

BARTEL
ASSOCIATES, LLC

**County of Marin
Retiree Healthcare Plan**

**Actuarial Valuation as of July 1, 2011
For Fiscal Years 2011/12 & 2012/13 GASB 45
Information
(Incorporating Results of MCERA 2008/2011
Experience Study)**

January 2012

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ACTUARIAL VALUATION CERTIFICATION

This report presents the July 1, 2011 actuarial valuation for the County of Marin Retiree Healthcare Plan (“Plan”). The purpose of this valuation is to:

- determine the Plan benefit obligations and funded status as of July 1, 2011 pursuant to Governmental Accounting Standards Board Statement No. 45 (GASB 45),
- calculate the County’s 2011/12 & 2012/13 fiscal year Annual Required Contribution for the Plan pursuant to GASB 45.

Use of this valuation for other purposes may not be appropriate.

This report includes the following sections:

- Section 1 presents a staff summary of the GASB 45 valuation results.
- Section 2 provides financial accounting information, including the 2011/12 & 2012/13 Annual Required Contributions.
- Section 3 provides the results of the actuarial valuation.
- Sections 4, 5, 6 and 7 summarize the census data, premium rates, Plan provisions, funding method, and actuarial assumptions that form the basis for this valuation.
- Section 8 provides a summary of GASB 45.

This report presents Bartel Associates’ valuation of the County of Marin Retiree Healthcare Plan in accordance with accepted actuarial principles and our understanding of GASB 45. Future valuations may differ significantly if Plan’s experience differs from our assumptions or if there are changes in plan design, actuarial methods or actuarial assumptions. The project scope did not include an analysis of this potential variation.

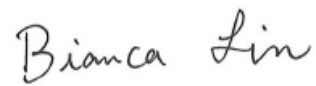
We have relied on demographic and premium information supplied by the County, which has been reviewed for general reasonableness, but not audited.

The undersigned are members of the American Academy of Actuaries and meet Academy Qualification Standards to render the actuarial results and opinions in this report.

Respectfully submitted,
Bartel Associates, LLC



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January, 2012

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Actuarial and Accounting Terminology Used in this Report

- AAL – Actuarial Accrued Liability
- AOC – Annual OPEB Cost
- ARC – Annual Required Contribution
- EAN – Entry Age Normal Cost Method
- GASB 45 – Governmental Accounting Standards Board Statement No. 45
- NC – Normal Cost
- NOO – Net OPEB Obligation
- OPEB – Other (than pensions) Post Employment Benefits
- PVPB – Present Value of all Projected Benefits
- UAAL – Unfunded Actuarial Accrued Liability

SECTION 1 STAFF SUMMARY

Plan Provisions

Under the current practice, the County allows eligible service and disability retirees and their dependents to continue health coverage in the County's medical and dental plans. The County pays a portion of the premiums based on date of hire.

- For retirees hired before October 1, 1987 (Plan 1), the County pays 100% of the eligible retiree's single health plan premiums.
- For retirees hired between October 1, 1987 and September 30, 1993 (Plan 2), the County pays the retiree's single health plan premiums up to \$2,275 per year.
- For retirees hired between October 1, 1993 and December 31, 2007 (Plan 3), the County pays a percentage of the retiree's single premium up to a dollar cap based on years of service at retirement, where the dollar cap is reviewed each year. Through January 1, 2007 the cap was increased to cover single Blue Cross Prudent Buyer Classic and Delta Dental premiums. Due to the amount of unfunded liability the County faces, the Board of Supervisors has implemented a policy to limit annual increases in the maximum allocation for Plan 3 to no more than 3%, subject to annual approval regarding whether any increase will be granted and, if so, the amount of the increase. Cap increases were 3% effective January 1, 2008 and January 1, 2009. No cap increases have been adopted since that time.
- For retirees hired on or after January 1, 2008 (Plan 4), the County pays \$150 per year of service up to \$3,000 per year for the retiree's single health plan premiums only.

Retirees eligible for Plans 1 and 2 may elect Plan 3 instead; and retirees eligible for Plans 1, 2, or 3 may elect Plan 4 instead.

Medical coverage is provided through Blue Cross and Kaiser. Blue Cross premiums vary by status (employee, retiree under age 65, retiree age 65 or over with Medicare). Kaiser premiums are the same for employees and retirees under age 65. To the extent these premium structures result in subsidies of retiree claim costs from premiums paid for employees by the County, an implied subsidy exists which under GASB 45 must be included in County post-retirement healthcare calculations.

Funding Policy

The County uses pay-as-you-go funding in conjunction with contributions to a reserve that is intended to be used to fund the plan. As of June 30, 2011 the planned balance in the reserve is approximately \$26 million on an all funds basis. This includes set-asides for FYs 2007/08, 2008/09, 2009/10 and 2010/11. In addition, the FY 2011/12 budget includes a planned set-aside of \$12 million all funds. In the future the County plans to transfer the reserve balance into an irrevocable trust dedicated to providing the postretirement healthcare benefits valued in this report.

SECTION 1
STAFF SUMMARY

Plan Changes since the Prior Valuation

Medical plan provisions were changed resulting in decreased costs to the County.

Actuarial Valuation Assumptions and Methods

Economic and demographic assumptions updated to reflect Marin County Employees' Retirement Association (MCERA) July 1, 2008-June 30, 2011 Actuarial Experience Study

Post-retirement mortality assumptions were updated to reflect future mortality improvement.

Minor changes were made to the assumptions regarding medical plan elections.

