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January 9, 2015

Ms. Lisa Driscoll  
County Finance Director  
County Administrator's Office  
651 Pine Street, 10th Floor  
Martinez, CA 94553

***Contra Costa County Retiree Health Plan  
Analysis of Proposed Retiree Health Benefit Change for International Association of  
Firefighters Local 1230 of the Contra Costa County Fire Protection District***

Dear Ms. Driscoll:

As requested, we have estimated the cost impact of a proposed change to retiree health benefits for the International Association of Firefighters Local 1230 ("Local 1230"). The proposed benefit change would apply to all Local 1230 employees and retirees for the Contra Costa County Fire Protection District ("District"). The purpose of this analysis is to estimate the change in the District's long-term other postemployment liability under GASB 45 (comparison of the present value of benefits, actuarial accrued liability, normal cost, annual required contribution, and projected benefit payments is shown before and after the proposed change) to comply with California Government Code Section 7507.

**Current Plan**

Currently, for eligible retirees from bargaining unit 4N, the District will pay a subsidy toward the cost of monthly medical premiums equal to 87% of the CalPERS Bay Area Basic Kaiser premium at each coverage level, but not more than the actual premium, if less.

For retirees enrolled in a health plan from CalPERS, the District will also subsidize an amount equal to 78% of the monthly dental premium. For retirees who elect dental coverage without medical coverage, the District will subsidize an amount toward the monthly dental premium such that the retiree will pay one cent (\$0.01) per month for such coverage.

**Proposed Plan**

***District Premium Subsidy on or after January 1, 2016:*** For 2016 and each calendar year thereafter, the prior year's District subsidy for each medical plan and rate tier will increase by 50% of the actual premium increase in the medical plan and rate tier in which the member is enrolled.

For eligible retirees from bargaining unit 4N enrolled in both a medical and dental plan, the District will pay a subsidy equal to 50% of the cost of monthly dental premiums in 2016 and later. For retirees enrolled only in a dental plan, retirees are required to pay \$0.01 per month for dental coverage. For 2016 and later, the required monthly contribution from retirees would increase each year by 50% of the dental premium increase.

## Results

	2014 Actuarial Valuation Results		
	Current Plan	Proposed Plan* (Local 1230 Change)	Difference
<b>Present Value of Benefits</b>			
Active Employees	\$625,243,000	\$607,882,000	(\$17,361,000)
Retirees	<u>\$567,919,000</u>	<u>\$554,996,000</u>	<u>(\$12,923,000)</u>
Total	\$1,193,162,000	\$1,162,878,000	(\$30,284,000)
<b>Actuarial Accrued Liability</b>			
Active Employees	\$355,929,000	\$347,330,000	(\$8,599,000)
Retirees	<u>\$567,919,000</u>	<u>\$554,996,000</u>	<u>(\$12,923,000)</u>
Total	\$923,848,000	\$902,326,000	(\$21,522,000)
<b>Assets</b>	\$129,426,000	\$129,426,000	
<b>Unfunded AAL</b>	\$794,422,000	\$772,900,000	(\$21,522,000)
<b>Amortization of UAAL as of June 30, 2014</b>	\$59,872,000	\$58,250,000	(\$1,622,000)
<b>Normal Cost as of June 30, 2014</b>	\$28,666,000	\$27,860,000	(\$806,000)
<b>Annual Required Contribution (ARC)</b>	\$88,538,000	\$86,110,000	(\$2,428,000)

\* For comparison purposes, the liabilities associated with the proposed plan change were measured based on the 2014 premiums trended to 2015 using the trend assumption stated in our 2014 actuarial valuation. The actual calendar year 2015 medical and dental premiums may differ from the trended premiums and the liabilities based on actual 2015 premiums may also differ than the amounts shown above.

The items shown in the table above are defined as follows:

The **Present Value of Benefits** is the present value of projected benefits (projected claims less retiree contributions) discounted at the valuation interest rate (5.70%).

The **Actuarial Accrued Liability (AAL)** is the present value of benefits that are attributed to past service only. The portion attributed to future employee service is excluded. For retirees, this is equal to the present value of benefits. For active employees, this is equal to the present value of benefits prorated by service to date over service at the expected retirement age.

The **Normal Cost** is that portion of the District provided benefit attributable to employee service in the current year. Employees are assumed to have an equal portion of the present value of benefits attributed to each year of service from date of hire to expected retirement age.

The **Annual Required Contribution (ARC)** is equal to the Normal Cost plus an amount to amortize the unfunded AAL as a level dollar amount over a period of 30 years on a “closed” basis starting January 1, 2008. There are 24 years remaining as of January 1, 2014.

The table below contains a 25 year projection of projected benefit payments under the current and proposed benefit plans. The projected benefit payments are net of required retiree contributions, but include the value of the implicit premium rate subsidy for non-Medicare retirees for whom the same premium rate is charged as for actives. The projected benefit payments include only employees and retirees as of the valuation date (January 1, 2014). Future employees are not reflected in the table below.

