

**B**ARTEL  
ASSOCIATES, LLC

## **County of Marin Retiree Healthcare Plan**

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### **Actuarial Valuation as of July 1, 2009 For Fiscal Years 2009/10 & 2010/11 GASB 45 Information**

December 2010

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## ACTUARIAL VALUATION CERTIFICATION

This report presents the July 1, 2009 actuarial valuation for the County of Marin Retiree Healthcare Plan (“Plan”). The purpose of this valuation is to:

- determine the Plan benefit obligations as of July 1, 2009 pursuant to Governmental Accounting Standards Board Statement No. 45 (GASB 45),
- calculate the County’s 2009/10 fiscal year and 2010/11 fiscal year Annual Required Contribution for the Plan.

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 2009/10 and 2010/11 Annual Required Contribution.
- Section 3 provides the results of the actuarial valuation.
- Sections 4, 5, and 6 summarize the census data, plan provisions, funding method, and actuarial assumptions that form the basis for this valuation.
- Section 7 includes a summary of GASB OPEB.

This report presents Bartel Associates’ best estimate of the County of Marin Retiree Healthcare Plan liabilities and costs in accordance with accepted actuarial principles and our understanding of GASB 45.

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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Marilyn Oliver, FSA, MAAA  
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December, 2010

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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

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### **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.
- 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, and 2009/10 and a planned set-aside for FY 2010/11 of \$9 million. 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

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## Changes since the Prior Valuation

### Plan Changes

Plan 4 with reduced benefits was adopted for employees hired on or after January 1, 2008. Under Plan 4 the County pays \$150 per year of service up to \$3,000 per year towards the retiree's single health plan premiums only.

### Actuarial Valuation Assumptions and Methods

Assumptions have been updated based on new actuarial assumptions adopted by the Marin County Employees' Retirement Association in October of 2009. The assumption changes include lowering the assumed future inflation rate from 4.0% to 3.5%, and updating mortality tables and probabilities of retirement and termination based on 2006 – 2009 experience. For consistency with the lowering of the inflation assumption, the interest rate in this valuation was lowered from 5.0% to 4.5%; the long-term medical trend rate was lowered from 6.0% to 5.5%; and the Medicare B and dental trend rates were lowered by .50%.

Based on changes in policy and the pattern of recent increases in the Plan 3 cap<sup>1</sup>, we are assuming that future increases in the Plan 3 cap will be at 3% per year, rather than at the rate of increase in Blue Cross and Delta Dental Premiums.

Minor changes were made to the assumptions regarding medical plan elections and participation rates at retirement.

No changes were made to actuarial methods.

### Results

The July 1, 2009 benefit obligations and the 2009/10 Plan cost are as follows using a 4.50% interest rate, based on assuming that the County will continue pay-as-you-go funding (amounts in 000's):

	<u>July 1, 2009</u>
■ <b>Present Value of Projected Benefits (PVPB)</b>	\$ 470,009
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.	
■ <b>Actuarial Accrued Liability (AAL)</b>	359,934
The Actuarial Accrued Liability is a measure of the County obligation for benefits earned or allocated to past service.	

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<sup>1</sup> 3% increases in 2008 and 2009 caps and no increase in 2010 cap

**SECTION 1**  
**STAFF SUMMARY**

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<b>■ Plan Assets</b>	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.	
<b>■ Unfunded Actuarial Accrued Liability (UAAL)</b>	359,934
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.	
	<b><u>2009/10</u></b> <b><u>Plan Cost</u></b>
<b>■ Normal Cost (NC)</b>	\$ 12,112
The Normal Cost is the value of benefits expected to be earned or allocated to the 2009/10 fiscal year.	
<b>■ Annual Required Contribution (ARC)</b>	26,475
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 2009/10 fiscal year.	
<b>■ Annual OPEB Cost (AOC)</b>	26,797
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.	

