49.23%
Exemptions	(\$191,166)	<u>(4.14%)</u>
Total Net Fee Funded Activities	\$2,081,220	45.09%
Non Fee Funded Activities		
1. Malfunctioning Alarms This program is to improve community safety by requiring business and property owners to maintain their fire alarm systems and repair systems that are not functioning properly. The annual efforts include monitoring multiple false alarm incidents at any given location and working with the owner to render systems functional.	\$103,001	2.23%
2. Customer Inquiries This activity includes responding to Fire and Building Code inquiries in residential and commercial occupancies, and responding to questions concerning California Fire and Building Code requirements for businesses.	\$730,558	15.83%
3. Station Liaison The Liaison Program is designed to enhance communication and provide an environment for open and collaborative relationships between CRR and Operations by providing Operations with area-wide training and support.	\$164,800	3.57%
4. Property Public Records Act Request This program is a State mandate that requires facilitating public records requests as they pertain to property.	\$31,855	0.69%
5. Operations' Referrals This activity provides annual inspection assistance to Operations, including assisting with complex inspections and/or accepting referrals due to the complex nature of the inspection and resulting compliance.	\$288,403	6.25%
6. Collaborations/Partner with cities building industry This activity is focused on our relationships with the communities we serve. The efforts include collaborative inspections, task force assistance, project meetings, development meetings and program development.	\$370,802	8.03%

Budget and Finance Committee Meeting – July 15, 2015 Extended Background and Attachments – Agenda Item No. 4C

7. Hoarding Task Force This activity focuses on reported hoarding situations throughout the communities that we serve. The efforts are focused on working with the Orange County Hoarding Task Force, providing inspections to identify dangerous fire and life safety hazards to the tenant or property as they pertain to hoarding conditions. These cases are generally referred through our City's code enforcement or through Operations emergency calls.	\$13,735	0.30%
8. Non-Permitted Inspections This activity is the same as permitted inspection activity, except that no operational permit is required by code. These are generally selected inspections throughout our communities that have been identified as having potential for high risk fire and life safety loss.	<u>\$639,985</u>	<u>13.87%</u>
Subtotal of Non-Fee Funded Activities	<u>\$2,343,139</u>	<u>50.77%</u>
Total Costs	<u>\$4,615,545</u>	<u>100.00%</u>

#### **Planning & Development Services Fees**

172 P&D fees are included in the fee schedule (Attachment 1B), with highlights as follows:

- 1. Number of fee increases 76 with an average increase amount of \$84 or 15%
- 2. Number of fee decreases -67 with an average decrease amount of \$247 or 28%
- 3. Number of fees exempt or hourly charges -22
- 4. Number of exempt fees converted to flat fees 3
- 5. Number of new fees -4
- 6. Number of fees deleted -5

#### **Prevention Field Services Fees**

133 PFS fees related to permit issuance are included in the fee schedule, (Attachment 1B) with highlights as follows:

- 1. Number of fee increases 8 with an average increase amount of \$84 or 7%
- 2. Number of fee decreases 8 with an average decrease amount of \$29 or 8%
- 3. Number of fees unchanged 95
- 4. Number of hourly rate fees -26

#### Miscellaneous Fees

The Miscellaneous Fees Schedule (Attachment 1C) reflects the current allowable cost consistent with the Government Code. These fees are charged when staff responds to a Public Records Request that requires specialized information or reports and/or copies of existing documents.

#### Why did the fees change?

The changes to the various fees are attributable to the following:

#### Overall:

#### Indirect Cost Rate Proposal (ICRP)/Overhead Rate

The OCFA indirect cost rate or overhead rate was calculated based on Federal OMB guidelines used for grants and Assist-by-Hire claims with modifications. The updated ICRP rate is 13.89% which is a 2.01% increase from the 2014 Fee Study rate of 11.88%. The increase is primarily due to higher administrative costs to support the operations.

#### **Programs:**

#### Planning and Development Services

OCFA has seen continued growth in the building industry and the demands for Planning and Development activities are a direct reflection of the rising market. The Planning and Development workload volume increased from approximately 9,600 to 12,100. To address the increased workload, OCFA has filled or is in the process of filling some of the previously frozen positions.

Some of the positions were hired at the entry or lower classification and were promoted to the next classification level after completing one year of successful performance. As a result, the personnel costs are higher this year compared to last year.

#### Prevention Field Services

Our data collection continues to improve with this Fee Study and incorporates the Department's efforts in focusing on high risk facilities and reducing life/property loss. The non-fee funded programs are better defined than in the prior fee study and now include staff time estimates along with administrative and supervisory time allocations.

#### New Fees

Included in the proposed fee schedule are the following new fees:

- 1. Small Project CUP Single Family Residence, Commercial Remodel, New Commercial Building without on-site access Brand new fee designed to reduce the cost of the site review for small projects.
- 2. Chemical Classification 1-5 Chemicals New fee for small projects like spray booth. Previous smallest quantities were 1-15 chemicals.
- 3. Fire alarm system >30 initiating devices and/or >80 notification devices Current fee structure only allows up to 30 initiating devices. This new fee will accommodate properties requiring over 30 initiating devices.
- 4. Fire alarm system >30 initiating devices and/or >80 notification devices, INSP ONLY Same as #3 but used for "Inspection Only".

#### **Outreach Activities:**

Orange County Building Industry Association (OC BIA) and Commercial Real Estate Development Association, known as NAIOP SoCal Chapter, were given preliminary notice of the fee study project prior to March 31, 2015. Staff has provided the fee study preliminary results to both associations. Any OC BIA comments and input received will be shared verbally at the Budget and Finance Committee meeting.

#### **RESOLUTION NO. 2015-XX**

#### A RESOLUTION OF THE BOARD OF DIRECTORS OF THE ORANGE COUNTY FIRE AUTHORITY SUPERSEDING ALL PREVIOUS RESOLUTIONS AND APPROVING CHANGES IN COMMUNITY RISK REDUCTION (FORMERLY FIRE PREVENTION) AND MISCELLANEOUS FEES

*WHEREAS*, the Joint Powers Agreement establishing the Orange County Fire Authority authorizes the Authority to levy and collect fees for services; and

WHEREAS, a 2015 study has been recently completed to update the cost of each individual Community Risk Reduction service provided by the Orange County Fire Authority; and

*WHEREAS*, the Board of Directors finds that in accordance with California Government Code Section 66014, the proposed Community Risk Reduction (formerly Fire Prevention) 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; and

*NOW THEREFORE, BE IT RESOLVED* that the Board of Directors of the Orange County Fire Authority does hereby adopt the Exemption Policy and approve the fees set forth in Attachment 1A, 1B, and 1C attached hereto, effective no later than September 28, 2015.

*BE IT FURTHER RESOLVED* that said Community Risk Reduction Fees and Charges Schedules shall be adjusted July 1 of each succeeding year. The fee adjustments will be the same as the percentage adjustments in the Authority salary and employee benefits provided for in the Memoranda of Understanding for the General and Supervisory Units. The adjustments will not exceed the cost of providing these services.

PASSED, APPROVED, AND ADOPTED this 23<sup>rd</sup> day of July 2015.

ELWYN A. MURRAY, CHAIR Board of Directors

ATTEST:

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

#### Orange County Fire Authority ORANGE COUNTY FIRE AUTHORITY EXEMPTIONS AND EXCEPTIONS POLICY COMMUNITY RISK REDUCTION Effective July 23, 2015

The following activities and/or entities shall be exempt from fees charged for Community Risk Reduction services on the attached fee schedules:

- 1. Facilities owned and operated by OCFA Partner Agencies (including the County of Orange) and funded from the Partner Authority's general fund. Enterprise funded departments of Partner Agencies (such as Orange County Integrated Waste Management) are not exempt.
- 2. Day-care facilities owned and operated by public schools and unified school districts.
- 3. Official Services to include all plan checking, fire permits and inspection activities at public schools, unified school districts, community colleges and universities whose policy-making body is subject to the Brown Act. Special events funded by an entity other than the policy-making body, false alarms, and additional services not described herein are subject to fees.
- 4. Construction of unenclosed accessory structure within a wildland interface area (e.g. patio cover, fire pit, gazebo, etc.)
- 5. Automotive Compressed Natural Gas refueling stations installed within a residential structure. (added in 2008)
- 6. Fire false alarm response at single-family homes.
- 7. Projects and activities related to the Orange County Fire Authority Nonprofit Foundation.
- 8. Businesses storing propane in quantities less than or equal to 125 gallons.

The Fire Marshal may exempt any Community Risk Reduction fee when, in the opinion of the Fire Marshal, the fee is determined to be a minimal risk to the community or environment and a single issuance permit/penalty. The request must be submitted and approved in writing.

