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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 Potential Retiree Health Benefit Changes

Dear Ms. Driscoll:

As requested, we have estimated the cost impact of a proposed change to retiree health benefits for participants in the Contra Costa County Retiree Health Plan. This change would impact all non-PEMHCA covered current and future retirees except those who retire from classifications represented by CNA and PDOCC. Only groups affected by the proposed changes are included in this analysis; employees and retirees represented by CNA, PDOCC, DAIA, DSA, L1230, and UCOA are excluded from this analysis. The purpose of this analysis is to estimate the change in the County'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 Provisions

Currently, for eligible retirees from the following bargaining units (SEIU Local 1021, AFSCME Local 2700, Western Council of Engineers, AFSCME Local 512, CCC Defenders Association, CCC Deputy District Attorneys, Probation Peace Officers, Employees' Association Local 1, IFPTE/AFL-CIO Local 21 and Management Classified & Exempt), the County subsidizes a portion of the monthly premium up to a specified cap. The cap varies depending on the medical plan elected and has not changed since 2011. The attached appendix contains a summary of the current plan provisions that were valued in the January 1, 2014 actuarial valuation for the affected bargaining groups along with the subsidy caps for each medical plan option.

Proposed Plan

The bargaining groups affected are as follows (SEIU Local 1021, AFSCME Local 2700, Western Council of Engineers, AFSCME Local 512, CCC Defenders Association, CCC Deputy District Attorneys, Probation Peace Officers, Employees' Association Local 1, IFPTE/AFL-CIO Local 21 and Management Classified & Exempt).

The proposed changes are as follows:

 Effective January 1, 2017, the medical premium tier structure will change from two tiers (retiree only, retiree plus one or more dependents) to three tiers (retiree only, retiree plus one dependent, and retiree plus two or more dependents) for Non-Medicare Retirees.

- 2. Effective when the three tier system goes into effect for Non-Medicare retirees, the County's premium caps established in 2011 will continue to apply: "retiree only" cap for single coverage and retiree plus one or more dependent cap applies for the retiree plus one dependent tier. Effective January 1, 2017, the County will increase the monthly medical plan premium subsidies for the new Retiree Plus Two or More Dependents tier (defined as Tier III) by \$150.
- 3. Effective January 1, 2021, the amount of the County monthly medical plan premium subsidy will increase by \$25 for the Medicare retiree only tier and for the Medicare retiree plus one or more dependents on Medicare tier.

Non-Medicare Retirees would remain blended and pooled with active employees for purposes of establishing premium rates, and there would be no change to dental benefits.

Results

The results are estimated as of January 1, 2016. The estimated costs are based on valuation results as of January 1, 2014, projected to January 1, 2016, and reflect actual health premiums for 2016. Only the liabilities for active and retired members of the affected bargaining groups are shown in the comparison below. Note that the proposed plan costs assume no change in the value of the implicit premium rate subsidy for retirees not yet eligible for Medicare. Under the proposed plan, the active and non-Medicare retiree premium rates would remain pooled and blended meaning an implicit rate subsidy would continue under the proposed plan. However, the liability associated with the implicit rate subsidy could increase, decrease, or stay approximately the same depending on the relative premium costs by rate tier for the new three tier premium structure. Since new relative costs by tier for the proposed three tier structure are not yet known, we could not value the effect the proposed three tier structure would have on the implicit rate subsidy liability.

	Current Plan	Proposal Plan	
	Est. at 1/1/2016	Est. at 1/1/2016	Difference
Present Value of Benefits			
Active Employees	\$376,570,000	\$384,360,000	\$7,790,000
Retirees	\$294,988,000	\$302,240,000	\$7,252,000
Total	\$671,558,000	\$686,600,000	\$15,042,000
Actuarial Accrued Liability			
Active Employees	\$272,959,000	\$278,857,000	\$5,898,000
Retirees	\$294,988,000	\$302,240,000	\$7,252,000
Total	\$567,947,000	\$581,097,000	\$13,150,000
Normal Cost Est. at June 30, 2016	\$17,555,000	\$17,901,000	\$346,000
Annual Required Contribution (ARC) Est. at 6/30/16	\$55,399,000	\$56,779,000	\$1,380,000

The enclosed Exhibits 1 and 2 show a breakdown for each affected bargaining group of the above comparison of liabilities under the current and proposed plans.