Post-retirement life insurance benefits, previously not included, were valued.

No changes were made to actuarial methods.

Results

The July 1, 2011 benefit obligations and the 2011/12 Plan cost are as follows using a 4.25% interest rate, based on assuming that the County will continue pay-as-you-go funding (amounts in 000's):

	<u>July 1, 2011</u>
■ Present Value of Projected Benefits (PVPB)	\$ 492,201
The Present Value of Benefits is a measure of the total County obligation for expected retiree healthcare benefits due to both past and future service for current employees and retirees.	
■ Actuarial Accrued Liability (AAL)	382,720
The Actuarial Accrued Liability is a measure of the County obligation for benefits earned or allocated to past service.	
■ Plan Assets	0
Plan Assets include funds that have been segregated and restricted in a trust so that they can only be used to pay plan benefits.	
■ Unfunded Actuarial Accrued Liability (UAAL)	382,720
The Unfunded Actuarial Accrued Liability is the excess of the AAL over Plan Assets. This represents the amount of the Actuarial Accrued Liability at the valuation date that must still be funded.	

SECTION 1
STAFF SUMMARY

	<u>2011/12</u> <u>Plan Cost</u>
<p>■ Normal Cost (NC)</p> <p>The Normal Cost is the value of benefits expected to be earned or allocated to the 2011/12 fiscal year.</p>	\$ 11,941
<p>■ Annual Required Contribution (ARC)</p> <p>The Annual Required Contribution is the sum of the Normal Cost plus a 30-year level percent of pay amortization of the Unfunded Actuarial Accrued Liability. It is determined as of the end of the 2011/12 fiscal year.</p>	27,182
<p>■ Estimated Annual OPEB Cost (AOC)</p> <p>The Annual OPEB Cost is the expense recognized on the County's income statement for providing post-retirement healthcare benefits. The AOC equals the ARC, adjusted for prior differences between the ARC and actual contributions.</p>	27,439

SECTION 2
ACCOUNTING INFORMATION

Assuming that the County continues pay-as-you-go funding, the following are the 2011/12 and 2012/13 ARCs, estimated AOCs, and the estimated June 30, 2011, June 30, 2012 and June 30, 2013 Net OPEB Obligations (NOO).

Annual Required Contribution (ARC)

The 2011/12 Annual Required Contribution determined by this valuation includes the Normal Cost and a 30-year amortization of the unfunded AAL, both as a level percentage of payroll and determined as of the end of the fiscal year (amounts in 000's):

	<u>July 1, 2009</u>		<u>July 1, 2011</u>	
	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>
■ Normal Cost	\$ 12,112	\$ 12,535	\$ 11,941	\$ 12,329
■ UAAL Amortization ¹	<u>14,363</u>	<u>15,059</u>	<u>15,241</u>	<u>15,877</u>
■ Total ARC	26,475	27,594	27,182	28,206
■ Projected Payroll	161,948	167,616	150,405	155,293
■ ARC as a % of Payroll	16.3%	16.5%	18.1%	18.2%

Annual OPEB Cost (AOC)

The AOC is equal to the ARC, except when the County has a Net OPEB Obligation (NOO) at the beginning of the year. When that happens, the AOC will equal the ARC adjusted for expected interest on the NOO and reduced by the amortization of the NOO included in the ARC. The end of year AOC for fiscal year 2011/12 and 2012/13 are determined as follows (amounts in 000's):

	<u>July 1, 2009</u>		<u>July 1, 2011</u>	
	<u>2009/10</u>	<u>2010/11</u>	<u>Estimated</u> <u>2011/12</u>	<u>Estimated</u> <u>2012/13</u>
■ ARC	\$ 26,475	\$ 27,594	\$ 27,182	\$ 28,206
■ Interest on NOO	2,843	3,595	4,085	4,754
■ Amortization of NOO	<u>(2,521)</u>	<u>(3,155)</u>	<u>(3,828)</u>	<u>(4,454)</u>
■ Total AOC	26,797	28,034	27,439	28,506
■ AOC as a % of Payroll	16.5%	16.7%	18.2%	18.4%

¹ Amortized as a level percent of payroll over rolling 30 years.

SECTION 2
ACCOUNTING INFORMATION

Net OPEB Obligation (NOO)

The NOO is the historical difference between the ARC and actual contributions. If an agency has always contributed the ARC, then the NOO equals zero. However, contributions have not been “made” for purposes of GASB 45 unless they have been segregated in an irrevocable trust for the sole purpose of paying plan benefits or used to pay premiums or benefits for the current year.

Based on the AOC developed on the prior page, the June 30, 2012 NOO and the June 30, 2013 NOO are estimated at year end as shown below. Final figures will be dependent on actual benefits paid and final NOO balances as of 6/30/2011 and 6/30/2012.