## ORANGE COUNTY FIRE AUTHORITY

PROPOSED FEE SCHEDULE PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a)	\$ Change	% Change
PR100	California Environmental Quality Act (CEQA), Environmental Impact Report (EIR), Notice of Preparation (NOP), and Advance Planning	\$400	\$417	\$17	4.13%
PR104	Small Project CUP - Single Family Residence, Commercial Remodel, New Commercial Building without on-site access	\$0	\$175	N/A	N/A
	Development Plan/Site Review	\$400	\$417	\$17	4.13%
	Map review (A map) tentative tract map/screen check	\$480	\$417	(\$64)	-13.23%
	Final map review (B Map) and/or clearance letter for print of linen	\$340	\$241	(\$99)	-29.08%
PR120	Conceptual fuel modification (inspection not included)	\$868	\$951	\$83	9.61%
	Precise fuel modification (includes vegetation clearance inspection for lumber drop, final, and HOA				
PR124	turnover inspections)	\$1,142	\$990	(\$152)	-13.29%
PR124i	Precise fuel modification – INSP ONLY	\$498	\$384	(\$114)	-22.87%
PR127i	Fuel Modification Maintenance Inspection -Customer requested or complaint initiated for Tract Development	\$774	\$848	\$74	9.61%
DD440	Infrastructure plan – multiple tracts – review of street standards, road lengths, and vehicle entry points,	¢070	¢o	(0,0,7,0)	100.000/
PR140	cul-de-sac design, etc. for multi-tract developments - Delete Fire master plan – Emergency access and fire hydrant location, fire lane markings, or vehicle gates	\$978	\$0	(\$978)	-100.00%
PR145	across emergency access drives	\$849	\$707	(\$142)	-16.71%
PR145i	Fire master plan – Emergency access and fire hydrant location, fire lane markings, or vehicle gates - INSP ONLY	\$315	\$229	(\$86)	-27.29%
DD146	Fire protection plan – an alternative to CBC Chapter 7A construction requirements for development in a	Exampt	¢667	¢cc7	100.00%
	fire hazard severity zone. Fire master plan – public school	Exempt Exempt	\$667 Exempt	\$667 N/A	100.00% N/A
FKI50	Temporary fire master plan - proposed emergency access these roads will not remain once the project is	Exempt	Exempt	IN/A	IN/A
PR155	complete.	\$845	\$435	(\$410)	-48.51%
PR155i	Temporary fire master plan - proposed emergency access these roads will not remain once the project is complete. INSP	\$265	\$194	(\$71)	-26.94%
	Residential site review for single family dwelling consisting of one or two units	\$650	\$511	(\$139)	-21.36%
	Residential site review for single family dwelling – INSP ONLY	\$116	\$106	(\$10)	-8.91%
PR170	Methane work plan - Delete	\$240	\$0	(\$240)	-100.00%
PR172	Methane findings & recommendations (Currently included with the Methane work plan)	\$280	\$460	\$180	64.41%
PR174	Methane mitigation plan	\$360	\$386	\$26	7.21%
PR176	Methane final letter (Currently included with the Methane mitigation plan) - Delete	\$220	\$0	(\$220)	-100.00%
PR180	Vehicle or pedestrian gates across emergency access roads	\$446	\$430	(\$16)	-3.48%
PR180i	Vehicle or pedestrian gates across emergency access roads- INSP ONLY	\$166	\$123	(\$42)	-25.61%
		_			
	Unenclosed accessory structure/outdoor fire place/fire pit in special fire areas. Inspection not required	Exempt	Exempt	N/A	N/A
	Speed hump review and drive test Operations pre-planning automation. Fee waived if criteria on handout are satisfied	\$719 \$684	\$979 \$727	\$260 \$44	36.14%
	Addressing Layout Developments - Commercial/Residential		ə/27 Hourly Rate	544 N/A	6.40% N/A
_	All A Occupancy > 10,000 square feet aggregate	\$1,697	\$1,914	\$217	12.78%
	All A Occupancy > 10,000 square feet aggregate INSP ONLY	\$597	\$423	(\$174)	-29.15%
	All A Occupancy $\leq$ 10,000 square feet aggregate area)	\$1,241	\$1,353	(\$114) \$112	9.01%
	All A Occupancy ≤ 10,000 square feet aggregate area) INSP ONLY	\$481	\$475	(\$5)	-1.06%
	All A ≤ 1500 square feet	\$1,084	\$1,001	(\$83)	-7.63%
	All A ≤ 1500 sq. ft. INSP ONLY	\$464	\$387	(\$77)	-16.50%
	Educational other than day care	\$918	\$1,212	\$294	31.97%
	Educational other than day care - INSP ONLY	\$298	\$423	\$124	41.70%
	Day Care E or I-4 (Portable or re-locatable < 1000 sq. ft.) aggregate	\$729	\$790	\$62	8.47%
PR216i	Day Care E or I-4 (Portable or re-locatable < 1000 sq. ft.) INSP ONLY E Day Care or I-4, E3 Daycare (see PR212 for any combination of E occupancies sharing common	\$249	\$264	\$16	6.27%
	egress)	\$1,202	\$1,089	(\$113)	-9.42%
	E Day Care or I-4 - INSP ONLY	\$282	\$299	\$18	6.27%
	B,F,M,S occupancies when required by Building Official)	\$1,030	\$1,247	\$217	21.07%
PR224i	B,F,M,S occupancies - INSP ONLY	\$381	\$458	\$77	20.14%
	F: >10,000 sq. ft. (also used for B,M,S occupancies when required by Permit Screening Form or Building Official) - Delete	\$1,593	\$0	(\$1,593)	-100.00%
	F: >10,000 sq. ft INSP ONLY - Delete	\$597	\$0	(\$597)	-100.00%
	H1, H2, H3, H4 or L Occupancy - Chemical classification fee (PR320-PR328) also required	\$1,953	\$1,909	(\$44)	-2.25%
	H1, H2, H3, H4, or L Occupancy Chemical classification fee (PR320-PR328) INSP ONLY	\$613	\$440	(\$173)	-28.19%
PR236	S1 - Motor Vehicle Repair Garages (Chem class fee included for above ground hazardous materials) S1 - Motor Vehicle Repair Garages INSP ONLY	\$1,147 \$547	\$1,028 \$370	(\$119) (\$177)	-10.40% -32.37%
PR240	S1 - Motor Venicle Repair Garages INSP ONLY S1 -Aircraft Repair Hanger (Chem class fee, (PR320-PR328) also required)	\$1,448		(\$177) N/A	-32.37% N/A
	S1 -Aircraft Repair Hanger INSP ONLY	\$348		N/A	N/A
	H5 Occupancy (Chem class fee (PR320-PR328), also required)	Hourly Rate	,	N/A	N/A
	H5 Occupancy INSP ONLY	Hourly Rate	,	N/A	N/A
	Structures with non-ambulatory or incapacitated occupants (I-1, I-2, I-2.1, R-2.1 occupancies)	Hourly Rate		N/A	N/A
111210					
	Structures with non-ambulatory or incapacitated occupants. (I-1, I-2, I-2.1, R-2.1 occupancies) INSP				
PR248i	Structures with non-ambulatory or incapacitated occupants. (I-1, I-2, I-2.1, R-2.1 occupancies) INSP		Hourly Rate \$628	N/A \$49	N/A 8.46%

(a) 2015-16 Hourly Rate increased by \$8 to \$203 per hour

# ORANGE COUNTY FIRE AUTHORITY

PROPOSED FEE SCHEDULE PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a)	\$ Change	% Change
	13: Structures with restrained occupants, 3 cells or less - INSP ONLY	\$199	\$211	\$12	6.27%
	<ul> <li>I3: Structures with restrained occupants, more than 3 cells</li> <li>I3: Structures with restrained occupants, more than 3 cells INSP ONLY</li> </ul>	\$2,603 \$663	\$2,831 \$704	\$228 \$42	8.76%
PR260	R1 or R2 Hotels, motels, apartments, condominiums with≤ 50 dwelling units per building	\$003 \$725	\$704 \$485	\$42 (\$240)	6.27% -33.13%
PR268	R1 or R2 Hotels, motels, apartments, condominiums with 51 to 150 dwelling units per building.	\$1,657	\$921	(\$736)	-44.43%
PR272	R1 or R2 Hotels, motels, apartments, condominiums with > 150 dwelling units per building.	Hourly Rate	Hourly Rate	N/A	N/A
PR276	R4 licensed residential care/ assisted living facilities and similar uses serving 7-19 clients. Facilities	¢1 109	Hourly Rate	N/A	N/A
FIX270	serving 6 or less clients, submit only to S&ES. R4 licensed residential care/ assisted living facilities and similar uses serving 7-19 clients. INSP ONLY	φ1,190	Tiouny Nate	IN/A	IN/A
PR276i PR280	D4 lineared and identical constant linear for itilizer and similar upon constants 20 alignets	\$398	\$423	\$25 N/A	6.27% N/A
PR200	R4 licensed residential care/ assisted living facilities and similar uses serving≥ 20 clients. R4 licensed residential care/ assisted living facilities and similar uses serving≥ 20 clients. INSP ONLY	\$Z,050	Hourly Rate	IN/A	IN/A
PR280i		\$696	\$740	\$44	6.27%
	Hi-Rise: Structures that are 55 ft or higher measured from lowest point of fire department access	\$5,661	\$3,304	(\$2,357)	-41.64%
PR2851	High-rise: Structures that are 55' or higher in height - INSP ONLY Above-ground storage tank, including equipment (see PR625 for temporary above-ground storage tanks)	\$1,740	\$1,849	\$109	6.27%
PR300		\$908	\$980	\$72	7.96%
PR300i	Above-ground storage tank, including equipment -INSP ONLY	\$447	\$475	\$28	6.27%
PR305	Dispensing from underground storage tank: New installation (Single fee for all tanks at a single location) (Aboveground safety/components only)	\$718	\$777	\$59	8.22%
11000	Dispensing from underground storage tank: New Installation, INSP ONLY (Aboveground	ψιιο	ψΠ	ψ03	0.2270
PR305i	safety/components only)	\$298	\$317	\$19	6.27%
PR310	Dispensing from Underground storage tank: Repair, alteration, abandonment (Aboveground safety/components only)	\$469	\$465	(\$3)	-0.67%
	Hazardous Material Process/Storage for Non - H Occupancies. Use with PR320-PR328. Also for	<b> </b>	<b> </b>	(40)	0.01 /0
PR315	outdoor LPG exchange stations; separate chemical classification review not required.	\$884	\$699	(\$185)	-20.97%
	Hazardous Material Process/Storage for Non - H Occupancies – INSP ONLY	\$464	\$370	(\$94)	-20.29%
PR318 PR320	Chemical Classification 1-5 Chemicals Chemical Classification Review. 6-15 chemicals	\$0 \$657	\$197 \$460	N/A (\$197)	N/A -29.94%
PR322	Chemical Classification Review 16-50 chemicals	\$1,019	\$592	(\$427)	-41.92%
PR324	Chemical Classification Review. 51-100 chemicals	\$1,188	\$724	(\$464)	-39.07%
PR326	Chemical Classification Review. > 100 chemicals	\$1,577	\$1,164	(\$413)	-26.18%
PR328	Chemical Classification Review. Unusual chemicals/quantities	Hourly Rate	Hourly Rate	N/A	N/A
-	High-piled storage: code/commodity compliance	\$1,244	\$1,296	\$53	4.22%
PR330i	High-piled storage - INSP ONLY	\$563	\$616	\$53	9.40%
PR335	Commercial cooking hood and duct system (per system)	\$419	\$435	\$16	3.82%
PR335i	Commercial cooking hood and duct system (per system) - INSP ONLY Refrigeration unit and system: having a refrigerant circuit containing more than 220 pounds of Group A1	\$182	\$194	\$11	6.27%
PR340	or 30 pounds of any other refrigerant	\$1,142	\$1,095	(\$46)	-4.04%
PR340i	Refrigeration unit and system – INSP ONLY	\$566	\$605	\$39	6.98%
PR345	Spray booth, spraying area: mechanically ventilated appliance provided to enclose or accommodate a spraying operation (Spraying room see H2)	\$1,018	\$752	(\$266)	-26.16%
PR345i	Spray booth, spraying area - INSP ONLY	\$398	\$423	( <del>4200)</del> \$25	6.27%
	Gas systems: medical gas, industrial gas (including piping and manifolds)				
PR350	Gas systems: medical gas, industrial gas – INSP ONLY	\$1,180 \$590	\$1,252	\$72	6.11%
PR3501 PR355	Dry Cleaning (cleaning solution) - Quantity must exceeds 330 or 660 gals)	\$580 \$718	\$616 \$777	\$36 \$59	6.27% 8.22%
PR360	Special equipment: industrial ovens, vapor recovery, dust collection	\$637	\$611	(\$26)	-4.09%
PR360i	Special equipment: industrial ovens, vapor recovery, dust collection - INSP ONLY	\$547	\$282	(\$265)	-48.47%
PR362	Photovoltaic System - Residential	\$249	\$204	(\$45)	-18.18%
PR362i	Photovoltaic System - Residential INSP ONLY	\$99	\$106	\$6	6.27%
PR363 PR363i	Photovoltaic System - Commercial (Requested by Building Official) Photovoltaic System - Commercial (Requested by Building Official) - INSP ONLY	Exempt Exempt	\$463 \$211	\$463 \$211	100.00% 100.00%
110001	Special extinguishing system: dry chemical, CO2, FM 200, foam liquid systems, inert gas (Halon, Inergen	Exempt	ΨΖΤΙ	ΨΖΙΙ	100.00 %
PR365	etc.)	\$426	\$483	\$57	13.46%
	Special extinguishing system – INSP ONLY	\$166	\$176	\$10	
PR375 PR375i	Battery Systems, stationary storage and cell sites (chemical quantities require application of CFC Art 64 Battery systems INSP ONLY	\$858 \$208	\$716 \$200	(\$142)	-16.53%
PR3751 PR380	Smoke control systems; review of rational analysis	\$398 \$1,187	\$299 \$1,564	(\$98) \$377	-24.72% 31.79%
PR382	Smoke control systems; review of rational analysis Smoke control systems: design/testing – inc. 1 submittal meeting w/customer	\$4,686	\$3,397	(\$1,289)	-27.51%
	Smoke control systems: design/testing INSP ONLY	\$1,690	\$1,479	(\$211)	-12.48%
	NFPA 13D fire sprinkler system: One or two family dwelling - custom home (single lot)	\$638	\$655	\$17	2.65%
	NFPA 13D fire sprinkler system: One or two family dwelling - custom home (single lot) - INSP ONLY NFPA 13D fire sprinkler system: One or two family dwelling - existing home (single lot)	\$239 \$560	\$335	\$96 \$55	40.08%
PR401 PR401i	NFPA 13D fire sprinkler system: One of two family dwelling - existing home (single lot) NFPA 13D fire sprinkler system: One or two family dwelling - existing home (single lot) - INSP ONLY	\$569 \$272	\$624 \$317	\$55 \$45	9.73% 16.54%
PR401	TI to NFPA 13D fire sprinkler system: $\leq 25$ heads without calculations	\$382	\$400	\$43 \$18	4.63%
PR402i	TI to NFPA 13D fire sprinkler system: ≤ 25 heads without calculations - INSP ONLY	\$222	\$247	\$24	10.91%
PR405	NFPA 13D fire sprinkler system: One or two family dwelling - within new tract developments	\$472	\$439	(\$33)	-6.95%