**SECTION 2**  
**ACCOUNTING INFORMATION**

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Assuming that the County continues pay-as-you-go funding, the following are the 2009/10 and 2010/11 ARCs, AOCs, and the estimated June 30, 2010 and June 30, 2011 Net OPEB Obligations (NOO).

**Annual Required Contribution (ARC)**

The 2009/10 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>2009/10</u>	<u>2010/11</u>
■ Normal Cost	\$ 12,112	\$ 12,535
■ UAAL Amortization <sup>2</sup>	<u>14,363</u>	<u>15,059</u>
■ Total ARC	26,475	27,594
■ Projected Payroll	161,948	167,616
■ ARC as a % of Payroll	16.3%	16.5%

**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 an amortization of the NOO. The end of year AOC for fiscal year 2009/10 and 2010/11 are determined as follows (amounts in 000's):

	<u>2009/10</u>	<u>2010/11</u>
■ ARC	\$ 26,475	27,594
■ Interest on NOO	2,843	3,557
■ Amortization of NOO	<u>(2,521)</u>	<u>(3,155)</u>
■ Total AOC	26,797	27,996
■ AOC as a % of Payroll	16.5%	16.7%

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<sup>2</sup> Amortized as a level percent of payroll over rolling 30 years.



**SECTION 2**  
**ACCOUNTING INFORMATION**

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**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, 2010 NOO and the June 30, 2011 NOO are estimated at year end as shown below. Final figures will be dependent on actual benefits paid.

	<u>2009/10</u>	<u>2010/11</u>
■ Beginning of Year NOO	\$ 63,180	\$ 79,054
■ <i>plus</i> AOC	26,797	27,996
■ <i>minus Expected Pay-Go Payments with Interest</i>		
• Estimated Benefits Paid	9,940	10,707
• Implied Subsidy Payments for FY <sup>3</sup>	744	848
• Interest to End of Year	<u>238</u>	<u>257</u>
■ End of Year NOO	79,054	95,238

Since the source of the implied subsidies paid in 2009/10 and 2010/11 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.

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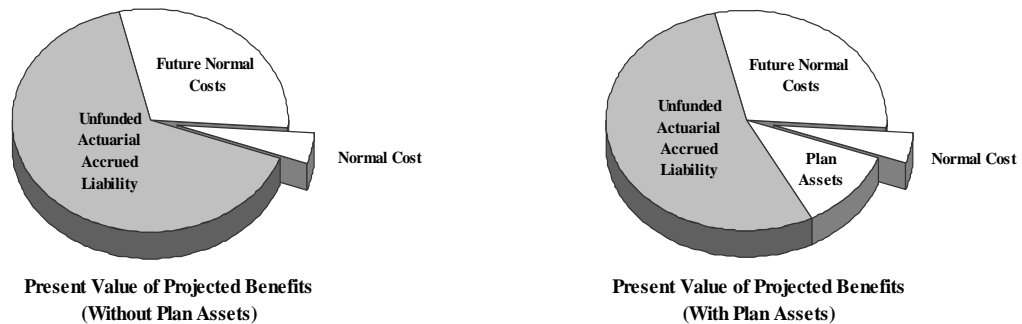
<sup>3</sup> Through active employee premiums.

## SECTION 3 ACTUARIAL VALUATION RESULTS

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### 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**

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**Benefit Obligations as of July 1, 2009**

**4.50% Interest Rate**

**(amounts in 000's)**

<b>■ Present Value of Benefits</b>	
• Actives	\$ 275,330
• Retirees	<u>194,680</u>
• Total	470,009
<b>■ Actuarial Accrued Liability</b>	
• Actives	165,254
• Retirees	<u>194,680</u>
• Total	359,934
<b>■ Assets</b>	<u>0</u>
<b>■ Unfunded AAL @ 7/1/2009</b>	359,934

**SECTION 3**  
**ACTUARIAL VALUATION RESULTS**

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**Annual Required Contribution (ARC) for 2009/10 and 2010/11<sup>4</sup>**  
**4.50% Interest Rate**  
**(amounts in 000's)**