The items shown 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 County 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 **Allocated Assets** is the assets we allocated to calculate the Annual Required Contribution for each bargaining unit based on their AAL relative to the total AAL. The Allocated Assets remain unchanged between the various scenarios.

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 22 years remaining as of January 1, 2016.

The **Annual Expected County Explicit Subsidy** is equal to the expected County contributions for the 2016 calendar year.

The table below contains a 20 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 estimated projected benefit payments are based on employees and retirees as of the valuation date. Future employees are not reflected in the table below.

Calendar	Projected Benefit Payments				
Year	Current Plan	Proposed Plan	Difference		
2016	\$ 40,958,000	\$ 40,958,000	\$ 0		
2017	42,554,000	42,972,000	418,000		
2018	43,724,000	44,096,000	372,000		
2019	45,045,000	45,395,000	350,000		
2020	46,271,000	46,587,000	316,000		
2021	46,837,000	48,069,000	1,232,000		
2022	47,504,000	48,790,000	1,286,000		
2023	48,074,000	49,363,000	1,289,000		
2024	48,739,000	50,045,000	1,306,000		
2025	49,286,000	50,635,000	1,349,000		
2026	49,459,000	50,809,000	1,350,000		
2027	49,243,000	50,591,000	1,348,000		
2028	48,722,000	50,054,000	1,332,000		
2029	47,795,000	49,123,000	1,328,000		
2030	47,271,000	48,587,000	1,316,000		
2031	46,228,000	47,522,000	1,294,000		
2032	45,019,000	46,289,000	1,270,000		
2033	44,355,000	45,598,000	1,243,000		
2034	43,408,000	44,624,000	1,216,000		
2035	41,667,000	42,852,000	1,185,000		

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, dated August 8, 2014. Appendices A through C contain a description of the provisions, assumptions and data used in the January 1, 2014 valuation for the affected bargaining groups.

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 County have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the County and reasonable expectations); and which, in combination, offer our best estimate of anticipated experience affecting the County. 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 County.

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 County 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.

The estimates as of January 1, 2016, are based on actual health plan premiums for 2016, but are based on census data and assumptions specified in the January 1, 2014 actuarial valuation. Furthermore, 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 County 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.

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.

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

JRB:dv

Exhibit 1. Valuation Results by County's Bargaining Units - Current Plan Provisions

The following table shows the breakdown of valuation results rolled forward to 1/1/2016 by various bargaining units within the County affected by the proposed changes. The results shown excluded groups not affected by the change (CNA, PDOCC, DSA, DAIA, L1230, and UCOA).

Bargaining Unit	Total PVB	Current Active AAL	Current Retiree AAL	Total AAL	Allocated Assets	Normal Cost	22-Year Amortization	Annual Required Contribution
		(all amounts	shown below are	in thousands)				
SEIU, Local 1021	\$78,638	\$31,321	\$33,173	\$64,494	\$9,731	\$2,062	\$4,309	\$6,371
AFSCME, Local 2700	144,516	60,888	61,249	122,137	18,375	3,942	8,164	12,106
Western Council of Engineers	1,714	867	371	1,238	174	60	84	144
CCC Defenders Association	5,744	1,916	2,510	4,426	666	131	296	427
AFSCME, Local 512	41,149	15,717	20,609	36,326	5,677	855	2,411	3,266
CCC Deputy District Attorneys	5,717	2,814	1,180	3,994	547	161	271	432
Probation Peace Officers CCC	26,494	14,507	5,928	20,435	2,807	931	1,387	2,318
CCC Employees' Association Local 1	208,837	87,602	86,687	174,289	25,994	5,884	11,668	17,552
IFPTE/AFL-CIO, Local 21	78,588	41,571	23,973	65,544	9,528	2,552	4,407	6,959
Management Classified & Exempt	<u>80,161</u>	<u>15,756</u>	59,308	<u>75,064</u>	13,459	<u>977</u>	4,847	5,824
Total	\$671,558	\$272,959	\$294,988	\$567,947	\$86,958	\$17,555	\$37,844	\$55,399

Exhibit 2. Proposed Changes - Results by County's Bargaining Units

The following table shows the breakdown of results for the proposed changes by various bargaining units within the County as of January 1, 2016.