Year	Projected Benefit Payments		Difference
	Current Plan	Proposed Plan (Local 1230 Change)	
2014	\$54,439,000	\$54,439,000	\$0
2015	56,181,000	56,181,000	0
2016	58,437,000	58,327,000	(110,000)
2017	61,348,000	61,112,000	(236,000)
2018	63,630,000	63,263,000	(367,000)
2019	66,025,000	65,520,000	(505,000)
2020	68,604,000	67,948,000	(656,000)
2021	70,593,000	69,768,000	(825,000)
2022	72,445,000	71,455,000	(990,000)
2023	74,411,000	73,259,000	(1,152,000)
2024	76,694,000	75,376,000	(1,318,000)
2025	78,735,000	77,233,000	(1,502,000)
2026	80,219,000	78,546,000	(1,673,000)
2027	81,526,000	79,667,000	(1,859,000)
2028	82,231,000	80,193,000	(2,038,000)
2029	82,931,000	80,705,000	(2,226,000)
2030	84,113,000	81,705,000	(2,408,000)
2031	84,428,000	81,848,000	(2,580,000)
2032	84,455,000	81,688,000	(2,767,000)
2033	85,136,000	82,202,000	(2,934,000)
2034	85,151,000	82,068,000	(3,083,000)
2035	84,817,000	81,589,000	(3,228,000)
2036	84,882,000	81,465,000	(3,417,000)
2037	84,839,000	81,301,000	(3,538,000)
2038	84,615,000	80,960,000	(3,655,000)

### Important Notes

Except where noted above, the results in this letter are based on the same data, methods, assumptions, and plan provisions that are used in the January 1, 2014, actuarial valuation report for the Contra Costa County (“County”), dated August 8, 2014. Appendices A through C contain a description of the current provisions assumptions and data used in the valuation report.

In preparing our report, we relied, without audit, on information (some oral and some in writing) supplied by Contra Costa County's staff. This information includes but not limited to employee census data, financial information and plan provisions. While Milliman has not audited the financial and census data, they have been reviewed for reasonableness and are, in our opinion, sufficient and reliable for the purposes of our calculations. If any of this information as summarized in this report is inaccurate or incomplete, the results shown could be materially affected and this report may need to be revised.

All costs, liabilities, rates of interest, and other factors for the District have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the District and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the District. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations which, in combination, represent our best estimate of anticipated experience for the District.

This analysis is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of District contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

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. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The District has the final decision regarding the appropriateness of the assumptions and actuarial cost methods.

This letter is prepared solely for the internal business use of Contra Costa County. To the extent that Milliman's work is not subject to disclosure under applicable public records laws, Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- a) Contra Costa County may provide a copy of Milliman's work, in its entirety, to the County's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the County.
- b) Contra Costa County may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

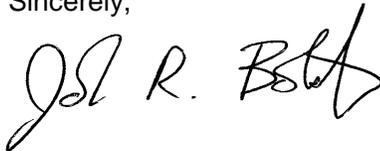
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The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuary is independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, the report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the applicable Actuarial Standards of Practice of the American Academy of Actuaries. The undersigned is a member of the American Academy of Actuaries and meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

A handwritten signature in black ink, appearing to read "John R. Botsford". The signature is fluid and cursive, with the first name "John" being the most prominent.

John R. Botsford, FSA, MAAA  
Principal and Consulting Actuary

JRB:dy  
enc.

**Appendix A. Summary of Benefits under Current Plan before Proposed Changes**

The following description of retiree health benefits is intended to be only a brief summary and is not complete information.

**Eligibility**

Currently, employees may receive retiree health benefits if they retire from the County, are receiving a pension, and meet certain eligibility requirements as follows:

General employees - age 50 with 10 years of pension service or age 70 with a vested pension, or after 30 years of pension service with no age requirement.

Safety employees - age 50 with 10 years of pension service or age 70 with a vested pension, or after 20 years of pension service with no age requirement.

Employees hired after December 31, 2006 and represented by the following bargaining groups (AFSCME, California Nurses Association, Deputy District Attorneys’ Association, Public Defenders Association, IFPTE, Western Council of Engineers, SEIU, PEU, Probation Peace Officers Association, and Unrepresented) also must have 15 years of County service.

Employees hired on or after October 1, 2005, and represented by the Physicians’ and Dentists’ Organization also must have 15 years of County service.

**Health Benefits**

Currently, eligible retirees and their dependents are covered either under the Contra Costa Health Plans, Health Net plans, Kaiser plans, or health plans sponsored by CalPERS (PEMHCA). Coverage may be provided for a retiree and surviving spouse as long as retiree and surviving spouse monthly premium contributions are paid. The County may pay a subsidy toward eligible retirees’ monthly medical and dental premiums. This subsidy may vary by bargaining unit and date of hire as described in this appendix. Employees hired on or after dates described in the table below and represented by the following bargaining groups must pay the entire cost of premiums to maintain coverage.