	<u>Actual</u> <u>2009/10</u>	<u>Estimated</u> <u>2010/11</u>	<u>Estimated</u> <u>2011/12</u>	<u>Estimated</u> <u>2012/13</u>
■ Beginning of Year NOO	\$ 63,180	\$ 79,898	\$ 96,121	\$ 111,853
■ <i>plus</i> AOC	26,797	28,034	27,439	28,506
■ <i>minus Expected Pay-Go Payments with Interest</i>				
• Estimated Benefits Paid	n/a	10,707	10,509	10,533
• Implied Subsidy Payments for FY ²	n/a	848	957	1,280
• Interest to End of Year	<u>n/a</u>	<u>257</u>	<u>241</u>	<u>248</u>
• Total Contributions	10,078	11,812	11,707	12,061
■ End of Year NOO	79,898	96,121	111,853	128,298

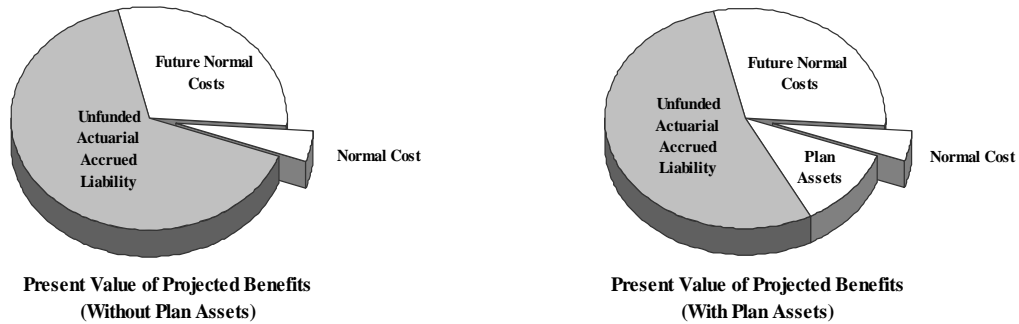
Since the source of the implied subsidies paid in 2011/12 and 2012/13 is employer-paid employee medical premiums, this implied subsidy amount should be subtracted from employer-paid employee medical premium payments recognized in the County’s financial statements.

² Through active employee premiums.

SECTION 3 ACTUARIAL VALUATION RESULTS

Actuarial Obligations

This report develops the AAL and Normal Cost using the Entry Age Normal actuarial cost method. It is designed to produce a Normal Cost that, if all assumptions are met, will generally be a level percent of payroll. The following charts illustrate a sample PVPB, both with and without plan assets, with the shaded area representing the unfunded AAL:



- **The Present Value of Projected Benefits (PVPB)** is a measure of the total County obligation for expected retiree healthcare benefits due to both past and future service for current employees and retirees.
- **The Actuarial Accrued Liability (AAL)** is a measure of the County obligation for benefits earned or allocated to past service.
- **The Normal Cost (NC)** is the value of County-provided benefits expected to be earned or allocated to the current fiscal year determined as of the end of the fiscal year.
- **Plan Assets** must be segregated in a trust for the sole purpose of paying Plan benefits in order to be considered Plan Assets for GASB 45.
- **The Unfunded Actuarial Accrued Liability (UAAL)** is the difference between the AAL and the Plan Assets.
- **Expected Benefit Payments** are the County-paid retiree healthcare benefit payments for the current fiscal year. It includes payments for current retirees and active employees expected to retire during the year.
- **The Annual Required Contribution** is the sum of the Normal Cost plus a 30-year level percent of pay amortization of the Unfunded Actuarial Accrued Liability (or less an amortization of excess assets) determined as of the end of the fiscal year.
- GASB45 requires that the **Implied Subsidy** for retirees be included in the AAL and the ARC for plans that are not community rated. An Implied Subsidy exists when the premium for a group of employees is determined by aggregating the experience of the group.

SECTION 3
ACTUARIAL VALUATION RESULTS

Benefit Obligations as of July 1, 2011

4.25% Interest Rate

(amounts in 000's)

■ Present Value of Benefits	
• Actives	\$ 287,362
• Retirees	<u>204,839</u>
• Total	492,201
■ Actuarial Accrued Liability	
• Actives	177,881
• Retirees	<u>204,839</u>
• Total	382,720
■ Assets	<u>0</u>
■ Unfunded AAL @ 7/1/2011	382,720

SECTION 3
ACTUARIAL VALUATION RESULTS

Annual Required Contribution (ARC) for 2011/12 and 2012/13³
4.25% Interest Rate
(amounts in 000's)

	<u>2011/12</u>	<u>2012/13</u>
■ ARC - \$		
• Normal Cost	\$ 11,941	\$ 12,329
• UAAL Amortization ⁴	<u>15,241</u>	<u>15,877</u>
• ARC	27,182	28,206
■ Projected Payroll⁵	150,405	155,293
■ ARC - %		
• Normal Cost	7.9%	7.9%
• UAAL Amortization	<u>10.2%</u>	<u>10.3%</u>
• ARC	18.1%	18.2%

³ Payable at end of fiscal year

⁴ Amortized as a level percent of payroll over rolling 30 years.

⁵ Payroll projected using aggregate payroll increase assumption.

SECTION 3
ACTUARIAL VALUATION RESULTS

Comparison of July 1, 2009 and July 1, 2011 Valuations
(amounts in 000's)

	July 1, 2009	July 1, 2011
■ Interest Rate	4.50%	4.25%
■ Present Value of Benefits		
• Actives	\$ 275,330	\$ 287,362
• Retirees	<u>194,680</u>	<u>204,839</u>
• Total	470,009	492,201
■ Actuarial Accrued Liability		
• Actives	165,254	177,881
• Retirees	<u>194,680</u>	<u>204,839</u>
• Total	359,934	382,720
■ Assets	0	0
■ Unfunded AAL	359,934	382,720
	2009/10	2011/12
■ ARC - \$		
• Normal Cost	\$ 12,112	\$ 11,941
• UAAL Amortization ⁶	<u>14,363</u>	<u>15,241</u>
• ARC	26,475	27,182
■ Projected Payroll⁷	161,948	150,405
■ ARC - %		
• Normal Cost	7.5%	7.9%
• UAAL Amortization	<u>8.8%</u>	<u>10.2%</u>
• ARC	16.3%	18.1%

⁶ Amortized as a level percent of payroll over rolling 30 years.