#### ORANGE COUNTY FIRE AUTHORITY PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a)	\$ Change	% Change
PR405i	NFPA 13D fire sprinkler system: One or two family dwelling - INSP ONLY	\$272	\$176	(\$96)	-35.26%
	NFPA 13D Multi-purpose fire sprinkler system (tract, custom or existing home) (FOR INTERNAL TRACKING PURPOSE)	\$0	\$0	\$0	0.00%
	NFPA 13D Multi-purpose fire sprinkler system (tract, custom or existing home) – INSP ONLY (FOR	\$0	\$0	\$0	0.00%
-	NFPA 13R fire sprinkler system: Multi-family dwellings 3 to 16 units per building	\$941	\$1,010	\$69	7.34%
	NFPA 13R fire sprinkler system 3 to 16 units INSP ONLY	\$388	\$440	\$52	13.47%
PR415	NFPA 13R fire sprinkler system >16 units	\$1,054	\$1,121	\$67	6.38%
PR415i	NFPA 13R fire sprinkler system >16 units INSP ONLY	\$554	\$704	\$151	27.22%
	New NFPA 13 fire sprinkler system: ≤ 100 heads with 1 riser	\$832	\$668	(\$164)	-19.69%
	New NFPA 13 fire sprinkler system: ≤ 100 heads with 1 riser – INSP ONLY	\$338	\$317	(\$21)	-6.30%
	New NFPA 13 fire sprinkler system:>100 fire sprinkler heads w/1 riser	\$1,011	\$1,037	\$26	2.57%
	New NFPA 13 fire sprinkler system: each additional riser OR per floor in buildings >3 stories INSP	\$421	\$282	(\$139)	-33.09%
	TI to NFPA 13, 13R fire sprinkler system: ≤ 25 heads without calculations	\$329	\$387	\$58	17.48%
	TI to NFPA 13, 13R fire sprinkler system: ≤ 25 heads without calculations - INSP ONLY	\$189	\$211	\$22	11.72%
	TI to NFPA 13, 13R fire sprinkler system: 26 - 99 heads without calculations	\$578	\$620	\$41	7.14%
	TI to NFPA 13, 13R fire sprinkler system: 26 - 99 heads without calculations - INSP ONLY	\$322	\$335	\$13	4.00%
	TI to NFPA 13, 13R fire sprinkler system: ≥ 100 heads OR other TIs requiring calculation review	\$841	\$874	\$33	3.95%
_	TI to NFPA 13, 13R fire sprinkler system: ≥ 100 heads OR other TIs requiring calculation review - INSP	\$388	\$458	\$70	18.01%
	Pre-action fire sprinkler system: Includes the fire alarm system when submitted together	\$801	\$638	(\$164)	-20.42%
	Pre-action fire sprinkler system: INSP ONLY	\$421	\$440	\$19	4.54%
	New or TI to NFPA 13 in-rack fire sprinkler systems	\$932	\$1,120	\$188	20.23%
	New or TI to NFPA 13 in-rack sprinkler fire sprinkler systems - INSP ONLY	\$322	\$440	\$119	36.85%
	NFPA 13 small hose stations	\$446	\$439	(\$7)	-1.47%
	NFPA 13 small hose stations – INSP ONLY	\$206	\$176	(\$30)	-14.40%
PR460	NFPA 14 Class I, II or III standpipes (includes all standpipes within a single building)	\$1,030	\$830	(\$200)	-19.42%
PR460i	NFPA 14 standpipes INSP ONLY	\$537	\$370	(\$167)	-31.15%
PR465	Fire pump installation	\$1,008	\$1,208	\$200	19.79%
PR465I	Fire pump installation - INSP ONLY	\$348	\$440	\$92	26.52%
PR470	Underground fire protection system: single hydrant OR single riser connection	\$746	\$466	(\$280)	-37.54%
	Underground fire protection system: single hydrant or riser. INSP ONLY	\$447	\$247	(\$201)	-44.90%
	Underground fire protection for each additional connections for hydrants or risers - use with PR470	\$757	\$189	(\$568)	-75.03%
	Underground fire protection system: use with PR475 - INSP ONLY	\$481	\$123	(\$357)	-74.35%
PR480	Underground repair	\$491	\$492	\$1	0.19%
PR4801	Underground repair – INSP ONLY	\$331	\$317	(\$14)	-4.35%
PR500	Fire sprinkler and Fire Alarm monitoring system up to 5 initiating devices and/or up to 20 notification	\$342	\$334	(\$8)	-2.46%
	Fire sprinkler and Fire Alarm monitoring system up to 5 initiating devices and/or up to 20 notification		•		
	devices - INSP ONLY	\$166	\$158	(\$7)	-4.35%
	Fire alarm system: 6-15 initiating devices and/or ≤ 21-40 notification devices	\$590	\$599	\$9	1.59%
	Fire alarm system: 6-15 initiating devices and/or ≤ 21-40 notification devices, INSP ONLY	\$215	\$229	\$14	6.27%
	Fire alarm system: 16-30 initiating and/or 41-80 notification devices	\$1,047	\$879	(\$168)	-16.01%
	Fire alarm system: 16-30 initiating and/or 41-80 notification devices, INSP ONLY	\$365	\$458	\$93 N/A	25.60%
PR530	Fire alarm system. >30 initiating devices and/or >80 notification devices Fire alarm system. >30 initiating devices and/or >80 notification devices, INSP ONLY	\$0 \$0	\$1,213 \$669	N/A N/A	N/A N/A
	Field review/inspection – Underground repair	\$404	\$397	(\$8)	-1.90%
	Field Plan Review / Inspection Private CNG refueling appliance within a single family residence. (no	Exempt	Exempt	(¢0) N/A	N/A
	Field Review/ Inspection - Temporary above-ground storage tanks, including equipment	\$239	\$256	\$17	7.18%
	Field review/inspection TI to NFPA 13, 13R sprinkler systems: ≤ 25 heads without calculations	\$305	\$291	(\$14)	-4.57%
	Field review/inspection TI to NFPA 13, 13R sprinkler systems: 25 heads without calculations	\$338	\$361	\$23	6.91%
	Coordination/Pre-submittal Meetings: (Initial 2 hours)	\$504	\$553	\$49	9.71%
	Written response to inquiry	\$534	\$454	(\$80)	-15.04%
	Alternate Method and Material Request	\$747	\$383	(\$364)	-48.78%
	Plan resubmittal: fee charged on 3rd and each subsequent submittal		Hourly Rate	(¢004) N/A	N/A
PR922	Plan revision	Hourly Rate	-	N/A	N/A
	Re-stamp of plans with wet stamp when submitted with approved plans	Hourly Rate	,	N/A	N/A
	Accelerated plan review (fee is in addition to base fee assessed for plan review)		50% of		
PR926	Plan Paview time and materials fee: Charged for missellaneous applications such as unusual time	Hourly Rate	Hourly Rate	N/A	N/A
PR928	Plan Review time and materials fee: Charged for miscellaneous applications such as unusual time intensive projects, research, travel time, etc.	Hourly Rate	Hourly Rate	N/A	N/A
	13D Reinspection 1-10	\$146	\$156	\$10	6.88%
	13D Reinspection 11+	\$195	\$208	\$13	6.72%
	Inspection time and materials fee: Charged for miscellaneous applications such as Time Intensive	,			
	projects, research, travel time, etc.	Hourly Rate	Hourly Rate	N/A	N/A
	Re-inspection fee: Charged when project is not completed or cannot be approved during regular				
	inspection	\$195	\$208	\$13	6.72%
	Penalty for Failure to Cancel Scheduled Inspection	50% of	50% of		
DD040		inspection	inspection	N1/A	N1/A
PR943		fee	fee	N/A	N/A

PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES Effective Date - no later than September 28, 2015

Fee		2014-15	2015-16		
Code	Service Name	Adopted	Proposed	\$ Change	% Change
Code		Fee	Fee (a)		
	Accelerated Inspection Request (fee is in addition to base fee assessed for inspection)	50% of	50% of		
PR944i		Hourly Rate	Hourly Rate	N/A	N/A

PROPOSED FEE SCHEDULE PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

		004445	0045.40		
Fee		2014-15	2015-16	<b>A</b> OI	
Code	Service Name	Adopted	Proposed	\$ Change	% Change
		Fee	Fee (a) (b)		
AA1	Aerosol – Issuance	\$225	\$225	\$0	0.00%
AA1R	Aerosol - Reissuance	\$138	\$138	\$0	0.00%
AA2	Aircraft Refueling – Issuance	\$451	\$454	\$3	0.79%
AA2R	Aircraft Refueling – Reissuance	\$295	\$295	\$0	0.00%
AA3	Aviation Facility – Issuance	Hourly Rate	Hourly Rate	N/A	N/A
AA3R	Aviation Facility – Reissuance	Hourly Rate	Hourly Rate	N/A	N/A
AA5	Waste Handling – Issuance		Hourly Rate		N/A
AA5R	Waste Handling – Reissuance		Hourly Rate		N/A
AA6	Amusement Building – Issuance		Hourly Rate		N/A
	Amusement Building – Reissuance		Hourly Rate		N/A
	Candles/Open flame – Issuance	\$156			
AC1R	Candles/Open flame – Reissuance	\$138	\$138	\$0	0.00%
	Carnival or Fair – Issuance				
AC2			Hourly Rate		N/A
AC6	Combustible Material Storage – Issuance		Hourly Rate		N/A
	Combustible Material Storage – Reissuance		Hourly Rate		N/A
	Compressed Gas – Corrosive Issuance	\$243			0.00%
AC71R	Compressed Gas – Corrosive Reissuance	\$156			0.00%
	Compressed Gas-Toxic - Issuance	\$243	\$243		0.00%
	Compressed Gas-Toxic - Reissuance	\$156	\$156		0.00%
	Compressed Gas – Flammable Gas Issuance	\$243	\$243		0.00%
	Compressed Gas – Flammable Gas Reissuance	\$156	\$156		0.00%
	Compressed Gas-Highly Toxic - Issuance	\$243			0.00%
	Compressed Gas-Highly Toxic - Reissuance	\$156			
	Compressed Gas – Inert Gas Issuance	\$190			0.00%
	Compressed Gas – Inert Gas Reissuance	\$138	\$138		0.00%
	Compressed Gas-Oxidizer - Issuance	\$243	\$243		
	Compressed Gas-Oxidizer - Reissuance	\$156	\$156		
	Compressed Gas – Pyrophoric - Issuance	\$225	\$225		
	Compressed Gas – Pyrophoric - Reissuance	\$156	\$156		0.00%
	Cryogens – Physical or Health Hazard - Issuance	\$156	\$156		0.00%
	Cryogens – Physical or Health Hazard - Reissuance	\$138	\$138		0.00%
	Cryogen – Flammable Issuance	\$225	\$225		0.00%
	Cryogen – Flammable Reissuance	\$156	\$156		0.00%
	Cryogen – Inert Issuance	\$156			
	Cryogen – Inert Reissuance	\$138	\$138		0.00%
	Cryogen – Oxidizer Issuance	\$173	\$173		0.00%
	Cryogen – Oxidizer Reissuance	\$138	\$138		0.00%
	Dry Cleaning Plants - Package Issuance	\$156	\$156		0.00%
	Dry Cleaning Plants – Package Reissuance	\$138	\$138		0.00%
AD2	Dust Producing Operations - Issuance	\$243	\$243		0.00%
	Dust Producing Operations - Reissuance	\$173	\$173		0.00%
AE1	Explosives/Blasting Agents/Fireworks/Rocketry – Issuance	Hourly Rate	Hourly Rate	N/A	N/A
	Explosives – Model Rockets (Retailers and Use)/ Small Arms Ammunition				
AE2	(Retailers) – Issuance	\$243	\$243	\$0	0.00%
	Explosives – Model Rockets (Retailers and Use)/ Small Arms Ammunition				
AE2R	(Retailers) – Reissuance	\$173	\$173		0.00%
AF1	Firework Stands	\$183	\$142	. ,	-36.28%
AF2	Outdoor Fireworks Display, such as July 4th displays	\$1,304	\$1,937	\$633	51.30%
	Outdoor Fireworks Display, such as home coming & barge display	\$536	\$543		1.50%
	Pyrotechnics/Special Effects Materials	\$921	\$865	· · ·	-6.58%
AF31	Flammable Combustible Liquids – Issuance to use or operate a pipeline	Hourly Rate	Hourly Rate	N/A	N/A

(a) 2015-16 Hourly Rate increased by \$8 to \$203 per hour

(b) Include M150 Admin Drive Time Fee

PROPOSED FEE SCHEDULE PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a) (b)	\$ Change	% Change
AF31R	Flammable Combustible Liquids - Reissuance	Hourly Rate	Hourly Rate	N/A	N/A
	Flammable Liquids – Issuance Class I liquids (5 gallons inside/10 gallons	,	,		
AF32	outside)	\$243	\$243	\$0	0.00%
	Flammable Combustible Liquids – Reissuance	\$156			0.00%
	Combustible Liquids – Issuance. To store, use or handle Class II or IIIA				
AF33	liquids in excess of 25 gallons inside or 60 gallons outside.	\$243	\$243	\$0	0.00%
	Combustible Liquids – Reissuance	\$156			
	Flammable Combustible Liquids – Issuance. To operate tank vehicles,				
AF35	equipment, tanks, plants, terminals, wells, etc.	\$243	\$243	\$0	0.00%
	Flammable Combustible Liquids – Reissuance	\$156	\$156	\$0	0.00%
	Flammable Combustible Liquids – Issuance. Tank removal or installation				
AF36	(AST/UST)	\$243	\$243	\$0	0.00%
	Flammable Combustible Liquids – Each additional tank (AST/UST)	\$173	\$173		0.00%
AF4	Fruit Ripening – Issuance	Hourly Rate	Hourly Rate	N/A	N/A
AF4R	Fruit Ripening – IReissuance		Hourly Rate		N/A
AH11	Hazardous Materials – Oxidizing Issuance	\$243	\$243	\$0	0.00%
AH110	Hazardous Materials – Water Reactive Issuance	\$156	\$156	\$0	0.00%
AH110R	Hazardous Materials – Water Reactive Reissuance	\$156	\$156	\$0	0.00%
-	Hazardous Materials – Oxidizing Reissuance	\$156	\$156	\$0	0.00%
AH12	Hazardous Materials – Corrosive Issuance	\$243	\$243	\$0	0.00%
AH12R	Hazardous Materials – Corrosive Reissuance	\$156	\$156	\$0	0.00%
AH13	Hazardous Materials – Flammable Solids Issuance	\$243	\$243	\$0	0.00%
AH13R	Hazardous Materials – Flammable Solids Reissuance	\$156	\$156	\$0	0.00%
AH14	Hazardous Materials – Highly Toxic Issuance	\$236	\$236	\$0	0.00%
AH14R	Hazardous Materials – Highly Toxic Reissuance	\$149	\$149	\$0	0.00%
AH15	Hazardous Materials – Organic Peroxide Issuance	\$236	\$236	\$0	0.00%
AH15R	Hazardous Materials – Organic Peroxide Reissuance	\$149	\$149	\$0	0.00%
AH16	Hazardous Materials – Pyrophoric Issuance	\$236	\$236	\$0	0.00%
AH16R	Hazardous Materials – Pyrophoric Reissuance	\$149	\$149	\$0	0.00%
AH18	Hazardous Materials – Toxic Issuance	\$243	\$243	\$0	0.00%
AH18R	Hazardous Materials – Toxic Reissuance	\$156	\$156	\$0	0.00%
AH19	Hazardous Materials – Unstable Reactive Issuance	\$243	\$243	\$0	0.00%
AH19R	Hazardous Materials – Unstable Reactive Reissuance	\$156	\$156	\$0	0.00%
AH3	High Piled Combustible - Issuance	\$416	\$419	\$3	0.87%
AH3R	High Piled Combustible Reissuance	\$243	\$243	\$0	0.00%
AL1	Liquefied Petroleum Gas – Issuance	\$149	\$149	\$0	0.00%
AL1R	Liquefied Petroleum Gas - Reissuance	\$138	\$138	\$0	0.00%
	Liquid- or Gas-Fueled Vehicles or Equipment in Assembly Buildings –				
AL2	Issuance/Reissuance	Hourly Rate	Hourly Rate		N/A
AL3	Lumber Yards and Woodworking Plants – Issuance	\$347	\$347	\$0	0.00%
AL3R	Lumber Yards and Woodworking Plants - Reissuance	\$243	\$243	\$0	0.00%
AM1	Magnesium Working – Issuance/Reissuance	Hourly Rate	Hourly Rate		N/A
AM3	Motor Vehicle Fuel Dispensing – Issuance	\$156	\$156	\$0	0.00%
	Motor Vehicle Fuel Dispensing – Package Issuance				
AM31		\$138			0.00%
	Motor Vehicle Fuel Dispensing – Package Reissuance	\$138			0.00%
AM3R	Motor Vehicle Fuel Dispensing - Reissuance	\$138			0.00%
AO1	Open Burning – Issuance		Hourly Rate		N/A
AO3	Industrial Ovens – Issuance	\$156	\$156	\$0	0.00%
AO3R	Industrial Ovens - Reissuance	\$138	\$138	\$0	0.00%
AP21 to	Assembly, <300 occupants - Issuance				
AP22		\$600	\$585	(\$15)	-2.83%