Bargaining Unit Name	Hire Date on or after which eligible retirees must pay entire cost of premiums
IFPTE, Unrepresented	January 1, 2009
AFSCME, Western Council of Engineers, SEIU, and PEU	January 1, 2010
Deputy District Attorneys Association	December 14, 2010
Probation Peace Officers Association of CCC	January 1, 2011
CCC Public Defenders Association	March 1, 2011

All surviving spouses must pay the entire cost of premiums to maintain coverage, with the exception of the following bargaining groups for whom the surviving spouse receives the same County subsidy as the retiree (covered by CalPERS health plans): A8 (Sheriff). BD (Fire Chief), BS (Sworn Exec. Mgmt.), HA, V#, VH, VN, 4N, BF, and XJ.

Bargaining Units V#, VH, VN, F8 and FW

Currently, for eligible retirees from the bargaining units listed in the table below, the County will contribute toward the cost of monthly premiums (medical and dental) in 2014 an amount equal to the actual dollar monthly premium amount paid by the County as of November 30, 2013, at each coverage level, plus 50% of the actual premium increase for 2014. For premium increases in 2015 and later, the County and retiree will split the increase evenly: the County will pay for 50% of the increase, and the retiree must pay for the other 50% of the increase.

Retirees who elected dental coverage without health coverage will pay one cent (\$0.01) per month for 2013, plus 50% of the actual premium increase for 2014. For premium increases in 2015 and later, the County and retiree will split the increase evenly: the County will pay for 50% of the increase, and the retiree must pay for the other 50% of the increase.

Bargaining Unit Code	Bargaining Unit Name	General / Safety
F8	Unrep Classified & Exempt-Othr	General
FW	Unrep CI & Ex-Sworn Peace Offc	Safety
V#	Sheriff's Sworn Mgmt Unit	Safety
VH	Deputy Sheriff's Unit-Sworn	Safety
VN	Deputy Sheriff's Unit-NonSworn	General

For employees hired between January 2, 2007, and September 30, 2011, and represented by the Deputy Sheriffs' Association, the County subsidy is subject to a vesting schedule as shown in the table below.

Credited Years of Service	Percentage of Employer Contribution
10	50
11	55
12	60
13	65
14	70
15	75
16	80
17	85
18	90
19	95
20 or more	100

Bargaining Unit HA – Fire Management

Currently, for eligible Fire Management retirees represented by United Chief Officers Association (UCOA) with bargaining unit code HA, the County will subsidize an amount equal to 80% of the CalPERS Kaiser premium at each coverage level (employee only, employee + one, employee + two or more) for the region in which the retiree resides, but the County’s subsidy will not exceed the total premium of a lower cost plan.

For retirees enrolled in a health plan from CalPERS, the County will subsidize 78% of the monthly dental premium.

For retirees who elect dental coverage without medical coverage, the County will subsidize an amount toward the monthly dental premium such that the retiree will pay one cent (\$0.01) per month for such coverage.

Bargaining Unit XJ – D.A. Investigators

Currently, for eligible retirees from the bargaining unit XJ, the County will pay a subsidy toward the cost of monthly premiums (medical and dental) in 2014 an amount equal to the actual dollar monthly premium amount paid by the County in 2013, depending on coverage level. For 2014 and later, the County subsidy will increase by 75% of the actual premium increase in Bay Area Kaiser rates.

For retirees enrolled in a health plan from CalPERS, the County will subsidize an amount equal to 78% of the monthly dental premium.

For retirees who elect dental coverage without medical coverage, the County will subsidize an amount toward the monthly dental premium such that the retiree will pay one cent (\$0.01) per month for such coverage.

Bargaining Units 1P, 1R, 4N, and L3

Currently, for eligible retirees from the following bargaining units, the County subsidizes a percentage of monthly premiums that varies depending on the medical and dental plan elected. Retirees from certain bargaining units described below also receive reimbursement of their Medicare Part B premiums as long as the total County subsidy does not exceed 100% of the medical plan premium.