	<u>2009/10</u>	<u>2010/11</u>
■ <b>ARC - \$</b>		
• Normal Cost	\$ 12,112	\$ 12,535
• UAAL Amortization <sup>5</sup>	<u>14,363</u>	<u>15,059</u>
• ARC	26,475	27,594
■ <b>Projected Payroll<sup>6</sup></b>	161,948	167,616
■ <b>ARC - %</b>		
• Normal Cost	7.5%	7.5%
• UAAL Amortization	<u>8.8%</u>	<u>9.0%</u>
• ARC	16.3%	16.5%

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<sup>4</sup> Payable at end of fiscal year

<sup>5</sup> Amortized as a level percent of payroll over rolling 30 years.

<sup>6</sup> Payroll projected using aggregate payroll increase assumption.

**SECTION 3**  
**ACTUARIAL VALUATION RESULTS**

**Comparison of July 1, 2005 and July 1, 2009 Valuations**  
(amounts in 000's)

	<u>July 1, 2005</u>	<u>July 1, 2009</u>	
■ Interest Rate	<u>5.00%</u>	<u>4.50%</u>	
■ Plan 3 Cap Increase	<b>Historic Levels<sup>7</sup></b>	<b>3%</b>	<b>3%<sup>8</sup></b>
■ Present Value of Benefits			
• Actives	\$ 416,025	\$ 266,115	\$ 275,330
• Retirees	<u>176,478</u>	<u>161,430</u>	<u>194,680</u>
• Total	592,503	427,545	470,009
■ Actuarial Accrued Liability			
• Actives	201,705	149,515	165,254
• Retirees	<u>176,478</u>	<u>161,430</u>	<u>194,680</u>
• Total	378,183	310,945	359,934
■ Assets	<u>0</u>	<u>0</u>	<u>0</u>
■ Unfunded AAL @ 7/1/2009	378,183	310,945	359,934
		<u>2007/08</u>	<u>2009/10</u>
■ ARC - \$	<b>Historic Levels</b>	<b>3%</b>	<b>3%</b>
• Normal Cost	\$ 23,577	\$ 13,331	\$ 12,112
• UAAL Amortization <sup>9</sup>	<u>17,688</u>	<u>13,464</u>	<u>14,363</u>
• ARC	41,265	26,795	26,475
■ Projected Payroll <sup>10</sup>	140,993	140,993	161,948
■ ARC - %			
• Normal Cost	16.7%	9.2%	7.5%
• UAAL Amortization	<u>12.5%</u>	<u>9.3%</u>	<u>8.8%</u>
• ARC	29.2%	18.5%	16.3%

<sup>7</sup> Used for GASB disclosure.

<sup>8</sup> Used for GASB disclosure. Incorporates Board-approved 0% increase between 2009 and 2010 caps.

<sup>9</sup> Amortized as a level percent of payroll over rolling 30 years.

<sup>10</sup> Payroll projected using aggregate payroll increase assumption.

**SECTION 3**  
**ACTUARIAL VALUATION RESULTS**

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**Actuarial Gains/Losses**  
**(amounts in 000's)**

The impact of experience gains and losses as well as assumption and plan changes on the Actuarial Accrued Liability is shown below. The Plan 3 cap increase assumption was lowered from the medical trend rate to 3%. Other assumption changes include demographic and economic changes implemented in the 6/30/2009 actuarial valuation of the retirement system and minor changes to the assumptions regarding participation and medical plan elections at retirement.

	<u>AAL</u>
■ Actual – 7/1/2005	\$ 378,183
■ Expected – 7/1/2009	510,564
■ Experience (Gains)/Losses	
• Premiums and Plan 3 cap lower than expected	(99,682)
• No plan 3 cap increase in 2010	(4,531)
• Demographic & other	(9,600)
■ Total	(113,813)
■ Assumption Changes	
• Plan 3 cap increase	(84,225)
• Interest rate, demographic and other assumption changes	47,833
■ Total	(36,392)
■ Plan Change <sup>11</sup>	(425)
■ Total Change	(150,630)
■ Actual – 7/1/2009	359,934

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<sup>11</sup> Addition of Plan 4.