⁷ Payroll projected using aggregate payroll increase assumption.

SECTION 3
ACTUARIAL VALUATION RESULTS

Actuarial Gains/Losses
(amounts in 000's)

The impact of experience gains and losses as well as plan and assumption changes on the Actuarial Accrued Liability is shown below.

- The change to new medical plans resulted in a decrease in the actuarial accrued liability.
- There were experience gains due to keeping the Plan 3 cap at its 2010 level and medical premiums increasing less than expected since the last valuation. Post-retirement life insurance benefits, previously not included, were valued in this valuation and resulted in a small liability increase.
- Demographic and economic assumptions were updated to reflect the results of the new Marin County Employees' Retirement Association Experience Study for July 1, 2008 through June 30, 2011, including the reduction in the assumed inflation rate from 3.50% to 3.25%. The assumed interest rate was reduced from 4.50% to 4.25% and the long-term medical trend rate was lowered from 5.50% to 5.25% to reflect the reduced inflation assumption. Also, the post-retirement mortality assumption was adjusted for future mortality improvement and minor changes were made to the medical plan election assumption.

	<u>AAL</u>
■ Actual – 7/1/2009	\$ 359,934
■ Expected – 7/1/2011	395,233
■ Experience (Gains)/Losses	
• Premiums lower than expected	(13,010)
• No Plan 3 cap increase for 2011 and 2012	(9,437)
• Life Insurance	4,465
• Demographic & other	3,021
■ Total	(14,961)
■ Plan Change – New Medical Plans	(25,093)
■ Assumption Changes	
• Medical plan elections	743
• Future mortality improvement	16,241
• New Experience Study	10,557
■ Total	27,541
■ Total Change	(12,513)
■ Actual – 7/1/2011	382,720

SECTION 4
DEMOGRAPHIC INFORMATION

Participant Statistics – July 1, 2011

	Miscellaneous	Safety	Total
Actives			
Count	1,473	340	1,813
Average Age	50.1	41.7	48.5
Average Service	11.0	11.8	11.1
Average Pay	\$ 80,253	\$ 94,684	\$ 82,959
Total Pay (000's)	118,212	32,192	150,405
Retirees			
Count	n/a	n/a	1,397
Average Age	n/a	n/a	70.9

Medical Coverage – July 1, 2011

Medical Plan	Employees	Retirees Under 65	Retirees 65+	Total
Kaiser High	652	211	451	1,314
Kaiser High – Cost Plan	-	-	38	38
Kaiser Low	314	24	13	351
Kaiser Limited	199	8	5	212
Kaiser Silver	113	2	1	116
Kaiser – Out of State	-	8	19	27
Blue Cross PB Plus	5	35	170	210
Blue Cross PB Classic	222	102	182	506
Waived / Inactive	308	44	84	436
Total	1,813	434	963	3,210

Plan Coverage – July 1, 2011

Plan	Plan 1	Plan 2	Plan 3	Plan 4	Self-Paying Surviving Spouse	Total
Retirees	834	30	422	-	111	1,397
Actives	165	173	1,268	207	-	1,813

SECTION 4
DEMOGRAPHIC INFORMATION

Miscellaneous Employees
Age & Service Distribution

July 1, 2011

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	2	3	2	-	-	-	-	7
25-29	11	33	5	-	-	-	-	49
30-34	8	41	42	5	-	-	-	96
35-39	5	55	55	24	4	-	-	143
40-44	6	48	50	47	17	4	-	172
45-49	5	43	66	59	28	21	5	227
50-54	6	30	60	65	25	26	20	232
55-59	2	32	62	56	30	32	39	253
60-64	1	22	54	55	31	18	29	210
65 & Over	-	4	28	19	14	10	9	84
Total	46	311	424	330	149	111	102	1,473

SECTION 4
DEMOGRAPHIC INFORMATION

Safety Employees
Age & Service Distribution

July 1, 2011

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	1	1	-	-	-	-	-	2
25-29	10	18	4	-	-	-	-	32
30-34	4	14	34	4	-	-	-	56
35-39	1	6	24	26	1	-	-	58
40-44	-	5	19	20	23	9	-	76
45-49	-	3	6	8	17	13	5	52
50-54	-	2	2	7	5	9	13	38
55-59	-	-	4	1	3	2	7	17
60-64	-	1	4	1	-	-	1	7
65 & Over	-	-	1	1	-	-	-	2
Total	16	50	98	68	49	33	26	340

SECTION 4
DEMOGRAPHIC INFORMATION

All Employees
Age & Service Distribution

July 1, 2011

Age	County Service							Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25 & Over	
Under 25	3	4	2	-	-	-	-	9
25-29	21	51	9	-	-	-	-	81
30-34	12	55	76	9	-	-	-	152
35-39	6	61	79	50	5	-	-	201
40-44	6	53	69	67	40	13	-	248
45-49	5	46	72	67	45	34	10	279
50-54	6	32	62	72	30	35	33	270
55-59	2	32	66	57	33	34	46	270
60-64	1	23	58	56	31	18	30	217
65 & Over	-	4	29	20	14	10	9	86
Total	62	361	522	398	198	144	128	1,813