Bargaining Unit Code	Bargaining Unit Name	General / Safety	Part B Reimbursement
1P	Physicians and Dentists Unit	General	Yes, stops in 2015
1R	Physicians & Dentists Unit-Residents	General	Yes, stops in 2015
4N	Fire Suppression & Prevention Unit	Safety	No
L3	Registered Nurses Unit	General	If retired on or before 6/30/2012 and age 65 on or before 10/31/2012

Retirees from the above listed units receive the following County subsidy based on the medical plan elected:

Medical Plan	Bargaining Unit	County Subsidy % (Medical)	County Subsidy % (Dental)
<u>Contra Costa Health Plan A and B</u>			
Without Dental	1P, 1R, L3	98%	0%
With Delta Dental	1P, 1R, L3	98%	98%
With PMI Delta Dental	1P, 1R, L3	98%	98%
<u>Kaiser, Health Net HMO</u>			
Without Dental	1P, 1R, L3	80%	0%
With Delta Dental	1P, 1R, L3	80%	78%
With PMI Delta Dental	1P, 1R, L3	80%	78%
<u>Health Net PPO</u>			
Without Dental	1P, 1R, L3	55%*	0%
With Delta Dental	1P, 1R, L3	55%*	78%
With PMI Delta Dental	1P, 1R, L3	55%*	78%
All Medical Plans			
Without Dental	4N	87% of Kaiser	0%
With Dental Plan	4N	87% of Kaiser	78%
Dental Only	All Units Listed Above	0%	All but \$0.01 / month

\* Approximately 55% for 2014. Future increases are split evenly between the County and the retiree.

All other Bargaining Units - County Subsidy Frozen at the 2011 Level

Currently, eligible retirees from the following bargaining units listed receive County subsidies at the same amount agreed upon between the County and the Bargaining Units in 2011 towards the medical and dental premiums with no future increases to this subsidy amount.

Bargaining Unit Code	Bargaining Unit Name	General / Safety	Bargaining Unit Code	Bargaining Unit Name	General / Safety
1X	Phys & Dnts & Optometrist Unit	General	JF	CCC Defenders/Investigators	General
2I*		General	K2	Property Appraisers Unit	General
25	Social Services Unit	General	K5	Court Professional Svcs Unit	General
51	Professional Engineers Unit	General	K6	Supervisory Clerical Unit	General
99	DEFAULT BARGAINING UNIT	General	KK	Income Maintenance Program Unit	General
2D	Community Aide Unit	General	KL	Engineering Technician Unit	General
2I	Service Line Supervisors Unit	General	KM	Sheriff's Non-Sworn Mgmt Unit	General
2R	Superior Court Reporters-Ex	General	KU	Probation Supervisors Unit	Safety
3A	Superior Court Clerical Unit	General	KZ	Social Svcs Staff Special Unit	General
3B	Superior Court Barg Unit-Loc1	General	MA	District Attorneys' Unit	General
3G	Deputy Clerks Unit	General	N2	Property Appraisers Unit	General
3R	General Clerical Unit	General	PP	Probation Unit of CCC	Safety
A8	Elected Department Heads	General	QA	Agriculture & Animal Ctrl Unit	General
AJ	Elected Superior Court Judges	General	QB	LVN/Aide Unit	General
AM	Elected Municipal Court Judges	General	QC	Fam/Chld Svs Site Supv Unit	General
AS	Elected Board of Supvs Members	General	QE	Building Trades Unit	General
B8	Mgmt Classes-Classified & Exem	General	QF	Deputy Public Defender Unit/At	General
BA		General	QG	Deputy Public Defender Unit-In	General
BC	Superior Court Exempt Mgmt Gen	General	QH	Family and Children Services	General
BD	Mgmt Classified & Ex Dept Head	General	QM	Engineering Unit	General
BF	Fire District (MS) Safety Mgmt	Safety	QP		General
BH	Superior Ct Exempt Mgmt-DH	General	QS	General Services & Mtce Unit	General
BJ	Sup Ct Judicial Ofcrs Ex-Mgmt	General	QT	Health Services Unit	General
BS	Sheriff's Sworn Executive Mgmt	Safety	QV	Investigative Unit	General
C8	Management Project-Other	General	QW	Legal & Court Clerk Unit	General
CH	CS Head Start Mgmt-Project	General	QX	Library Unit	General
D8	Unrepresented Proj Class-Other	General	QY	Probation Unit	General
F8	Unrep Classified & Exempt-Other	General	S2		General
FC	Unrep Superior Ct Clerical Exempt	General	Z1	Supervisory Project	General
FD	Unrep Superior Ct Other Exempt	General	Z2	Non-Supervisory Project	General
FM	Unrep Muni Ct Reporter-Exempt	General	ZA	Supervisory Management	General
FR	Unrep Superior Ct Reprts-Exempt	General	ZB	Non-Supervisory Management	General
FS	Unrep Cl & Ex Student Workers	General	ZL	Supervisory Nurse	General
FX	Unrep Exempt Medical Staff	General	ZN	Non-Supervisory Nurse	General
JD	CCC Defenders/Attorneys	General			

\* Coded as "21" in census data.

Health Insurance Premium Rates (non-PEMHCA)

The following table shows monthly retiree health insurance premiums for the 2014 calendar year for coverage under various health plans sponsored by Contra Costa County, and the County's subsidies as frozen at the 2011 level for the specified bargaining groups.