PROPOSED FEE SCHEDULE

PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a) (b)	\$ Change	% Change
	Assembly, <300 occupants - Reissuance				
to AP22R		\$429	\$418	(\$11)	-3.06%
AP23 to AP25	Assembly, >300 occupants - Issuance	\$925	\$900	(\$25)	-2.92%
AP23R	Assembly, >300 occupants - Reissuance				
to					
AP25R		\$514	\$501	(\$13)	-2.93%
AR2	Refrigeration Equipment – Issuance	\$347	\$347	\$0	0.00%
	Refrigeration Equipment – Reissuance	<b>#</b> 400	¢100	¢.	0.000/
AR2R	Density of Oracles Oracas Income	\$190	\$190	\$0	0.00%
AR3	Repair and Service Garage – Issuance	ФООБ	Фоол	¢o	0.009/
ARS	Repair and Service Garage < 5000 sq ft – Package Issuance	\$295	\$295	\$0	0.00%
AR31	Repair and Service Garage < 5000 sq it – Package issuance	\$277	\$277	\$0	0.00%
ARSI	Repair and Service Garage < 5000 sq ft – Package Reissuance	φ211	φ211	φU	0.00%
AR31R	Repair and Service Garage < 5000 sq it – Fackage Reissuance	\$225	\$225	\$0	0.00%
7.1.011	Repair and Service Garage – Reissuance	φ220	φ220	φυ	0.0070
AR3R	Repair and Dervice Darage Reissuance	\$225	\$225	\$0	0.00%
AS1	Spraying or Dipping Operation – Issuance	\$399	\$399		
AS1R	Spraying or Dipping Operation - Reissuance	\$138	\$138		
AT1	Tent/Membrane Structure – Issuance		Hourly Rate		N/A
AT1.1	Canopy Structure – Issuance	Hourly Rate			N/A
AT2	Storage of Scrap Tires and Tire Byproducts – Issuance		Hourly Rate		N/A
AT2R	Storage of Scrap Tires and Tire Byproducts – Reissuance	Hourly Rate			N/A
AW1	Hot Work - Issuance.	\$190	\$190		0.00%
	Welding Carts Flammable gas up to 1000 cuft and Oxidizing gas up to 1500	•	•		
AW11	cuft - Package Issuance	\$190	\$190	\$0	0.00%
	Welding Carts Flammable gas up to 1000 cuft and Oxidizing gas up to 1500				
AW11R	cuft - Package Reissuance	\$138	\$138	\$0	0.00%
	Hot Work - Reissuance.	\$138	\$138	\$0	0.00%
	Reinspection – Flat rate for any inspection after the 1st (Applies to all CRR				
J200	fees)	Hourly Rate	Hourly Rate	N/A	N/A
	Penalty \$250 – Failure to comply with 1st orders, tags or notices (Applies to				
J201	all CRR fees)	\$250	\$250	\$0	0.00%
	Penalty \$500 – Failure to comply with 2nd orders, tags or notices (Applies				
J202	to all CRR fees)	\$500	\$500	\$0	0.00%
	Penalty \$1000 – Failure to comply with 3rd or more orders, tags or notices				
J203	(Applies to all CRR fees)	\$1,000	\$1,000	\$0	0.00%
	Correctional or Detentional Facility – Large (i.e. full scale jails, prisons, and				
M100	places of detention)	\$592	\$595		
M101	Correctional or Detentional Facility – Small (i.e. holding cells)	\$279	\$279		0.00%
M102	High Rise Facility > 55 Feet	\$1,133	\$1,147		1.32%
M121	Care Facility for more than 6 ambulatory & non-ambulatory clients	\$358	\$362	\$4	1.39%
	Hospitals, Nursing homes, Mental hospitals, Detoxification and Surgery				
M123	Centers	\$957	\$897	(\$60)	-6.76%
M124	Commercial Care Facility (i.e. Child, Drug & Alchol, Juvenile, & etc.)	\$227	\$216	( )	-7.01%
M125	Pre-Inspection Residential Care Facility (i.e. Single Family Residences)	\$240	\$243	\$3	1.25%
	Miscellaneous Special Events – Events that may impact emergency				
	operations equipment or access and may only require an over the counter	<b>*</b>	<b>*</b> · -	<b>.</b> -	
M130	submittal	\$48	\$48	\$0	0.00%

Attachment 1B

# ORANGE COUNTY FIRE AUTHORITY

PROPOSED FEE SCHEDULE PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2014-15 Adopted Fee	2015-16 Proposed Fee (a) (b)	\$ Change	% Change
	Minor Special Events – Events that may impact emergency operations				
	equipment or access and have attendance or participation by less than				
M131	1500 persons.	\$174	\$174	\$0	0.00%
	Major Special Events – Events that impact emergency operations				
	equipment or access or have attendance or participation by 1500 or more				
M132	persons.	\$331	\$331	\$0	
M133	Special Event Expedite Fee for <10 days submittal	50%	50%	\$0	0.00%
M140	Fire Watch - Requested		Hourly Rate		N/A
M141	Standby – Engine Company – Board approved cost recovery rate	Hourly Rate	Hourly Rate	N/A	N/A
M150	Administrative Drive Time	\$70	+ -	÷ -	0.00%
M151	Alternate Means & Methods		Hourly Rate		N/A
M152	All other time to be charged as Time and Materials	Hourly Rate	Hourly Rate	N/A	N/A
	False Alarm				
	False Alarm - 2nd within 6 months (Penalty fees are not included with the				
0	annual S&EB increase)	\$100	\$100	\$0	0.00%
	Failure to comply with orders, tags or notices -				
	3rd false alarm within 6 months (Penalty fees are not included with the				
0	annual S&EB increase)	\$250	\$250	\$0	0.00%
	Failure to comply with orders, tags or notices -				
	4th false alarm within 6 months (Penalty fees are not included with the				
0	annual S&EB increase)	\$500	\$500	\$0	0.00%
	Failure to comply with orders, tags or notices -				
	5th and subsequent false alarm within 6 months (Penalty fees are not				
0	included with the annual S&EB increase)	\$1,000	\$1,000	\$0	0.00%

## **ORANGE COUNTY FIRE AUTHORITY** Schedule of Public Record Request Fees and Charges

#### **SERVICES**

AMOUNT

### **DUPLICATION FEES**

### **Duplication General:**

Copy Rate	
CD/DVD Disks	
Microfilm Copies	\$0.15 per page
Photographs	actual cost

### Fair Political Practices Commission (FPPC) Filings (Fees per California Government Code § 81008):

Retrieval Fee ....... Not to exceed \$5.00 for copies/reports 5+ years old or current FPPC rate

#### Report s/Maps:

After Action Reports	actual cost/posted reports available	on-line at no charge
Annual Financial Report	actual cost/current fiscal year available	on-line at no charge
Budget	actual cost/current fiscal year available	on-line at no charge
Property Related Records (Comm	unity Right to Know Reports)	\$2.50 per address
Fire Incident/Fire Investigation/Pa	aramedic Reports\$7.50 p	er address/incident
Reports prepared by Consultants.		actual cost
Geographic Information System (	GIS)/Battalion/Division Maps	actual cost@

#### Specialized Reports/Maps:

Creation of special computer-generated reports/Maps	Actual cost per hour based on
	OCFA Cost Reimbursement
	Rates, minimum one hour@ \$52.00 per hour

Requiring research of records, analysis, compilation	Actual cost per hour for the first
	hour, thereafter billed in 1/4 hour
	increments + \$0.10 per page@

911 Audio Recording	;\$25 j	per ino	cident
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#### Subscriptions(Via US Mail):

Minutes	\$35.00 per year/per body
	\$35.00 per year/per body
	\$25.00 per packet plus postage, if applicable
Note: All goenda items are available on-line	at no charge

*Note:* All agenda items are available on-line at no charge

## MISCELLANEOUS SERVICES FEES

Certification	
Delivery Service	actual cost
Email Server Search	actual cost@ \$69.00 per hour/ 2 hour minimum
Fax Transmissions	<b>50.10 per page</b> /paid prior to transmission in-lieu of duplication fee
Notary Fees (per CA Government	Code § 8211 and 8223)\$10.00 per signature or current rate
Postage	current US Postage Rates
Record Retrieval – Offsite Storage	e

## SUBPOENA FEES (per California Government Code §68096.1 & 68097.2)

### WAIVER OF FEES

The above fees may be waived at the discretion of the Section Manager concerned when it is clear that the general public and/or OCFA will benefit by providing the service at no cost.

- (a) Examples of the types of service for which the above fees may be waived are as follows:
  - (1) Requests from City Officials, Board Members, etc. for business purposes
  - (2) Requests from individuals or firms directly concerned with pending actions of the Board of Directors or Executive Committee, which require their attendance at a Public Hearing or when legal notice is required.
  - (3) Requests from other Public agencies, including law enforcement agencies and the District Attorney, in cases of cooperative exchange of information.
- (b) Decisions on questionable items shall be made by the Fire Chief or designee.