Bargaining Unit	Total PVB	Current Active AAL	Current Retiree AAL	Total AAL	Allocated Assets	Normal Cost	22-Year Amortization	Annual Required Contribution
	(all amounts shown below are in thousands)							
SEIU, Local 1021	\$80,411	\$31,967	\$34,078	\$66,045	\$9,731	\$2,100	\$4,431	\$6,531
AFSCME, Local 2700	147,841	62,203	62,855	125,058	18,375	4,022	8,394	12,416
Western Council of Engineers	1,742	884	374	1,258	174	61	85	146
CCC Defenders Association	5,849	1,951	2,558	4,509	666	133	302	435
AFSCME, Local 512	42,145	16,070	21,151	37,221	5,677	873	2,482	3,355
CCC Deputy District Attorneys	5,821	2,867	1,206	4,073	547	163	277	440
Probation Peace Officers CCC	26,979	14,750	6,047	20,797	2,807	939	1,415	2,354
CCC Employees' Association Local 1	213,459	89,528	88,755	178,283	25,994	6,005	11,982	17,987
IFPTE/AFL-CIO, Local 21	80,359	42,477	24,585	67,062	9,528	2,605	4,527	7,132
Management Classified & Exempt	81,994	<u>16,160</u>	60,631	<u>76,791</u>	13,459	1,000	4,983	<u>5.983</u>
Total	\$686,600	\$278,857	\$302,240	\$581,097	\$86,958	\$17,901	\$38,878	\$56,779
		Increase / (d	decrease) from	Current Plar	n Provisions			
SEIU, Local 1021	\$1,773	\$646	\$905	\$1,551	\$0	\$38	\$122	\$160
AFSCME, Local 2700	3,325	1,315	1,606	2,921	0	80	230	310
Western Council of Engineers	28	17	3	20	0	1	1	2
CCC Defenders Association	105	35	48	83	0	2	6	8
AFSCME, Local 512	996	353	542	895	0	18	71	89
CCC Deputy District Attorneys	104	53	26	79	0	2	6	8
Probation Peace Officers CCC	485	243	119	362	0	8	28	36
CCC Employees' Association Local 1	4,622	1,926	2,068	3,994	0	121	314	435
IFPTE/AFL-CIO, Local 21	1,771	906	612	1,518	0	53	120	173
Management Classified & Exempt	1,833	<u>404</u>	1,323	<u>1,727</u>	<u>0</u>	<u>23</u>	<u>136</u>	<u>159</u>
Total	\$15,042	\$5,898	\$7,252	\$13,150	\$0	\$346	\$1,034	\$1,380

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. For details, reference should be made to labor agreements.

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, 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.

Health Benefits

Currently, eligible retirees and their dependents are covered under the Contra Costa Health Plans, Health Net plans and Kaiser plans. 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,