Medical Plan	County's Subsidy (Frozen in 2011)	2014 Premium Rate	County's Subsidy for 2014	Retiree's Share for 2014
<u>Contra Costa Health Plan A</u>				
Retiree on Basic Plan	\$ 509.92	\$ 612.77	\$ 509.92	\$ 102.85
Retiree & 1 or more dependents on Basic Plan	1,214.90	1,459.96	1,214.90	245.06
Retiree on Medicare Coordination of Benefits (COB) Plan	420.27	279.23	279.22	0.01
Retiree & 1 or more dependents on Medicare COB Plan	1,035.60	1,228.77	1,035.60	193.17
<u>Contra Costa Health Plan B</u>				
Retiree on Basic Plan	528.50	679.27	528.50	150.77
Retiree & 1 or more dependents on Basic Plan	1,255.79	1,614.06	1,255.79	358.27
Retiree on Medicare COB Plan	444.63	287.60	287.59	0.01
Retiree & 1 or more dependents on Medicare COB Plan	1,088.06	1,265.63	1,088.06	177.57
<u>Kaiser Permanente – Plan A</u>				
Retiree on Basic Plan	478.91	768.47	478.91	289.56
Retiree & 1 or more dependents on Basic Plan	1,115.84	1,790.52	1,115.84	674.68
Retiree on Medicare COB Plan	263.94	295.01	263.94	31.07
Retiree & 1 dependent on Medicare COB Plan	712.79	796.71	712.79	83.92
Retiree & 2 dependents on Medicare COB Plan	1,161.65	1,298.41	1,161.65	136.76
<u>Kaiser Permanente – Plan B</u>				
Retiree on Basic Plan	478.91	676.03	478.91	197.12
Retiree & 1 or more dependents on Basic Plan	1,115.84	1,575.17	1,115.84	459.33
Retiree on Medicare COB Plan	263.94	223.69	223.68	0.01
Retiree & 1 dependent on Medicare COB Plan	712.79	603.97	603.96	0.01
Retiree & 2 dependents on Medicare COB Plan	1,161.65	984.25	984.24	0.01
<u>Health Net HMO – Plan A</u>				
Retiree on Basic Plan	627.79	1,067.40	627.79	439.61
Retiree & 1 or more dependents on Basic Plan	1,540.02	2,618.43	1,540.02	1,078.41
Retiree on Medicare Seniority Plus Plan	409.69	514.28	409.69	104.59
Retiree & 1 dependent on Medicare Seniority Plus Plan	819.38	1,028.56	819.38	209.18
Retiree & 2 dependents on Medicare Seniority Plus Plan	1,229.07	1,542.84	1,229.07	313.77
<u>Health Net HMO – Plan B</u>				
Retiree on Basic Plan	627.79	836.04	627.79	208.25
Retiree & 1 or more dependents on Basic Plan	1,540.02	2,050.86	1,540.02	510.84
Retiree on Medicare Seniority Plus Plan	409.69	431.74	409.69	22.05
Retiree & 1 dependent on Medicare Seniority Plus Plan	819.38	863.48	819.38	44.10
Retiree & 2 dependents on Medicare Seniority Plus Plan	1,229.07	1,295.22	1,229.07	66.15

Health Insurance Premium Rates (continued)

Medical Plan	County's Subsidy (Frozen in 2011)	2014 Premium Rate	County's Subsidy for 2014	Retiree's Share for 2014
<u>Health Net Medicare COB</u>				
Retiree only	\$ 467.13	\$ 573.03	\$ 467.13	\$ 105.90
Retiree & spouse	934.29	1,146.06	934.29	211.77
<u>Health Net CA &amp; Nat'l PPO – Basic Plan A</u>				
Retiree on PPO	604.60	1,365.43	604.60	760.83
Retiree & 1 or more dependents on PPO Basic Plan	1,436.25	3,243.69	1,436.25	1,807.44
Retiree on PPO Medicare Plan with Medicare Part A & B	563.17	924.22	563.17	361.05
Retiree & 1 or more dependents on PPO Medicare Plan with Medicare Part A & B	1,126.24	1,848.43	1,126.24	722.19
<u>Health Net CA &amp; Nat'l PPO – Basic Plan B</u>				
Retiree on PPO	604.60	1,240.08	604.60	635.48
Retiree & 1 or more dependents on PPO Basic Plan	1,436.25	2,945.89	1,436.25	1,509.64
Retiree on PPO Medicare Plan with Medicare Part A & B	563.17	839.40	563.17	276.23
Retiree & 1 or more dependents on PPO Medicare Plan with Medicare Part A & B	1,126.24	1,678.80	1,126.24	552.5

The following table shows monthly retiree health insurance premiums for the 2015 calendar year for health coverage under Contra Costa Health Plans sponsored by the Contra Costa County.