SECTION 5
PREMIUM RATES

2011 Monthly Premium Rates

Actives

Plan	Single	2-Party	Family
Kaiser High	\$ 578.89	\$ 1,157.78	\$ 1,539.86
Kaiser Low	566.28	1,132.56	1,506.31
Kaiser Limited	542.49	1,084.98	1,443.03
Kaiser Silver	517.40	1,034.80	1,376.28
Blue Cross PB Plus	1,628.97	3,293.96	4,173.52
Blue Cross PB Classic	920.96	1,865.44	2,363.81

Retirees

Plan	Non-Medicare			Medicare		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser High	\$ 578.89	\$ 1,157.78	\$ 1,539.86	\$ 424.13	\$ 848.26	n/a
Kaiser Low	566.28	1,132.56	1,506.31	381.20	762.40	n/a
Kaiser Limited	542.49	1,084.98	1,443.03	324.27	648.54	n/a
Kaiser Silver	517.40	1,034.80	1,376.28	259.98	519.96	n/a
Blue Cross PB Plus	1,394.50	2,860.55	3,660.53	945.67	1,892.46	n/a
Blue Cross PB Classic	930.13	1,896.31	2,414.61	589.60	1,179.18	n/a

Delta Dental 2011 monthly premiums are \$52.76 for single coverage, \$99.95 for 2-party coverage and \$155.36 for family coverage.

SECTION 5
PREMIUM RATES

2012 Monthly Premium Rates

Actives

Plan	Single	2-Party	Family
Kaiser High	Plan eliminated		
Kaiser Low	\$ 616.68	\$ 1,233.36	\$ 1,640.36
Kaiser Limited	Plan eliminated		
Kaiser Silver	557.51	1,115.03	1,482.99
Blue Cross PPO	889.06	1,800.82	2,281.93

Retirees

Plan	Non-Medicare			Medicare		
	Single	2-Party	Family	Single	2-Party	Family
Kaiser High	Plan eliminated					
Kaiser Low	\$ 616.68	\$ 1,233.36	\$ 1,640.36	\$ 378.44	\$ 756.88	n/a
Kaiser Limited	Plan eliminated					
Kaiser Silver	557.51	1,115.03	1,482.99	257.63	515.27	n/a
Blue Cross PPO	926.93	1,740.50	2,408.57	578.27	1,156.56	n/a

	Kaiser Low	Kaiser Silver	Blue Cross PPO
	Network	Network	Network
Calendar Year Deductible	None	None	\$500/member \$1,000/family
Annual Out-of-Pocket Maximums	\$1,500/member \$3,000/family	\$1,500/member \$3,000/family	\$3,000/member \$6,000/family
Lifetime Maximum	None	None	None
Hospital			
Inpatient Services	No charge	No charge	20%
Outpatient Surgery	\$5/procedure	\$25/procedure	20%
Physician Services			
Physician Office Visit	\$5/visit	\$25/visit	\$20/visit
Preventive Care	No charge	No charge	No charge
Diagnostic X-Ray and Lab	No charge	No charge	20%
Ambulance Service	\$50/trip	\$50/trip	20%
Emergency	\$50/visit	\$50/visit	\$50 ded. + 20%
Prescription Drugs			
Retail (30-day supply)	\$5/generic \$5/brand-name	\$10/generic \$25/brand-name	\$5/generic \$15/brand-name
Mail Order (90-day supply)	\$5/generic \$5/brand-name	\$20/generic \$50/brand-name	\$10/generic \$25/brand-name

SECTION 6
PLAN PROVISIONS

Benefits

Under current practice, the County allows eligible service and disability retirees and their dependents to continue health coverage in the County's medical and dental plans. The County pays a portion of the premiums based on date of hire. Retirees must have 5 years of County service to be eligible.

	Plan 1	Plan 2	Plan 3	Plan 4
Eligibility	Hired before 10/1/87	Hired between 10/1/08 and 9/30/93	Hired between 10/1/93 and 12/31/07	Hired on or after 1/1/08
Benefits	The County pays 100% of the eligible retiree's single health plan premiums.	The County pays the retiree's single health plan premiums up to \$2,275 per year.	The County pays a percentage of the retiree's single premium (and those for spouses of eligible retiree's with 30 years of service) up to a dollar cap (\$8,853 per year from 2009 to 2012) based on years of service at retirement ⁸	The County pays \$150 per year of service up to \$3,000 per year for the retiree's single health plan premiums only.

- The Plan 3 dollar cap is reviewed each year. Through January 1, 2007 the cap was increased to cover single Blue Cross Prudent Buyer Classic and Delta Dental premiums. Due to the amount of unfunded liability the County faces, the Board has implemented a policy to limit annual increases in the maximum allocation for Plan 3 to no more than 3%, subject to annual approval regarding whether any increase will be granted and, if so, the amount of the increase. The last cap increase was at 3% on January 1, 2009.
- Retirees eligible for Plans 1 and 2 may elect Plan 3 instead; and retirees eligible for Plans 1, 2, or 3 may elect Plan 4 instead.

The County also implicitly subsidizes a portion of retirees' benefits because non-Medicare retirees are charged the same premiums as employees for Kaiser participants. Blue Cross retirees are also charged premiums that are somewhat lower than the cost. Under GASB 45, the value of the implied subsidy must be included in the employer's ARC and AAL calculations to the extent that the employer pays at least the yearly implied subsidy in employee premiums.

The County also provides retirees with 20 years of service \$10,000 of life insurance and, on an 8-year phase-out basis, continuance of supplemental life coverage.