## LATE FEES

A 10% late fee may be assessed on past due accounts if payment is not received by the original due date. Late fee assessments applicable to this policy include, but are not limited to

- Ambulance
- Fire Prevention
- Special Activities
- And any other OCFA miscellaneous billings



Serving Local Governments Since 1975

June 29, 2015

Mr. Jim Ruane, Finance Manager/Auditor Orange County Fire Authority 1 Fire Authority Road Irvine, CA 92602

Jim,

Per our contract with the Orange County Fire Authority to review the Authority's fee costing process and the resulting proposed fees, I have completed the following steps:

- Reviewed the costing methodology and model.
- Reviewed the overhead calculations.
- Reviewed the time detail and resulting costs for every proposed fee service. This step in the process included meeting or talking with various staff members who were involved in the process. For those services that I had specific questions, we identified the steps involved so that I could better understand what was included in the time allocations.
- Reviewed a sample of proposed fees which have significant increases or decreases for reasonableness.

During the above review process, staff discussed how the time allocations were calculated. For Planning & Development, it involved a look backward at historical data, but also took into account the feedback from the people actually doing the work to come up with these time allocations. Even though this has resulted in more volatility this year, I feel comfortable that the resulting time allocations, cost details, and fee recommendations are reasonable reflections of what is involved in providing these services to the Authority's customers and do not exceed the costs reasonably borne as defined in Article XIIIB of the State Constitution. This is because the extra year of review has allowed for an extra year of data in the time-keeping system and more comfort with that resulting data.

For Prevention Field Services, some services had decreases in the fees that reflect lower sectional administrative costs. There were also changes in the split of the workload between Prevention Field Service staff and Operations staff. For many permits, this resulted in Prevention Field Service staff performing the initial permit, with Operations staff performing more of the renewal permits.

Internet: www.revenuecost.com

1519 E. Chapman Avenue • Suite C • Fullerton, CA 92831

Voice 714.992.9020

Fax 714.992.9021

I would like to thank staff for their help in this review.

Respectfully submitted,

Eric Johnson Vice President

PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

	Effective Date - no later than September 28, 2015	2015 40
Fee	Service Name	2015-16 Proposed
Code	Service Name	Fee (a)
	California Environmental Quality Act (CEQA), Environmental Impact Report (EIR), Notice of Preparation	
PR100	(NOP), and Advance Planning	\$417
	Small Project CUP - Single Family Residence, Commercial Remodel, New Commercial Building without	
PR104	on-site access	\$175
PR105	Development Plan/Site Review	\$417
PR110	Map review (A map) tentative tract map/screen check	\$417
PR115	Final map review (B Map) and/or clearance letter for print of linen	\$241
PR120	Conceptual fuel modification (inspection not included)	\$951
	Precise fuel modification (includes vegetation clearance inspection for lumber drop, final, and HOA	
PR124	turnover inspections)	\$990
	Precise fuel modification – INSP ONLY	\$384
	Fuel Modification Maintenance Inspection -Customer requested or complaint initiated for Tract	
PR127i	Development	\$848
	Infrastructure plan – multiple tracts – review of street standards, road lengths, and vehicle entry points,	
PR140	cul-de-sac design, etc. for multi-tract developments - Delete	\$0
	Fire master plan – Emergency access and fire hydrant location, fire lane markings, or vehicle gates	
PR145		\$707
	Fire master plan – Emergency access and fire hydrant location, fire lane markings, or vehicle gates -	
PR145i		\$229
DD4 40	Fire protection plan – an alternative to CBC Chapter 7A construction requirements for development in a	¢
	fire hazard severity zone.	\$667
PR150	Fire master plan – public school	Exemp
	Temporary fire master plan - proposed emergency access these roads will not remain once the project is	Ф 4 <b>2</b> Б
PR155	complete.	\$435
DR155i	Temporary fire master plan - proposed emergency access these roads will not remain once the project is complete. INSP	\$194
	Residential site review for single family dwelling consisting of one or two units	\$511
	Residential site review for single family dwelling – INSP ONLY	\$106
	Methane work plan - Delete	
		\$0
	Methane findings & recommendations (Currently included with the Methane work plan)	\$460
	Methane mitigation plan	\$386
	Methane final letter (Currently included with the Methane mitigation plan) - Delete	\$C
PR180	Vehicle or pedestrian gates across emergency access roads	\$430
PR180i	Vehicle or pedestrian gates across emergency access roads- INSP ONLY	\$123
		_
	Unenclosed accessory structure/outdoor fire place/fire pit in special fire areas. Inspection not required	Exempt
	Speed hump review and drive test	\$979
	Operations pre-planning automation. Fee waived if criteria on handout are satisfied	\$727
	Addressing Layout Developments - Commercial/Residential	Hourly Rate
	All A Occupancy > 10,000 square feet aggregate	\$1,914
	All A Occupancy > 10,000 square feet aggregate INSP ONLY	\$423
PR204	All A Occupancy ≤ 10,000 square feet aggregate area)	\$1,353
	All A Occupancy ≤ 10,000 square feet aggregate area) INSP ONLY	\$475
	All A ≤ 1500 square feet	\$1,001
	All A ≤ 1500 sq. ft. INSP ONLY	\$387
	Educational other than day care	\$1,212
	Educational other than day care - INSP ONLY	\$423
	Day Care E or I-4 (Portable or re-locatable < 1000 sq. ft.) aggregate	\$790
	Day Care E or I-4 (Portable or re-locatable < 1000 sq. ft.) INSP ONLY	\$264
	E Day Care or I-4, E3 Daycare (see PR212 for any combination of E occupancies sharing common	Ψ20-
PR220	egress)	\$1,089
	E Day Care or I-4 - INSP ONLY	\$299
	015-16 Hourly Rate increased by \$8 to \$203 per hour	Page 1

PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

	Effective Date - no later than September 28, 2015	
Fee		2015-16
Code	Service Name	Proposed
Code		Fee (a)
PR224	B,F,M,S occupancies when required by Building Official)	\$1,247
PR224i	B,F,M,S occupancies - INSP ONLY	\$458
	F: >10,000 sq. ft. (also used for B,M,S occupancies when required by Permit Screening Form or Building	
PR228	Official) - Delete	\$0
	F: >10,000 sq. ft INSP ONLY - Delete	\$0
	H1, H2, H3, H4 or L Occupancy - Chemical classification fee (PR320-PR328) also required	\$1,909
	H1, H2, H3, H4, or L Occupancy Chemical classification fee (PR320-PR328) INSP ONLY	\$440
	S1 - Motor Vehicle Repair Garages (Chem class fee included for above ground hazardous materials)	\$1,028
	S1 - Motor Vehicle Repair Garages INSP ONLY	\$370
	S1 -Aircraft Repair Hanger (Chem class fee, (PR320-PR328) also required)	Hourly Rate
	S1 -Aircraft Repair Hanger INSP ONLY	Hourly Rate
PR244	H5 Occupancy (Chem class fee (PR320-PR328), also required)	Hourly Rate
PR244i	H5 Occupancy INSP ONLY	Hourly Rate
PR248	Structures with non-ambulatory or incapacitated occupants (I-1, I-2, I-2.1, R-2.1 occupancies)	Hourly Rate
	Structures with non-ambulatory or incapacitated occupants. (I-1, I-2, I-2.1, R-2.1 occupancies) INSP	,
PR248i		Hourly Rate
	I3: Structures with restrained occupants, 3 cells or less	\$628
	I3: Structures with restrained occupants, 3 cells or less - INSP ONLY	\$211
PR260		\$2,831
	I3: Structures with restrained occupants, more than 3 cells INSP ONLY	
		\$704
	R1 or R2 Hotels, motels, apartments, condominiums with $\leq$ 50 dwelling units per building	\$485
PR268	R1 or R2 Hotels, motels, apartments, condominiums with 51 to 150 dwelling units per building.	\$922
PR272	R1 or R2 Hotels, motels, apartments, condominiums with > 150 dwelling units per building.	Hourly Rate
	R4 licensed residential care/ assisted living facilities and similar uses serving 7-19 clients. Facilities	
PR276	serving 6 or less clients, submit only to S&ES.	Hourly Rate
	R4 licensed residential care/ assisted living facilities and similar uses serving 7-19 clients. INSP ONLY	-
PR276i		\$423
PR280	R4 licensed residential care/ assisted living facilities and similar uses serving≥ 20 clients.	Hourly Rate
	R4 licensed residential care/ assisted living facilities and similar uses serving≥ 20 clients. INSP ONLY	,
PR280i	<b>3</b>	\$740
	Hi-Rise: Structures that are 55 ft or higher measured from lowest point of fire department access	\$3,304
	High-rise: Structures that are 55' or higher in height - INSP ONLY	\$1,849
	Above-ground storage tank, including equipment (see PR625 for temporary above-ground storage tanks)	<i> </i>
PR300		\$980
	Above-ground storage tank, including equipment -INSP ONLY	\$475
1110001	Dispensing from underground storage tank: New installation (Single fee for all tanks at a single location)	\$ in t
PR305	(Aboveground safety/components only)	\$777
111000	Dispensing from underground storage tank: New Installation, INSP ONLY (Aboveground	φ <i>ι</i> τι
PR305i	safety/components only)	\$317
110000	Dispensing from Underground storage tank: Repair, alteration, abandonment (Aboveground	ψ017
PR310	safety/components only)	\$465
110	Hazardous Material Process/Storage for Non - H Occupancies. Use with PR320-PR328. Also for	φ+00
DD215		¢600
	outdoor LPG exchange stations; separate chemical classification review not required.	\$699
	Hazardous Material Process/Storage for Non - H Occupancies – INSP ONLY	\$370
PR318	Chemical Classification 1-5 Chemicals	\$197
PR320	Chemical Classification Review. 6-15 chemicals	\$460
PR322	Chemical Classification Review 16-50 chemicals	\$592
PR324	Chemical Classification Review. 51-100 chemicals	\$724
PR326	Chemical Classification Review. > 100 chemicals	\$1,164
	Chemical Classification Review. Unusual chemicals/quantities	φ1,10-
PR328	onomical classification review. Onusual chemicals/quantities	Hourly Rate
	High pilod storage: and /commodity compliance	-
	High-piled storage: code/commodity compliance	\$1,296
	High-piled storage - INSP ONLY	\$616
(a) 20	015-16 Hourly Rate increased by \$8 to \$203 per hour	Page 2

PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

	· · · · · · · · · · · · · · · · · · ·	2015-16
Fee	Service Name	Proposed
Code		Fee (a)
PR335	Commercial cooking hood and duct system (per system)	\$435
PR335i		\$194
	Refrigeration unit and system: having a refrigerant circuit containing more than 220 pounds of Group A1	<b></b>
PR340	or 30 pounds of any other refrigerant	\$1,095
PR340i		\$605
	Spray booth, spraying area: mechanically ventilated appliance provided to enclose or accommodate a	
PR345	spraying operation (Spraying room see H2)	\$752
PR345i	Spray booth, spraying area - INSP ONLY	\$423
	Gas systems: medical gas, industrial gas (including piping and manifolds)	
PR350		\$1,252
PR350i	Gas systems: medical gas, industrial gas – INSP ONLY	\$616
PR355	Dry Cleaning (cleaning solution) - Quantity must exceeds 330 or 660 gals)	\$777
PR360	Special equipment: industrial ovens, vapor recovery, dust collection	\$611
PR360i		\$282
PR362	Photovoltaic System - Residential	\$204
PR362i		\$106
PR363		\$463
PR363i		\$211
110000	Special extinguishing system: dry chemical, CO2, FM 200, foam liquid systems, inert gas (Halon, Inergen,	ΨΖΤΙ
PR365	etc.)	\$483
	Special extinguishing system – INSP ONLY	\$176
	Battery Systems, stationary storage and cell sites (chemical quantities require application of CFC Art 64	\$716
PR375i	Battery systems INSP ONLY	\$299
	••	
PR380		\$1,564
	Smoke control systems: design/testing – inc. 1 submittal meeting w/customer Smoke control systems: design/testing INSP ONLY	\$3,397
PR382i		\$1,479 \$655
	NFPA 13D fire sprinkler system: One or two family dwelling - custom home (single lot)	\$335
	NFPA 13D fire sprinkler system: One or two family dwelling - custom home (single lot) - INSP ONLY	
	NFPA 13D fire sprinkler system: One or two family dwelling - existing home (single lot)	\$624
	NFPA 13D fire sprinkler system: One or two family dwelling - existing home (single lot) - INSP ONLY	\$317
PR402	· · · ·	\$400
	TI to NFPA 13D fire sprinkler system: ≤ 25 heads without calculations - INSP ONLY	\$247
	NFPA 13D fire sprinkler system: One or two family dwelling - within new tract developments	\$439
PR405i	NFPA 13D fire sprinkler system: One or two family dwelling - INSP ONLY	\$176
	NFPA 13D Multi-purpose fire sprinkler system (tract, custom or existing home) (FOR INTERNAL	¢o
	TRACKING PURPOSE)	\$0
	NFPA 13D Multi-purpose fire sprinkler system (tract, custom or existing home) – INSP ONLY (FOR	\$0
	NFPA 13R fire sprinkler system: Multi-family dwellings 3 to 16 units per building	\$1,010
	NFPA 13R fire sprinkler system 3 to 16 units INSP ONLY	\$440
	NFPA 13R fire sprinkler system >16 units	\$1,121
	NFPA 13R fire sprinkler system >16 units INSP ONLY	\$704
PR420	New NFPA 13 fire sprinkler system: ≤ 100 heads with 1 riser	\$668
	New NFPA 13 fire sprinkler system: ≤ 100 heads with 1 riser – INSP ONLY	\$317
	New NFPA 13 fire sprinkler system:>100 fire sprinkler heads w/1 riser	\$1,037
PR425i	New NFPA 13 fire sprinkler system: each additional riser OR per floor in buildings >3 stories INSP	\$282
PR430	TI to NFPA 13, 13R fire sprinkler system: ≤ 25 heads without calculations	\$387
PR430i	TI to NFPA 13, 13R fire sprinkler system: ≤ 25 heads without calculations - INSP ONLY	\$211
PR435	TI to NFPA 13, 13R fire sprinkler system: 26 - 99 heads without calculations	\$620
PR435I	TI to NFPA 13, 13R fire sprinkler system: 26 - 99 heads without calculations - INSP ONLY	\$335
PR440	TI to NFPA 13, 13R fire sprinkler system: ≥ 100 heads OR other TIs requiring calculation review	\$874
PR440i	TI to NFPA 13, 13R fire sprinkler system: ≥ 100 heads OR other TIs requiring calculation review - INSP	\$458

# **ORANGE COUNTY FIRE AUTHORITY**

PROPOSED FEE SCHEDULE

PLANNING AND DEVELOPMENT SERVICES

Effective Date - no later than September 28, 2015

Fee Code	Service Name	2015-16
		Proposed Fee (a)
PR445	Pre-action fire sprinkler system: Includes the fire alarm system when submitted together	Fee (a) \$638
	Pre-action fire sprinkler system: INSP ONLY	\$440
	New or TI to NFPA 13 in-rack fire sprinkler systems	\$1,120
	New of TI to NFPA 13 in-rack sprinkler fire sprinkler systems - INSP ONLY	
	NEPA 13 small hose stations	\$440
		\$439
	NFPA 13 small hose stations – INSP ONLY	\$176
	NFPA 14 Class I, II or III standpipes (includes all standpipes within a single building)	\$830
	NFPA 14 standpipes INSP ONLY	\$370
	Fire pump installation	\$1,208
	Fire pump installation - INSP ONLY	\$440
	Underground fire protection system: single hydrant OR single riser connection	\$466
	Underground fire protection system: single hydrant or riser. INSP ONLY	\$247
	Underground fire protection for each additional connections for hydrants or risers - use with PR470	\$189
PR475i l	Underground fire protection system: use with PR475 - INSP ONLY	\$123
PR480 l	Underground repair	\$492
PR4801 l	Underground repair – INSP ONLY	\$317
PR500 F	Fire sprinkler and Fire Alarm monitoring system up to 5 initiating devices and/or up to 20 notification	\$334
F	Fire sprinkler and Fire Alarm monitoring system up to 5 initiating devices and/or up to 20 notification	
PR500i c	devices – INSP ONLY	\$158
PR510 F	Fire alarm system: 6-15 initiating devices and/or $\leq$ 21-40 notification devices	\$599
PR510i F	Fire alarm system: 6-15 initiating devices and/or ≤ 21-40 notification devices, INSP ONLY	\$229
PR520 F	Fire alarm system: 16-30 initiating and/or 41-80 notification devices	\$879
PR520i F	Fire alarm system: 16-30 initiating and/or 41-80 notification devices, INSP ONLY	\$458
	Fire alarm system. >30 initiating devices and/or >80 notification devices	\$1,213
PR530i F	Fire alarm system. >30 initiating devices and/or >80 notification devices, INSP ONLY	\$669
PR610 F	Field review/inspection – Underground repair	\$397
PR615 F	Field Plan Review / Inspection Private CNG refueling appliance within a single family residence. (no	Exempt
PR625 F	Field Review/ Inspection -Temporary above-ground storage tanks, including equipment	\$256
PR630 F	Field review/inspection TI to NFPA 13, 13R sprinkler systems: ≤ 25 heads without calculations	\$291
PR635 F	Field review/inspection TI to NFPA 13, 13R sprinkler systems: 26-99 heads without calculations	\$361
PR900	Coordination/Pre-submittal Meetings: (Initial 2 hours)	\$553
PR905	Written response to inquiry	\$454
PR910 /	Alternate Method and Material Request	\$383
	Plan resubmittal: fee charged on 3rd and each subsequent submittal	Hourly Rate
	Plan revision	Hourly Rate
	Re-stamp of plans with wet stamp when submitted with approved plans	Hourly Rate
	Accelerated plan review (fee is in addition to base fee assessed for plan review)	50% of
PR926	· · · · · · · · · · · · · · · · · · ·	Hourly Rate
F	Plan Review time and materials fee: Charged for miscellaneous applications such as unusual time	
PR928 i	intensive projects, research, travel time, etc.	Hourly Rate
	13D Reinspection 1-10	\$156
	13D Reinspection 11+	\$208
PR940i p	Inspection time and materials fee: Charged for miscellaneous applications such as Time Intensive projects, research, travel time, etc.	Hourly Rate
	Re-inspection fee: Charged when project is not completed or cannot be approved during regular	<b>*</b> ***
		\$208
F	Penalty for Failure to Cancel Scheduled Inspection	50% of
00040		inspection
PR943		fee 50% of
	Accelerated Inspection Request (fee is in addition to base fee assessed for inspection)	6/10/. 01

PROPOSED FEE SCHEDULE

PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

E		2015-16
Fee	Service Name	Proposed
Code		Fee (a) (b)
AA1	Aerosol – Issuance	\$225
AA1R	Aerosol - Reissuance	\$138
AA2	Aircraft Refueling – Issuance	\$454
AA2R	Aircraft Refueling – Reissuance	\$295
AA3	Aviation Facility – Issuance	Hourly Rate
AA3R	Aviation Facility – Reissuance	Hourly Rate
AA5	Waste Handling – Issuance	Hourly Rate
AA5R	Waste Handling – Reissuance	Hourly Rate
AA6	Amusement Building – Issuance	Hourly Rate
AA6R	Amusement Building – Reissuance	Hourly Rate
AC1	Candles/Open flame – Issuance	\$156
AC1R	Candles/Open flame – Reissuance	\$138
7.011	Carnival or Fair – Issuance	φ100
AC2		Hourly Rate
AC6	Combustible Material Storage – Issuance	Hourly Rate
AC6R	Combustible Material Storage – Reissuance	Hourly Rate
ACOIX AC71	Compressed Gas – Corrosive Issuance	\$243
	Compressed Gas – Corrosive Reissuance	\$156
	Compressed Gas – Conosive Reissuance	\$130
	Compressed Gas-Toxic - Issuance	\$243
AC710K	Compressed Gas-Toxic - Reissuance	\$150
AC72 AC72R	Compressed Gas – Flammable Gas Issuance	\$243
AC73	Compressed Gas-Highly Toxic - Issuance	\$243
AC73R	Compressed Gas-Highly Toxic - Reissuance	\$156
AC74	Compressed Gas – Inert Gas Issuance	\$190
AC74R		\$138
AC76 AC76R	Compressed Gas-Oxidizer - Issuance	\$243
		\$156
AC77	Compressed Gas – Pyrophoric - Issuance	\$225
AC77R		\$156
AC91	Cryogens – Physical or Health Hazard - Issuance	\$156
AC91R	Cryogens – Physical or Health Hazard - Reissuance	\$138
AC92	Cryogen – Flammable Issuance	\$225
AC92R	Cryogen – Flammable Reissuance	\$156
AC94	Cryogen – Inert Issuance	\$156
AC94R	Cryogen – Inert Reissuance	\$138
AC95	Cryogen – Oxidizer Issuance	\$173
AC95R	Cryogen – Oxidizer Reissuance	\$138
AD11	Dry Cleaning Plants - Package Issuance	\$156
AD11R	Dry Cleaning Plants – Package Reissuance	\$138
AD2	Dust Producing Operations - Issuance	\$243
AD2R	Dust Producing Operations - Reissuance	\$173
AE1	Explosives/Blasting Agents/Fireworks/Rocketry – Issuance	Hourly Rate
	Explosives – Model Rockets (Retailers and Use)/ Small Arms Ammunition	<b></b>
AE2	(Retailers) – Issuance	\$243
	Explosives – Model Rockets (Retailers and Use)/ Small Arms Ammunition	<b>•</b>
AE2R	(Retailers) – Reissuance	\$173
AF1	Firework Stands	\$142
AF2	Outdoor Fireworks Display, such as July 4th displays	\$1,937