Medical Plan	County's Subsidy (Frozen in 2011)	2015 Premium Rate	County's Subsidy for 2015	Retiree's Share for 2015
<u>Contra Costa Health Plan A</u>				
Retiree on Basic Plan	\$ 509.92	\$ 654.44	\$ 509.92	\$ 144.52
Retiree & 1 or more dependents on Basic Plan	1,214.90	1,559.24	1,214.90	344.34
Retiree on Medicare COB Plan	420.27	301.01	301.00	0.01
Retiree & 1 dependent on Medicare COB Plan	1,035.60	602.02	602.01	0.01
Family, 1 on Medicare COB Plan, and 1 or more on Basic Plan	1,035.60	963.23	963.22	0.01
<u>Contra Costa Health Plan B</u>				
Retiree on Basic Plan	528.50	725.46	528.50	196.75
Retiree & 1 or more dependents on Basic Plan	1,255.79	1,723.82	1,255.79	468.03
Retiree on Medicare COB Plan	444.63	310.03	310.02	0.01
Retiree & 1 dependent on Medicare COB Plan	1,088.06	620.06	620.05	0.01
Family, 1 on Medicare COB Plan, and 1 or more on Basic Plan	1,088.06	992.10	992.09	0.01

PEMHCA Health Plan Premium Rates

Eligible retirees from the bargaining units 4N, A8, B8, BD, BF, BS, F8, FW, HA, V#, VH, VN, and XJ can choose to enroll in health plans sponsored by CalPERS based on their residence region (Bay Area, Sacramento, Los Angeles, Northern California, Southern California and Out of State of California). The following table shows the monthly Bay Area retiree health insurance premiums for the 2014 calendar year:

	<i>Monthly Premium Rates – 2014</i>					
	Single		2-Party		Family	
	Under 65	Over 65	Under 65	Over 65	Under 65	Over 65
Blue Shield	\$ 836.59	\$ 298.21	\$ 1,673.18	\$ 596.42	\$ 2,175.13	\$ 894.63
Blue Shield NetValue	704.01	298.21	1,408.02	596.42	1,830.43	894.63
Kaiser	742.72	294.97	1,485.44	589.94	1,931.07	884.91
PERSCare	720.04	327.36	1,440.08	654.72	1,872.10	982.08
PERS Choice	690.77	307.23	1,381.54	614.46	1,796.00	921.69
PERS Select	661.52	307.23	1,323.04	614.46	1,719.95	921.69
Anthem HMO Select	657.33	341.12	1,314.66	682.24	1,709.06	1,023.36
Anthem HMO Traditional	728.41	341.12	1,456.82	682.24	1,893.87	1,023.36
United Healthcare	764.24	193.33	1,528.48	386.66	1,987.02	579.99
PORAC	634.00	397.00	1,186.00	791.00	1,507.00	1,264.00
CCHP	723.74	618.84	1,281.39	1,071.59	1,674.11	1,359.41

Dental Plan Premiums

The following table shows monthly retiree dental insurance premiums for the 2014 calendar year. County subsidies vary based on retiree’s medical plan enrollment election and bargaining unit upon retirement.

Plan	Monthly Premiums
<b>Delta Dental - \$1,800 Annual Maximum</b>	
Retiree	\$ 44.27
Family	100.00
<b>Delta Dental - \$1,600 Annual Maximum</b>	
Retiree	\$ 42.45
Family	95.63
<b>Delta Care (PMI)</b>	
Retiree	\$ 29.06
Family	62.81

Excluded Bargaining Units – Not Eligible for Plan Participation

Members of the following bargaining units are not eligible for participation in the County's retiree health plan.

Bargaining Unit Code	Bargaining Unit Name	General / Safety
8I	IHSS Public Authority-Mgmt	General
8J	IHSS Public Authority-Non Mgmt	General
8P	Special Co Class Codes-Payroll	General
B9	Mgmt East CCFPD (Non-MS)	Safety

## Appendix B. Actuarial Cost Method and Assumptions

The actuarial cost method used for determining the benefit obligations is the Projected Unit Credit Cost Method. Under this method, the actuarial present value of projected benefits is the value of benefits expected to be paid for current actives and eligible retirees and is calculated based on the assumptions and census data described in this report.

The Actuarial Accrued Liability (AAL) is the actuarial present value of benefits attributed to employee service rendered prior to the valuation date. The AAL equals the present value of benefits multiplied by a fraction equal to service to date over service at expected retirement. The Normal Cost is the actuarial present value of benefits attributed to one year of service. This equals the present value of benefits divided by service at expected retirement. Since retirees are not accruing any more service, their normal cost is zero. The actuarial value of assets is equal to the market value of assets as of the valuation date.

In determining the Annual Required Contribution, the Unfunded AAL is amortized as a level dollar amount over 30 years on a "closed" basis. There are 24 years remaining in the amortization period as of January 1, 2014. The actuarial assumptions are summarized below.