⁸ 100% for 20 years of service, prorated for those with less than 20 years of service.

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ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Data

Results were based on the demographic data as of July 1, 2011 provided by the County. Data has been reviewed for reasonability but not audited.

Actuarial Methods

The actuarial cost method used for this valuation is the Entry Age Normal (EAN) cost method. Under the EAN cost method, the plan's Normal Cost is developed as a level percent of payroll payable throughout the participants' working lifetime. The Actuarial Accrued Liability (AAL) is the cumulative value, on the valuation date, of prior Normal Costs. For retirees, the AAL is the present value of all projected benefits.

The unfunded AAL is amortized over a rolling 30-year period as a level percentage of payroll.

Actuarial Assumptions

Interest (Discount) rate

4.25%, assuming that the County does not prefund, but continues to use pay-as-you-go funding.

Inflation

Assumed to increase 3.25% per annum.

Aggregate Payroll

Assumed to increase 3.25% per annum. (Used to amortize unfunded AAL.)

Medical Care Cost Trend Rates

Year	Blue Cross / Kaiser	Kaiser Senior Advantage	Medicare B Premiums
2013	8.50%	8.50%	7.00%
2014	8.00%	8.00%	6.75%
2015	7.50%	7.50%	6.50%
2016	7.00%	7.00%	6.25%
2017	6.50%	6.50%	6.25%
2018	6.00%	6.00%	6.00%
2019	5.50%	5.50%	5.50%
2020+	5.25%	5.25%	5.25%

Plan 3 Cap Trend Rate 3.00% per year

Dental Care Cost Trend Rate 4.25% per year

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ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Monthly Claims Costs

Age	2011					
	Blue Cross Non-Medicare		Blue Cross Medicare		Kaiser	
	Male	Female	Male	Female	Male	Female
30	\$ 276	\$ 633	\$ 276	\$ 633	\$ 157	\$ 360
35	354	685	354	685	202	390
40	453	692	453	692	258	394
45	579	771	579	771	329	439
50	751	910	751	910	427	518
55	1,017	1,083	1,017	1,083	579	617
60	1,348	1,294	1,348	1,294	767	737
65	1,635	1,513	977	908	931	862
70	1,975	1,760	494	440	1,125	1,002
75	2,444	2,087	611	522	1,392	1,188
80	2,906	2,336	727	584	1,655	1,330
85	3,310	2,624	827	656	1,884	1,494

Age	2012					
	Blue Cross Non-Medicare		Blue Cross Medicare		Kaiser	
	Male	Female	Male	Female	Male	Female
30	\$ 238	\$ 545	\$ 238	\$ 545	\$ 177	\$ 405
35	305	590	305	590	227	438
40	391	597	391	597	290	443
45	499	665	499	665	370	493
50	647	784	647	784	481	582
55	877	934	877	934	651	693
60	1,162	1,115	1,162	1,115	863	828
65	1,409	1,304	842	782	1,046	968
70	1,702	1,517	426	379	1,264	1,127
75	2,107	1,799	527	450	1,564	1,336
80	2,505	2,013	626	503	1,860	1,495
85	2,852	2,261	713	565	2,118	1,679

Percentage of Future Retirees Participating in Medical Plans

	Service			
	<10	10-14	15-19	20+
Plan 1	100%	100%	100%	100%
Plan 2/3	75%	85%	90%	100%
Plan 4	60%	75%	80%	85%

SECTION 7
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Percentage of Future Retirees Participating in Dental Plans: 97.5%

Medical Plan Coverage after Retirement

Current Employees:

	2011		
	Plan 1	Plan 2/3	Plan 4
Blue Cross Prudent Buyer Classic	17.5%	25.0%	20.0%
Blue Cross Prudent Buyer Plus	17.5%	5.0%	0.0%
Kaiser High	<u>65.0%</u>	<u>70.0%</u>	<u>80.0%</u>
Total	100.0%	100.0%	100.0%

	2012+		
	Plan 1	Plan 2/3	Plan 4
Blue Cross PPO	35.0%	30.0%	20.0%
Kaiser Low	<u>65.0%</u>	<u>70.0%</u>	<u>80.0%</u>
Total	100.0%	100.0%	100.0%

Current Retirees and Beneficiaries: Current medical plan election in 2011. All Blue Cross members are assumed to elect Blue Cross PPO and all Kaiser California members are assumed to elect Kaiser Low for 2012 in the current 1-time election period that is being held due to the medical plan changes. Annual open enrollment is only available for employees and does not apply to retirees.

Election of Plan 3 at Retirement by Currently Employed Plan 1 and 2 Members

Plan 1 members with 30 years service and eligible spouses are assumed to elect Plan 3. All Plan 2 members are assumed to elect Plan 3.

Medicare Coverage

10% of those hired between July 1, 1967 and March 31, 1986 are assumed to be ineligible for Medicare.

Spouse Coverage

30 years of service at retirement: 80% of male retirees and 50% of female retirees cover a spouse. All others: 50% of male retirees and 20% of female retirees cover a spouse. Female spouse is assumed to be 3 years younger than male spouse.

Life Insurance

It was assumed that 50% of actives would have supplemental life insurance at retirement and that 50% of those with supplemental insurance would have double insurance.

SECTION 7
ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Salary Merit and Longevity Increases

Assumptions based on the Marin County Employees' Retirement Association Experience Study July 1, 2008 through June 30, 2011.