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
21*		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 Maintence Program Unit	General
2D	Community Aide Unit	General	KL	Engineering Technician Unit	General
21	Service Line Supervisors Unit	General	KM	Sheriff's Non-Sworn Mgmt Unit	General
2R	Superior Court Reporters-Ex	General	KU	Probation Supervisors Unit	Safety
ЗА	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
ВС	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
ВН	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	Z 2	Non-Supervisory Project	General
FM	Unrep Muni Ct Reporter-Exempt	General	ZA	Supervisory Management	General
FR	Unrep Superior Ct Reptrs-Exempt	General	ZB	Non-Supervisory Management	General
FS	Unrep CI & 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 2016 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)	2016 Premium Rate	County's Subsidy for 2016	Retiree's Share for 2016
Contra Costa Health Plan A				
Retiree on Basic Plan	\$509.92	\$709.06	\$509.92	\$199.14
Retiree & 1 or more dependents on Basic Plan	1,214.90	1,689.37	1,214.90	474.47
Retiree on Medicare COB Plan	420.27	326.13	326.12	0.01
Retiree & 1 dependent on Medicare COB Plan	1,035.60	652.26	652.25	0.01
Family, 1 on Medicare COB Plan, and 1 or more on Basic Plan	1,125.25	978.40	978.39	0.01
Contra Costa Health Plan B				
Retiree on Basic Plan	528.50	786.01	528.50	257.51
Retiree & 1 or more dependents on Basic Plan	1,255.79	1,867.68	1,255.79	611.89
Retiree on Medicare COB Plan	444.63	335.91	335.90	0.01
Retiree & 1 dependent on Medicare COB Plan	1,088.06	671.82	671.81	0.01
Family, 1 on Medicare COB Plan, and 1 or more on Basic Plan	1,171.93	1,007.72	1,007.71	0.01
Kaiser Permanente – Plan A				
Retiree on Basic Plan	478.91	819.43	478.91	340.52
Retiree & 1 or more dependents on Basic Plan	1,115.84	1,910.33	1,115.84	794.49
Retiree on Medicare COB Plan	263.94	296.97	263.94	33.03
Retiree & 1 dependent on Medicare COB Plan	712.79	802.02	712.79	89.23
Retiree & 2 dependents on Medicare COB Plan	1,161.65	1,305.13	1,161.65	143.48
Kaiser Permanente – Plan B				
Retiree on Basic Plan	478.91	656.63	478.91	177.72
Retiree & 1 or more dependents on Basic Plan	1,115.84	1,529.95	1,115.84	414.11
Retiree on Medicare COB Plan	263.94	225.18	225.17	0.01
Retiree & 1 dependent on Medicare COB Plan	712.79	608.00	607.99	0.01
Retiree & 2 dependents on Medicare COB Plan	1,161.65	988.89	988.88	0.01
Health Net HMO – Plan A				
Retiree on Basic Plan	627.79	1,294.30	627.79	666.51
Retiree & 1 or more dependents on Basic Plan	1,540.02	3,175.02	1,540.02	1,635.00
Retiree on Medicare Seniority Plus Plan	409.69	545.59	409.69	135.90
Retiree & 1 dependent on Medicare Seniority Plus Plan	819.38	1,091.18	819.38	271.80
Retiree & 2 dependents on Medicare Seniority Plus Plan	1,229.07	1,636.76	1,229.07	407.69

Health Insurance Premium Rates (continued)

Medical Plan	County's Subsidy (Frozen in 2011)	2016 Premium Rate	County's Subsidy for 2016	Retiree's Share for 2016
Health Net HMO – Plan B				
Retiree on Basic Plan	\$627.79	\$900.03	\$627.79	\$272.24
Retiree & 1 or more dependents on Basic Plan	1,540.02	2,207.86	1,540.02	667.84
Retiree on Medicare Seniority Plus Plan	409.69	458.02	409.69	48.33
Retiree & 1 dependent on Medicare Seniority Plus Plan	819.38	916.04	819.38	96.66
Retiree & 2 dependents on Medicare Seniority Plus Plan	1,229.07	1,374.06	1,229.07	144.99
Health Net Medicare COB				
Retiree only	467.13	659.04	467.13	191.91
Retiree & spouse	934.29	1,318.08	934.29	383.79
Health Net CA & Nat'l PPO – Basic Plan A				
Retiree on PPO	604.60	1,699.52	604.60	1094.92
Retiree & 1 or more dependents on PPO Basic Plan	1,436.25	4,037.34	1,436.25	2,601.09
Retiree on PPO Medicare Plan with Medicare Part A & B	563.17	987.65	563.17	424.48
Retiree & 1 or more dependents on PPO Medicare Plan with Medicare Part A & B	1,126.24	1,975.31	1,126.24	849.07
Health Net CA & Nat'l PPO – Basic Plan B				
Retiree on PPO	604.60	1,529.99	604.60	925.39
Retiree & 1 or more dependents on PPO Basic Plan	1,436.25	3,634.58	1,436.25	2,198.33
Retiree on PPO Medicare Plan with Medicare Part A & B	563.17	897.02	563.17	333.85
Retiree & 1 or more dependents on PPO Medicare Plan with Medicare Part A & B	1,126.24	1,794.04	1,126.24	667.80

Dental Plan Premiums

The following table shows monthly retiree dental insurance premiums for the 2016 calendar year. County subsidies vary based on retiree's medical plan enrollment election and bargaining unit upon retirement.