### Economic Assumptions

*Discount Rate (Liabilities)*                      5.70%

We have used a discount rate of 5.70% in this valuation to reflect the County's current policy of partially funding its OPEB liabilities. This rate is derived based on the fund's investment policy, level of partial funding, and includes a 2.50% long-term inflation assumption. County OPEB Irrevocable Trust assets are invested in the Public Agency Retirement Services' Highmark Portfolio. Based on the portfolio's target allocation (shown below), the average return of Trust assets over the next 30 years is expected to be 6.25%, which would be an appropriate discount rate if the County's annual contribution is equal to the ARC. If the County were to elect not to fund any amount to a Trust, the discount rate would be based on the expected return of the County's general fund (we have assumed a long term return of 3.50% for the County's general fund). Since the County is partially funding the Trust with a contribution of \$20 million per year, we used a blended discount rate of 5.70%.

Asset Class	Expected 1-Year Nominal Return	Targeted Asset Allocation
Domestic Equity Large Cap	8.14%	17.0%
Domestic Equity Mid Cap	8.92%	6.0%
Domestic Equity Small Cap	9.90%	8.0%
U.S. Fixed Income	4.69%	38.0%
International / Global Equity (Developed)	8.56%	16.0%
Real Estate	8.12%	4.0%
Cash	3.01%	1.0%
Alternatives	5.71%	10.0%
Expected Geometric Median Annual Return (30 years)		6.25%

**Demographic Assumptions**

Below is a summary of the assumed rates for mortality, retirement, disability and withdrawal, which are consistent with assumptions used in the December 31, 2012 CCCERA Actuarial Valuation.

*Pre / Post Retirement Mortality*

Healthy: For General Members: RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back one year.

For Safety Member: RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set back two years.

Disabled: For General Members: RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set forward six years for males and set forward seven years for females.

For Safety Member: RP-2000 Combined Healthy Mortality Table projected to 2030 with Scale AA, set forward three years.

Beneficiaries: Beneficiaries are assumed to have the same mortality as a General Member of the opposite sex who had taken a service (non-disability) retirement.

*Disability*

Age	General Tier 3	Safety (All Tiers)
20	0.01%	0.02%
25	0.02%	0.22%
30	0.03%	0.42%
35	0.05%	0.56%
40	0.08%	0.66%
45	0.13%	0.94%
50	0.17%	2.54%

*Withdrawal* – Sample probabilities of terminating employment with the County are shown below for selected years of County service.

Years of Service	General	Safety
Less than 1	13.50%	11.50%
1	9.00%	6.50%
2	9.00%	5.00%
3	6.00%	4.00%
4	4.50%	3.50%
5	4.00%	3.00%
10	2.75%	1.90%
15	2.10%	1.40%
20 or more	2.00%	1.00%

*Retirement* – For this valuation, we have applied the Tier 3 rates for all General employees and Tier A rates for all Safety employees since nearly all current employees are in these two pension tiers.

Age	General Tier 3	Safety Tier A	Age	General Tier 3	Safety Tier A
45	0%	2%	60	15%	40%
46	0%	2%	61	20%	40%
47	0%	7%	62	27%	40%
48	0%	7%	63	27%	40%
49	0%	20%	64	30%	40%
50	4%	25%	65	40%	100%
51	3%	25%	66	40%	100%
52	3%	25%	67	40%	100%
53	5%	25%	68	40%	100%
54	5%	25%	69	40%	100%
55	10%	30%	70	40%	100%
56	10%	25%	72	40%	100%
57	10%	25%	73	40%	100%
58	12%	35%	74	40%	100%
59	12%	35%	75	100%	100%

### **Coverage Election Assumptions**

*Retiree Coverage* – We have assumed 90% of new retirees will elect medical and dental coverage at retirement. For new retirees who were members of certain bargaining units indicated in appendix A and hired after a certain date indicated (eligible retirees must pay entire cost of premium to maintain coverage), we have assumed 50% will elect medical and dental coverage at retirement.

*Spouse Coverage* – We have assumed 50% of new retirees electing coverage will elect spouse medical and dental coverage at retirement.

*Spouse Age* – Female spouses are assumed to be three years younger than male spouses.

*Dependent Coverage* – We have assumed 30% of retirees with no spouse coverage will elect coverage for a dependent child until age 65, and 50% of retirees with spouse coverage will elect coverage for a dependent child until age 65.

*Health Plan Election* – We have assumed that new retirees will remain enrolled in the same plan they were enrolled in as actives. For actives who waived coverage, we have assumed that they will elect Kaiser plan coverage.