**SECTION 4**  
**DEMOGRAPHIC INFORMATION**

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**Participant Statistics – July 1, 2009**

	Miscellaneous	Safety	Total
<b>Actives</b>			
Count	1,626	349	1,975
Average Age	49.5	41.3	48.0
Average Service	10.0	11.3	10.3
Average Pay	\$ 76,699	\$ 90,999	\$ 79,226
Total Pay (000's)	124,713	31,759	156,472
<b>Retirees</b>			
Count	1,061	217	1,278
Average Age	72.0	63.1	70.5

**Medical Coverage – July 1, 2009**

Medical Plan	Employees	Retiree Under 65	Retiree 65+	Total
Kaiser High	685	207	403	1,295
Kaiser High – Cost Plan	-	-	51	51
Kaiser Low	375	21	9	405
Kaiser Limited	260	6	3	269
Kaiser – Out of State	-	5	15	20
Blue Cross PB +	11	40	170	221
Blue Cross PB Classic	293	98	163	554
Waived / Inactive	351	33	54	438
Total	1,975	410	868	3,253

**Plan Coverage – July 1, 2009**

Plan	1	2	3	4	Self-Paying Surviving Spouse	Total
Retirees	833	28	327	-	90	1,278
Actives	240	216	1,393	126	-	1,975

**SECTION 4**  
**DEMOGRAPHIC INFORMATION**

**Miscellaneous Employees**  
**Age & Service/Salary Distribution**

**July 1, 2009**

Age		Service								Total
		Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under 25	Count	3	10	-	-	-	-	-	-	13
	Average Salary	57,676	57,032	-	-	-	-	-	-	57,180
25-29	Count	13	49	7	-	-	-	-	-	69
	Average Salary	57,747	62,381	57,306	-	-	-	-	-	60,993
30-34	Count	8	74	28	1	-	-	-	-	111
	Average Salary	59,492	71,586	72,796	94,790	-	-	-	-	71,229
35-39	Count	10	86	43	23	4	-	-	-	166
	Average Salary	73,826	66,915	79,602	74,407	68,631	-	-	-	71,697
40-44	Count	7	60	55	47	15	1	-	-	185
	Average Salary	75,916	76,459	82,740	81,376	69,935	74,900	-	-	79,017
45-49	Count	8	53	75	44	25	20	4	-	229
	Average Salary	52,592	71,039	74,554	76,150	92,951	74,846	72,707	-	75,282
50-54	Count	9	67	73	50	21	34	16	7	277
	Average Salary	58,785	74,234	78,028	80,203	78,488	87,469	79,344	84,656	78,315
55-59	Count	7	52	76	49	34	38	28	11	295
	Average Salary	87,754	70,996	80,077	82,205	77,168	88,764	103,187	98,233	82,666
60-64	Count	3	36	45	41	23	22	12	9	191
	Average Salary	74,492	77,667	81,337	77,877	74,237	80,431	78,215	109,232	79,954
65 & Over	Count	-	8	27	21	8	16	6	4	90
	Average Salary	-	83,032	65,990	73,871	76,752	70,537	91,566	113,880	74,942
Total	Count	68	495	429	276	130	131	66	31	1,626
	Average Salary	65,543	71,025	77,455	78,854	78,775	82,572	89,963	100,380	76,699