Plan	Monthly Premiums
Delta Dental - \$1,800 Annual Maximum	
Retiree	\$ 44.27
Family	100.00
Delta Care (PMI)	
Retiree	\$ 29.06
Family	62.81

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 22 years remaining in the amortization period as of January 1, 2016. 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

<u>Healthy</u>: 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.

<u>Disabled</u>: 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 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 GuidelinesTM. Based on the carrier premium rates and relative age cost factors assumptions, we developed age adjusted monthly PMPM health costs for 2016 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	\$ 1,347	\$ 182		
CCHP B	1,656	381		
Kaiser A	1,478	263		
Kaiser B	1,241	256		
Health Net HMO A	2,277	478		
Health Net HMO B	1,745	397		
Health Net PPO	2,369	393		

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	Calendar						
Year	Pre 65	Year	Post 65				
2016	5.75%	2016	6.50%				
2017	6.50%	2017 – 2025	6.00%				
2018 – 2020	5.75%	2026 – 2032	5.75%				
2021 – 2023	6.50%	2033	6.00%				
2024 – 2028	6.25%	2034	6.75%				
2029	6.50%	2035	6.50%				
2030 - 2035	6.25%	2036 - 2042	6.25%				
2036	6.00%	2043 – 2045	6.00%				
2037 – 2040	5.75%	2046 - 2051	5.75%				
2041 – 2048	5.50%	2052 - 2059	5.50%				
2049 – 2063	5.25%	2060 - 2070	5.25%				
2064 – 2074	5.00%	2071 – 2076	5.00%				
2075 – 2079	4.75%	2077 – 2081	4.75%				
2080 +	4.50%	2082 +	4.50%				

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	SEIU, Local 1021	AFSCME, Local 2700	Western Council of Engineers	CCC Defenders Association	AFSCME, Local 512	CCC Deputy District Attorneys	Probation Peace Officers CCC	CCC Employees' Association Local 1	IFPTE/AFL- CIO, Local 21	Management Classified & Exempt	Total
Under 25	11	9	0	0	0	0	1	14	2	0	37
25 - 29	65	89	0	1	6	9	20	105	11	4	310
30 - 34	114	129	7	13	19	30	27	218	52	25	634
35 - 39	150	153	1	17	28	13	44	220	77	27	730
40 – 44	133	172	3	9	39	6	50	243	108	42	805
45 – 49	152	205	1	6	49	11	36	304	121	65	950
50 - 54	119	244	4	8	56	7	20	371	154	70	1053
55 – 59	98	236	1	3	38	6	8	303	149	48	890
60 - 64	75	149	1	0	20	0	4	207	91	31	578
65 & Over	<u>27</u>	<u>75</u>	<u>0</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>3</u>	<u>92</u>	<u>32</u>	<u>13</u>	<u>246</u>
Total	944	1,461	18	57	259	82	213	2,077	797	325	6,233

Current Retirees

Age	SEIU, Local 1021	AFSCME, Local 2700	Western Council of Engineers	CCC Defenders Association	AFSCME, Local 512	CCC Deputy District Attorneys	Probation Peace Officers CCC	CCC Employees' Association Local 1	IFPTE/AFL- CIO, Local 21	Management Classified & Exempt	Total
Under 50	2	2	0	0	1	0	6	12	0	4	27
50 – 54	11	23	0	1	9	0	8	28	9	15	104
55 – 59	33	65	0	9	20	3	12	112	54	48	356
60 - 64	96	168	0	5	66	1	9	201	93	124	763
65 - 69	139	244	1	3	91	2	10	301	73	236	1100
70 - 74	112	201	2	2	48	0	6	240	16	201	828
75 – 79	69	147	1	1	38	0	3	147	5	186	597
80 - 84	46	74	2	0	37	0	0	126	0	154	439
85 & Over	<u>65</u>	<u>121</u>	<u>3</u>	<u>0</u>	<u>28</u>	<u>0</u>	<u>0</u>	<u>148</u>	<u>0</u>	<u>216</u>	<u>581</u>
Total	573	1,045	9	21	338	6	54	1,315	250	1,184	4,795