**Valuation of Retiree Premium Subsidy Due to Active Health Costs**

The County and California PERS (PEMHCA) health plans charge the same premiums for retirees who are not yet eligible for Medicare as for active employees. Therefore, the retiree premium rates are being subsidized by the inclusion of active lives in setting rates. (Premiums calculated only based on retiree health claims experience would have resulted in higher retiree premiums.) GASB 45 requires that the value of this subsidy be recognized as a liability in valuations of OPEB costs. To account for the fact that per member health costs vary depending on age (higher health costs at older ages), we calculated equivalent per member per month (PMPM) costs that vary by age based on the age distribution of covered members, and based on relative cost factors by age. The relative cost factors were developed from the Milliman Health Cost Guidelines™. Based on the carrier premium rates and relative age cost factors assumptions, we developed age adjusted monthly PMPM health costs for 2014 to be used in valuing the implicit rate subsidy. The following tables show the age adjusted expected monthly claims cost for a male participant at age 64 for each health plan and relative age factors compared to a male age 64.

Plan	Monthly Age Adjusted Claims Cost for Age 64 Male	Dependent Child Cost Load
CCHP A	\$ 1,164	\$ 157
CCHP B	1,431	329
Kaiser A	1,384	246
Kaiser B	1,278	264
Health Net HMO A	1,878	394
Health Net HMO B	1,621	369
Health Net PPO	1,903	316
California PERS Plans (average)	1,100	219

**Relative Claims Cost Factor Compared to Male age 64**

Age	Male	Female
50	0.458	0.572
55	0.604	0.668
60	0.786	0.789
64	1.000	0.915

Since retirees eligible for Medicare (age 65 and beyond) are enrolled in Medicare supplemental plans, the premiums for retirees with Medicare are determined without regard to active employee claims experience and no such subsidy exists for this group for medical cost.

**Medical Cost Inflation Assumption**

We assumed future increases to the health costs and premiums are based on the “Getzen” model published by the Society of Actuaries for purposes of evaluating long term medical trend. Under the Patient Protection and Affordable Care Act of 2010, a Federal excise tax will apply for high cost health plans beginning in 2018. A margin to reflect the impact of the excise tax in future years is reflected in the assumed trend. The following table shows the assumed rate increases in future years for Medical premiums.

Calendar Year	County Plans * Pre 65	Calendar Year	PEMHCA Plans Pre 65	Calendar Year	All Plans * Post 65
2014	6.50%	2014	7.00%	2014	7.25%
2015	5.25%	2015	5.75%	2015	6.00%
2016	5.75%	2016	6.25%	2016	6.50%
2017	6.50%	2017 – 2018	6.75%	2017 – 2025	6.00%
2018 – 2020	5.75%	2019	7.00%	2026 – 2032	5.75%
2021 – 2023	6.50%	2020 – 2022	7.25%	2033	6.00%
2024 – 2028	6.25%	2023 – 2024	7.00%	2034	6.75%
2029	6.50%	2025 – 2029	6.75%	2035	6.50%
2030 – 2035	6.25%	2030 – 2033	6.50%	2036 – 2042	6.25%
2036	6.00%	2034 – 2036	6.25%	2043 – 2045	6.00%
2037 – 2040	5.75%	2037 – 2038	6.00%	2046 – 2051	5.75%
2041 – 2048	5.50%	2039 – 2043	5.75%	2052 – 2059	5.50%
2049 – 2063	5.25%	2044 – 2050	5.50%	2060 – 2070	5.25%
2064 – 2074	5.00%	2051 – 2061	5.25%	2071 – 2076	5.00%
2075 – 2079	4.75%	2062 – 2074	5.00%	2077 – 2081	4.75%
2080 +	4.50%	2075 – 2079	4.75%	2082 +	4.50%
		2080 +	4.50%		

\* For Contra Costa Health Plan A and B, actual increase from calendar year 2014 to 2015 was used.

**Dental Cost** We assumed Dental costs will increase 4.0% annually.

**Appendix C. Summary of Participant Data**

The following census of participants was used in the actuarial valuation and provided by Contra Costa County.

**Active Employees**

Age	General	Safety	Total
Under 25	44	10	54
25 – 29	377	124	501
30 – 34	732	168	900
35 – 39	838	203	1,041
40 – 44	883	236	1,119
45 – 49	1,043	226	1,269
50 – 54	1,148	85	1,233
55 – 59	997	34	1,031
60 – 64	663	17	680
65 & Over	<u>257</u>	<u>4</u>	<u>261</u>
Total	6,982	1,107	8,089
Average Age at Hire:		45.93	
Average Age on Valuation Date:		10.31	

**Current Retirees**

Age	General	Safety	Total
Under 50	22	69	91
50 – 54	104	146	250
55 – 59	390	163	553
60 – 64	821	211	1,032
65 – 69	1,155	255	1,410
70 – 74	869	125	994
75 – 79	619	86	705
80 – 84	444	72	516
85 & Over	<u>595</u>	<u>60</u>	<u>655</u>
Total	5,019	1,187	6,206
Average Age on Valuation Date:		69.92	