**SECTION 4**  
**DEMOGRAPHIC INFORMATION**

**Safety Employees**  
**Age & Service/Salary Distribution**

**July 1, 2009**

Age		Service								Total
		Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under 25	Count	2	4	-	-	-	-	-	-	6
	Average Salary	73,393	77,849	-	-	-	-	-	-	76,364
25-29	Count	3	22	5	-	-	-	-	-	30
	Average Salary	67,700	78,950	89,142	-	-	-	-	-	79,524
30-34	Count	1	23	32	3	-	-	-	-	59
	Average Salary	68,099	80,033	89,358	81,578	-	-	-	-	84,967
35-39	Count	-	13	31	16	9	-	-	-	69
	Average Salary	-	86,066	82,866	92,597	94,491	-	-	-	87,242
40-44	Count	2	10	18	13	20	6	-	-	69
	Average Salary	68,099	83,126	84,642	92,109	100,186	99,889	-	-	91,181
45-49	Count	1	1	7	9	13	17	3	-	51
	Average Salary	86,923	86,923	101,535	89,682	91,870	109,801	105,033	-	99,368
50-54	Count	2	1	4	1	6	12	6	4	36
	Average Salary	80,725	71,302	93,387	127,358	96,761	104,323	118,732	137,288	106,323
55-59	Count	-	2	5	2	1	7	3	-	20
	Average Salary	-	90,137	73,374	78,499	86,923	95,371	95,437	-	87,249
60-64	Count	-	1	2	1	1	2	1	1	9
	Average Salary	-	86,923	94,786	71,302	102,648	109,751	86,923	193,211	105,565
65 & Over	Count	-	-	-	-	-	-	-	-	-
	Average Salary	-	-	-	-	-	-	-	-	-
Total	Count	11	77	104	45	50	44	13	5	349
	Average Salary	72,960	81,359	86,907	90,811	96,371	104,657	107,748	148,473	90,999

**SECTION 4**  
**DEMOGRAPHIC INFORMATION**

**All Employees**  
**Age & Service/Salary Distribution**

**July 1, 2009**

Age		Service								Total
		Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30 & Over	
Under 25	Count	5	14	-	-	-	-	-	-	19
	Average Salary	63,963	62,980	-	-	-	-	-	-	63,238
25-29	Count	16	71	12	-	-	-	-	-	99
	Average Salary	59,613	67,515	70,571	-	-	-	-	-	66,608
30-34	Count	9	97	60	4	-	-	-	-	170
	Average Salary	60,448	73,589	81,629	84,881	-	-	-	-	75,997
35-39	Count	10	99	74	39	13	-	-	-	235
	Average Salary	73,826	69,430	80,969	81,870	86,534	-	-	-	76,261
40-44	Count	9	70	73	60	35	7	-	-	254
	Average Salary	74,179	77,412	83,209	83,701	87,221	96,319	-	-	82,322
45-49	Count	9	54	82	53	38	37	7	-	280
	Average Salary	56,407	71,333	76,858	78,448	92,581	90,906	86,561	-	79,669
50-54	Count	11	68	77	51	27	46	22	11	313
	Average Salary	62,774	74,191	78,826	81,127	82,549	91,866	90,086	103,795	81,536
55-59	Count	7	54	81	51	35	45	31	11	315
	Average Salary	87,754	71,705	79,663	82,059	77,446	89,792	102,437	98,233	82,957
60-64	Count	3	37	47	42	24	24	13	10	200
	Average Salary	74,492	77,918	81,909	77,720	75,421	82,874	78,885	117,630	81,106
65 & Over	Count	-	8	27	21	8	16	6	4	90
	Average Salary	-	83,032	65,990	73,871	76,752	70,537	91,566	113,880	74,942
Total	Count	79	572	533	321	180	175	79	36	1,975
	Average Salary	66,575	72,416	79,299	80,531	83,663	88,125	92,890	107,059	79,226



**SECTION 5  
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.

- 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 (and those for spouses of eligible retiree's with 30 years of service) up to a dollar cap (\$8,853 per year in 2009 and 2010) based on years of service at retirement<sup>12</sup>, 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 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.
- 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.