PROPOSED FEE SCHEDULE

PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

Fee		2015-16
Code	Service Name	Proposed
		Fee (a) (b)
AF21	Outdoor Fireworks Display, such as home coming & barge display	\$543
AF22	Pyrotechnics/Special Effects Materials	\$865
AF31	Flammable Combustible Liquids – Issuance to use or operate a pipeline	Hourly Rate
AF31R	Flammable Combustible Liquids - Reissuance	Hourly Rate
	Flammable Liquids – Issuance Class I liquids (5 gallons inside/10 gallons	
AF32	outside)	\$243
AF32R	Flammable Combustible Liquids – Reissuance	\$156
	Combustible Liquids – Issuance. To store, use or handle Class II or IIIA	
AF33	liquids in excess of 25 gallons inside or 60 gallons outside.	\$243
AF33R	Combustible Liquids – Reissuance	\$156
	Flammable Combustible Liquids – Issuance. To operate tank vehicles,	
AF35	equipment, tanks, plants, terminals, wells, etc.	\$243
AF35R	Flammable Combustible Liquids – Reissuance	\$156
	Flammable Combustible Liquids – Issuance. Tank removal or installation	
AF36	(AST/UST)	\$243
AF361	Flammable Combustible Liquids – Each additional tank (AST/UST)	\$173
AF4	Fruit Ripening – Issuance	Hourly Rate
AF4R	Fruit Ripening – IReissuance	Hourly Rate
AH11	Hazardous Materials – Oxidizing Issuance	\$243
AH110	Hazardous Materials – Water Reactive Issuance	\$156
AH110R	Hazardous Materials – Water Reactive Reissuance	\$156
AH11R	Hazardous Materials – Oxidizing Reissuance	\$156
AH12	Hazardous Materials – Corrosive Issuance	\$243
AH12R	Hazardous Materials – Corrosive Reissuance	\$156
AH13	Hazardous Materials – Flammable Solids Issuance	\$243
AH13R	Hazardous Materials – Flammable Solids Reissuance	\$156
AH14	Hazardous Materials – Highly Toxic Issuance	\$236
AH14R	Hazardous Materials – Highly Toxic Reissuance	\$149
AH15	Hazardous Materials – Organic Peroxide Issuance	\$236
AH15R	Hazardous Materials – Organic Peroxide Reissuance	\$149
AH16	Hazardous Materials – Pyrophoric Issuance	\$236
AH16R	Hazardous Materials – Pyrophoric Reissuance	\$149
AH18	Hazardous Materials – Toxic Issuance	\$243
AH18R	Hazardous Materials – Toxic Reissuance	\$156
AH19	Hazardous Materials – Unstable Reactive Issuance	\$243
AH19R	Hazardous Materials – Unstable Reactive Reissuance	\$156
AH3	High Piled Combustible - Issuance	\$419
AH3R	High Piled Combustible Reissuance	\$243
AL1	Liquefied Petroleum Gas – Issuance	\$149
AL1R	Liquefied Petroleum Gas - Reissuance	\$138
	Liquid- or Gas-Fueled Vehicles or Equipment in Assembly Buildings –	
AL2	Issuance/Reissuance	Hourly Rate
AL3	Lumber Yards and Woodworking Plants – Issuance	\$347
AL3R	Lumber Yards and Woodworking Plants - Reissuance	\$243
AM1	Magnesium Working – Issuance/Reissuance	Hourly Rate
AM3	Motor Vehicle Fuel Dispensing – Issuance	\$156
	Motor Vehicle Fuel Dispensing – Package Issuance	
AM31		\$138
AM31R	Motor Vehicle Fuel Dispensing – Package Reissuance	\$138

Attachment 3

# ORANGE COUNTY FIRE AUTHORITY

PROPOSED FEE SCHEDULE PREVENTION FIELD SERVICES

Effective Date - no later than September 28, 2015

		-
E.c.		2015-16
Fee	Service Name	Proposed
Code		Fee (a) (b)
AM3R	Motor Vehicle Fuel Dispensing - Reissuance	\$138
AO1	Open Burning – Issuance	Hourly Rate
AO3	Industrial Ovens – Issuance	\$156
AO3R	Industrial Ovens - Reissuance	\$138
AP21 to	Assembly, <300 occupants - Issuance	
AP22		\$585
AP21R	Assembly, <300 occupants - Reissuance	
to		
AP22R		\$418
AP23 to	Assembly, >300 occupants - Issuance	
AP25		\$900
AP23R	Assembly, >300 occupants - Reissuance	
to		
AP25R		\$501
AR2	Refrigeration Equipment – Issuance	\$347
/	Refrigeration Equipment – Reissuance	çe
AR2R		\$190
7111211	Repair and Service Garage – Issuance	φ100
AR3	Repair and Service Garage – Issuance	\$295
ANJ	Denair and Carving Carogo , 5000 as the Deakage Jacuanae	φ295
1021	Repair and Service Garage < 5000 sq ft – Package Issuance	¢077
AR31		\$277
	Repair and Service Garage < 5000 sq ft – Package Reissuance	<b>\$005</b>
AR31R		\$225
	Repair and Service Garage – Reissuance	<b>*</b> ~~ <b>-</b>
AR3R		\$225
AS1	Spraying or Dipping Operation – Issuance	\$399
AS1R	Spraying or Dipping Operation - Reissuance	\$138
AT1	Tent/Membrane Structure – Issuance	Hourly Rate
AT1.1	Canopy Structure – Issuance	Hourly Rate
AT2	Storage of Scrap Tires and Tire Byproducts – Issuance	Hourly Rate
AT2R	Storage of Scrap Tires and Tire Byproducts – Reissuance	Hourly Rate
AW1	Hot Work - Issuance.	\$190
	Welding Carts Flammable gas up to 1000 cuft and Oxidizing gas up to 1500	
AW11	cuft - Package Issuance	\$190
	Welding Carts Flammable gas up to 1000 cuft and Oxidizing gas up to 1500	
AW11R	cuft - Package Reissuance	\$138
AW1R	Hot Work - Reissuance.	\$138
	Reinspection – Flat rate for any inspection after the 1st (Applies to all CRR	•
J200	fees)	Hourly Rate
0200	Penalty \$250 – Failure to comply with 1st orders, tags or notices (Applies to	The arry Trate
J201	all CRR fees)	\$250
5201		
1202	Penalty \$500 – Failure to comply with 2nd orders, tags or notices (Applies to	
J202	all CRR fees)	\$500
1000	Penalty \$1000 – Failure to comply with 3rd or more orders, tags or notices	<b>#</b> 4 000
J203	(Applies to all CRR fees)	\$1,000
	Correctional or Detentional Facility – Large (i.e. full scale jails, prisons, and	
M100	places of detention)	\$595
M101	Correctional or Detentional Facility – Small (i.e. holding cells)	\$279
M102	High Rise Facility > 55 Feet	\$1,147

Attachment 3

# ORANGE COUNTY FIRE AUTHORITY

PROPOSED FEE SCHEDULE

PREVENTION FIELD SERVICES Effective Date - no later than September 28, 2015

		-
Fee Code	Service Name	2015-16 Proposed Fee (a) (b)
M121	Care Facility for more than 6 ambulatory & non-ambulatory clients	\$362
	Hospitals, Nursing homes, Mental hospitals, Detoxification and Surgery	
M123	Centers	\$897
M124	Commercial Care Facility (i.e. Child, Drug & Alchol, Juvenile, & etc.)	\$216
M125	Pre-Inspection Residential Care Facility (i.e. Single Family Residences)	\$243
	Miscellaneous Special Events – Events that may impact emergency	
	operations equipment or access and may only require an over the counter	
M130	submittal	\$48
	Minor Special Events – Events that may impact emergency operations	
	equipment or access and have attendance or participation by less than	
M131	1500 persons.	\$174
	Major Special Events – Events that impact emergency operations	
	equipment or access or have attendance or participation by 1500 or more	
M132	persons.	\$331
M133	Special Event Expedite Fee for <10 days submittal	50%
M140	Fire Watch - Requested	Hourly Rate
M141	Standby – Engine Company – Board approved cost recovery rate	Hourly Rate
M150	Administrative Drive Time	\$70
M151	Alternate Means & Methods	Hourly Rate
M152	All other time to be charged as Time and Materials	Hourly Rate
	False Alarm	
	False Alarm - 2nd within 6 months (Penalty fees are not included with the	
0	annual S&EB increase)	\$100
	Failure to comply with orders, tags or notices -	
	3rd false alarm within 6 months (Penalty fees are not included with the	<b>*</b>
0	annual S&EB increase)	\$250
	Failure to comply with orders, tags or notices -	
0	4th false alarm within 6 months (Penalty fees are not included with the	
0	annual S&EB increase)	\$500
	Failure to comply with orders, tags or notices -	
0	5th and subsequent false alarm within 6 months (Penalty fees are not	<b>#4</b> 000
0	included with the annual S&EB increase)	\$1,000