Service	Miscellaneous	Safety
0	5.00%	5.00%
1	4.00%	5.00%
2	3.00%	5.00%
3	2.00%	2.00%
4	1.00%	1.25%
5+	0.50%	1.25%

Demographic Assumptions

Assumptions based on the Marin County Employees' Retirement Association 2008-2011 Experience Study except for the allowance for future post-retirement mortality improvement.

Pre-retirement Probabilities Other than Retirement:

Miscellaneous

Age	Withdrawal and Vested Termination (by service)								
	0	1	2	3	4	5-9	10-14	15-19	20+
20	.150	.090	.070	.070	.070	.079	.053	.030	.000
35	.150	.090	.070	.070	.070	.068	.045	.025	.000
55	.150	.090	.070	.070	.070	.012	.000	.000	.000

Age	Death Male	Death Female	Disability Ordinary	Disability Duty
20	.00020	.00020	.00000	.00025
35	.00050	.00030	.00008	.00080
55	.00220	.00180	.00078	.00165

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ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Safety

Age	Withdrawal and Vested Termination (by service)								
	0	1	2	3	4	5-9	10-14	15-19	20+
20	.080	.050	.040	.040	.040	.021	.021	.021	.000
35	.080	.050	.040	.040	.040	.034	.034	.034	.000
55	.080	.050	.040	.040	.040	.000	.000	.000	.000

Age	Death Male	Death Female	Disability Ordinary	Disability Duty
20	.00020	.00020	.00020	.00061
35	.00050	.00030	.00070	.00302
55	.00220	.00180	.00460	.02145

Retirement Probabilities:

Age	10-29 Years of Service			30+ Years of Service		
	Misc	Safety 3%@50	Safety 3%@55	Misc	Safety 3%@50	Safety 3%@55
50	4%	25%	5%	4%	50%	25%
51	4%	10%	5%	4%	20%	25%
52	4%	10%	5%	4%	20%	25%
53	4%	10%	5%	4%	20%	25%
54	4%	10%	5%	4%	20%	25%
55	10%	25%	15%	25%	50%	30%
56	4%	25%	15%	25%	50%	30%
57	6%	25%	15%	25%	50%	30%
58	8%	25%	15%	25%	50%	30%
59	10%	25%	15%	25%	50%	30%
60	10%	100%	100%	35%	100%	100%
61	10%	100%	100%	35%	100%	100%
62	20%	100%	100%	35%	100%	100%
63	20%	100%	100%	35%	100%	100%
64	20%	100%	100%	35%	100%	100%
65-69	25%	100%	100%	35%	100%	100%
70	100%	100%	100%	100%	100%	100%

Post-retirement Mortality:

Service Retirements and Spouses: RP-2000 Combined Healthy Basic Mortality Table, projected fully generational using Projection Scale AA, with one-year setback for males and two-year setback for females.



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ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Disability Retirement: RP-2000 Combined Healthy Basic Mortality Table, projected fully generational using Projection Scale AA, with three-year setforward.

Sample life expectancies are shown below.

7/1/2011 Age	Service		7/1/2011 Age	Disability	
	Male	Female		Male	Female
50	34.8	37.3	50	31.3	32.6
55	29.7	32.3	55	26.2	27.7
60	24.8	27.5	60	21.4	23.1
65	20.1	22.9	65	17.0	18.8
70	15.9	18.6	70	13.1	14.9
75	12.1	14.8	75	9.7	11.5
80	8.8	11.3	80	6.8	8.5
85	6.2	8.3	85	4.7	6.1

SECTION 8

GASB OPEB SUMMARY

On June 21, 2004, the Governmental Accounting Standards Board approved Statement No. 45 (GASB 45), accounting standards for *other* (than pensions) *post employment benefits* (OPEB). Accounting for these benefits – primarily postretirement medical – can have significant impact on state and local government financial statements. This section summarizes GASB 45.

Background

Historically, most public sector entities have accounted for OPEB using a “pay-as-you-go” approach; very few have prefunded or even accrued for these benefits. This means OPEB costs are ignored while an employee renders service and recognized only after an employee retires. GASB argues this delayed recognition shifts “costs” from one taxpaying generation to another. The GASB position is that OPEB, like pension benefits, are a form of deferred compensation. Accordingly, GASB 45 requires recognizing OPEB (in the financial statement) *as employees render service* (and consequently earn the benefit), rather than when paid.

Effective Dates

GASB 45 effective dates are phased in similar to GASB Statement No. 34:

- Fiscal years beginning after December 15, 2006 for GASB 34 phase 1 governments (total annual revenue of \$100 million or more)
- Fiscal years beginning after December 15, 2007 for GASB 34 phase 2 governments (total annual revenue of \$10 million to \$100 million)
- Fiscal years beginning after December 15, 2008 for GASB 34 Phase 3 governments (total annual revenue less than \$10 million).

What Benefits are OPEB?

OPEB includes most post employment benefits, other than pensions, that employees are entitled to after leaving employment:

- Retiree medical
- Dental
- Prescription drug
- Vision
- Life insurance
- Outside group legal
- Long-term care
- Disability benefits outside a pension plan

OPEB does not include vacation, sick leave, COBRA, or ad hoc early retirement incentives, which fall under other GASB accounting statements.

SECTION 8

GASB OPEB SUMMARY

Accounting Standards

Under GASB 45, pay-as-you-go accounting is replaced with accrual accounting. This is virtually identical to GASB's approach under Statement No. 27, with the key financial statement components being an Annual Required Contribution, an Annual OPEB Cost, and a Net OPEB Obligation.