**2010 Monthly Premium Rates**

<b>Single Rates</b>	<b>Kaiser High</b>	<b>Kaiser Low</b>	<b>Kaiser Limited</b>	<b>BC PB Plus</b>	<b>BC PB Classic</b>
<b>Employee</b>	\$ 571.28	\$ 558.81	\$ 535.34	\$ 1,482.22	\$ 838.00
<b>Retirees under Age 65</b>	571.28	558.81	535.34	1,268.88	846.34
<b>Cost (65+, Closed Plan)</b>	748.61	na	na	na	na
<b>Senior Advantage (65+)</b>	394.12	365.35	317.56	na	na
<b>Retirees over Age 65</b>	na	na	na	860.48	536.49

Delta Dental 2010 monthly premiums are \$51.18.

<sup>12</sup> 100% for 20 years of service, prorated for those with less than 20 years of service.



**SECTION 6**  
**ACTUARIAL METHODS AND ASSUMPTIONS AND DATA**

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**Data**

Results were based on the demographic data as of July 1, 2009 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**

4.5%, assuming that the County does not prefund, but continues to use pay-as-you-go funding.

**Inflation**

Assumed to increase 3.5% per annum.

**Aggregate Payroll**

Assumed to increase 3.5% per annum. (Used to amortize unfunded AAL.)

**Medical Care Cost Trend Rates**

<u>Year</u>	<u>Blue Cross / Kaiser</u>	<u>Kaiser Senior Advantage</u>	<u>Medicare B Premiums</u>
2011	9.50%	9.50%	7.50%
2012	9.00%	9.00%	7.25%
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%

**Plan 3 Cap Trend Rate** 3.00% per year

**Dental Care Cost Trend Rate** 4.50% per year

**SECTION 6**  
**ACTUARIAL METHODS AND ASSUMPTIONS AND DATA**

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**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%

**Percentage of Future Retirees Participating in Dental Plans: 97.5%**

**Medical Plan Coverage after Retirement for those Participating in the Medical Plans**

Current Employees:

	<u>Plan 1</u>	<u>Plan 2/3/4</u>
Blue Cross Prudent Buyer Classic	20%	30%
Blue Cross Prudent Buyer Plus	20%	5%
Kaiser High	<u>60%</u>	<u>65%</u>
Total	100%	100%

Current Retirees and Beneficiaries: Current medical plan election.

**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.

**Salary Merit and Longevity Increases**

Assumptions used in the June 30, 2009 actuarial valuation of the Marin County Employees' Retirement Association. No increases are assumed after age 60.

<u>Service</u>	<u>Miscellaneous</u>	<u>Safety</u>
0	5.00%	8.00%
1	4.00%	3.00%
2	3.00%	1.50%
3	2.00%	1.00%
4	1.00%	.75%
5+	.50%	.75%

## SECTION 6

### ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

#### Demographic Assumptions

Assumptions used in the June 30, 2009 actuarial valuation of the Marin County Employees' Retirement Association.

#### Preretirement probabilities other than retirement:

##### Miscellaneous

Withdrawal and Vested Termination (by service)									
Age	0	1	2	3	4	5-9	10-14	15-19	20+
20	.150	.090	.070	.070	.070	.080	.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	.00050
35	.00050	.00030	.00015	.00160
55	.00220	.00180	.00155	.00330

##### Safety

Withdrawal and Vested Termination (by service)									
Age	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	.00121
35	.00050	.00030	.00070	.00605
55	.00220	.00180	.00460	.04290

## SECTION 6

### ACTUARIAL METHODS AND ASSUMPTIONS AND DATA

Retirement Probabilities:

Age	10-29 Years of Service			30+ Years of Service		
	Misc	Safety	Safety	Misc	Safety	Safety
		3% @50	3% @55		3% @50	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 to 2010 using Projection Scale AA, with one-year setback for males and two-year setback for females.

Disability Retirement: RP-2000 Combined Healthy Basic Mortality Table, projected to 2010 using Projection Scale AA, with three-year setforward.

## SECTION 7

### GASB OPEB SUMMARY

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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 7

### GASB OPEB SUMMARY

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#### 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 7**  
**GASB OPEB SUMMARY**

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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 7

### GASB OPEB SUMMARY

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#### **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.