- **Annual Required Contribution (ARC):** GASB 45 doesn't require an agency to make up any shortfall (unfunded Actuarial Liability) immediately, nor does it allow an immediate credit for any excess Plan Assets. Instead, the difference is amortized over time. An agency's ARC is nothing more than the employer current Normal Cost (value of benefits being "earned" during a year), plus the amortized unfunded Actuarial Liability (or less the amortized excess Plan Assets). Simply put, the ARC is the value of benefits earned during the year plus (or minus) something to move the plan toward being on track for funding. GASB 45 allows actuaries to amortize the unfunded Actuarial Liability (or excess Plan Assets) on a level dollar or level percent of payroll basis. We believe most agencies will want to use a level percent of payroll amortization because it's more consistent with the budget process and how pension contributions are usually calculated. The ARC must be based on the underlying OPEB promise (as understood by the plan sponsor and employees).
- **Annual OPEB Cost (AOC):** The first year an agency complies with the new standards, the AOC equals the ARC. In subsequent years, the AOC will equal the ARC, adjusted for prior differences between the ARC and AOC.
- **Net OPEB Obligation (NOO):** An agency's NOO is the historical difference between actual contributions made and the ARC. If an agency has always contributed the ARC, the NOO equals zero. However, an agency has not "made" the contribution unless it has been set aside *and* cannot legally be used for any other purpose.

Implementation Process

The implementation process will be relatively straightforward: An agency will hire an actuary to calculate the ARC. The first time an agency does this, their AOC equals their ARC. The agency then decides whether to contribute all, none, or part of the ARC into a Trust that cannot legally be used for any purpose other than paying OPEB.

If an agency always contributes the ARC, then each subsequent year's AOC equals their ARC – and the NOO is zero. The first year an agency does *not* contribute the ARC; they must establish an NOO equal to the difference between their actual contribution and the ARC. The subsequent year's AOC equals the ARC, adjusted for discount and amortization of the NOO.

Disclosure Requirements

This may be the most important aspect of GASB 45. When disclosed, some agencies will show large OPEB unfunded liabilities, while others will show small or no unfunded liabilities. These differences *may* require an adjustment in an agency's bond rating.

SECTION 8
GASB OPEB SUMMARY

Plan sponsors must disclose in their financial statement footnotes:

- Basic plan information
 - Plan type
 - Benefits provided
 - Authority under which benefits were established
- Plan funding/contribution policy information:
 - Required contribution rates for active members and employers shown in dollars or as a percent of payroll
- Plan Funded Status information:
 - AOC and the dollar contributions actually made
 - If the employer has a NOO, also
 - Components of the AOC
 - NOO increase or decrease during the year
 - End of year NOO
 - 3-year history of
 - AOC
 - Percent of AOC contributed during the year
 - End of year NOO

Most recent year's plan Funded Status

Actuarial methods and assumptions used to determine the ARC, AOC, and Funded Status.

In addition, plan sponsors must provide 3 years of historical required supplementary information:

- Valuation dates
- Actuarial asset values
- Actuarial Liability
- Unfunded Actuarial Liability (excess Plan Assets)
- Plan funded ratio
- Annual covered payroll
- Ratio of unfunded Actuarial Liability (excess Plan Assets) to annual covered payroll
- Factors that significantly affect comparing the above information across the years.

SECTION 8

GASB OPEB SUMMARY

Defining the Plan

GASB 45 refers to the *substantive plan* as the basis for accounting. It may differ from the *written plan* in that it reflects the employer's cost sharing policy based on:

- Past practice or communication of intended changes to a plan's cost sharing provisions, or
- Past practice of cost increases in monetary benefits.

The substantive plan is the basis for allowing recognition of potential future plan changes.

What if retirees participate in the active healthcare plan, but are charged a rate based on composite active and retiree experience? (This was a contentious issue during the statement drafting, with one of the seven board members dissenting from Board adoption of the final statement.) In general, GASB 45 requires recognition of the implied subsidy. However, if benefits are provided through a community rated plan (premium rates based on experience of multiple employers rather than a single employer), and the same premium is charged for active and retired participants, it is appropriate to value unadjusted premiums.

Actuarial Assumptions and Discount Rate Requirements

Under GASB 45, the actuary must follow current actuarial standards of practice, which generally call for explicit assumptions – meaning each individual assumption represents the actuary's best estimate.

GASB 45 also requires basing the discount rate on the source of funds used to pay the benefits. This means the underlying expected long-term rate of return on Plan Assets for funded plans. Since the source of funds for unfunded plans is usually an agency's general fund, and California and most other state law restricts what investments agencies can have in their general fund, unfunded plans will need to use a low (for example, 4% to 5%) discount rate. If an agency sets up a Trust and diversifies Trust Plan Assets, however, the discount rate might be much higher depending on the Trust fund's expected long-term investment return.

Transition Issues

Typically, new accounting standards allow transition from old to new requirements. Because historical ARC calculations will rarely be available, GASB 45 takes a prospective transition approach: there is no requirement for an initial transition obligation. But if AOCs, before transition, were calculated consistently with the standard, a NOO at transition can be established at an agency's discretion.

Valuation Frequency Requirements and Small Plans

GASB 45 requires an actuarial valuation at least every two years for plans with more than 200 (active, inactive, and retired) members. Plans with fewer than 200 members will need a valuation every 3 years. In a significant departure from prior standards, though, GASB 45 allows plans with fewer than 100 members to elect a simplified measurement method not requiring an actuarial certification.