



## **EL DORADO COUNTY**

### **POST RETIREMENT MEDICAL BENEFIT PROGRAM**

#### **Actuarial Valuation Report**

**Valuation Date:**

**July 1, 2008**

**Date of Report:**

**December 9, 2008**

# Executive Summary

## Background

El Dorado County provides retiree healthcare benefits to employees who retire from active service after the age of 50 and are eligible to commence pension benefits immediately. Retirees are eligible for the following benefits:

- **County Contribution Subsidy** – The County pays a monthly amount up to a percentage of the premium for the County sponsored Blue Shield Plan plus dental coverage. The applicable percentage is based on the retiree’s years of service with the County or other California city or county. The amount paid to each individual retiree may be limited such that total County contributions do not exceed 1.2% of total payroll.
- **Implicit Subsidy** – For coverage prior to age 65, the retiree pays premiums that are developed by blending active and retiree costs. Since retirees are older and generally cost more than actives, the premium paid by the retiree is less than the “true cost” of coverage for retirees. For example, under the Kaiser Plan, the estimated “true cost” for a male retiree of age 62 is \$1,249 per month, while the required premium is only \$608 per month. This implicit subsidy is considered an obligation under the new GASB requirements.

## GASB 45

In June 2004, the Governmental Accounting Standards Board (GASB) issued GASB Statement 45, which addresses accounting and financial reporting for Postemployment Benefits Other Than Pensions (OPEB). This statement replaces and significantly modifies prior guidance. GASB 45 is effective for Phase I governments for fiscal years beginning after December 15, 2006.

The liabilities and annual costs for the County’s contribution promises to retirees are calculated in this actuarial valuation in accordance with GASB 45. Similar to most government entities, the County does not currently recognize OPEB liability as benefits are accrued, or have a qualified trust for pre-funding. As this report shows, any required accrual determined on a GASB basis will be considerably higher than the amount on a pay-as-you-go basis.

## Executive Summary (cont.)

It is important to note that only current active and retired participants are valued in this actuarial report, as prescribed by GASB.

### *ARC Development*

GASB requires an Annual Required Contribution (ARC) to be developed each year based on the Plan's assets and liabilities. Although GASB does not actually require pre-funding, the portion of the ARC that is not funded each year accumulates as a liability on the County's financial statements.

The ARC can be developed under a variety of funding methods, as allowed by GASB. This report shows results under the Entry Age Normal cost method with the unfunded AAL amortized over a 20 year period as a level percent of pay. The Entry Age Normal cost method is used by CalPERS to develop the County's pension costs and is the most common method used in the public sector.

### **Benefit Limitations**

The basis for retiree contributions and the manner in which the 1.2% payroll cap applies to County contributions have a considerable effect on the GASB 45 valuation results. Specifically, the following issues must be considered:

- The County currently charges retirees blended (active and retiree experience) premium rates. This results in the implicit subsidy liability mentioned above. Changing this plan feature (i.e., charging rates based on retiree experience only) would affect valuation results by reducing liabilities.
- The cap currently considers the County contribution only. If the cap were to include the implicit subsidy, the total payments under the plan would be limited by the cap immediately and the liabilities would be significantly reduced.
- Treatment of the cap under the GASB guidance is dependent on the structure of the cap. A cap on individual employee benefits may be reflected in the calculations, however a limit that only applies to the overall County cost is not allowed to be reflected under the standard.

This valuation shows that County subsidy contributions are projected to reach the 1.2% payroll limit in the 2010-2011 fiscal year.

## Executive Summary (cont.)

It is important to note that GASB requires that the “substantive plan” be valued, including all legal or contractual obligations (i.e., the plan as understood by the employer and employees / retirees). Further, GASB addresses the types of limitations that should and should not be considered in the liability determination. Simply stated, a limitation on participant *benefits* may be recognized, but a limitation on the total *employer contribution* that has not historically impacted benefits “*should not be considered until such a cap is enforced and thereby begins to alter the established pattern of sharing of costs*”.

An instructed by the County, we have produced the GASB 45 accounting results in this report using the unlimited County Contribution. For illustration purposes, we show results assuming the 1.2% of payroll cap applies in the table below.

### *Results of Various Scenarios*

The following table summarizes liabilities and costs under various scenarios, based on a 4.5% discount rate:

	<b>Present Value of Benefits</b>	<b>Actuarial Accrued Liability</b>	<b>Normal Cost</b>	<b>ARC (millions)</b>
A) Implicit Subsidy	\$ 40,143,000	\$ 24,372,000	\$ 1,461,000	\$2.8
B) County Contribution (unlimited)	155,470,000	87,846,000	5,373,000	10.5
Total, (A) + (B)	195,613,000	112,218,000	6,834,000	13.3
C) County Contribution (1.2% cap)	73,233,000	41,379,000	2,543,000	5.0
Total, (A) + (C)	113,376,000	65,752,000	4,004,000	7.8

### *Brief Description of Scenarios*

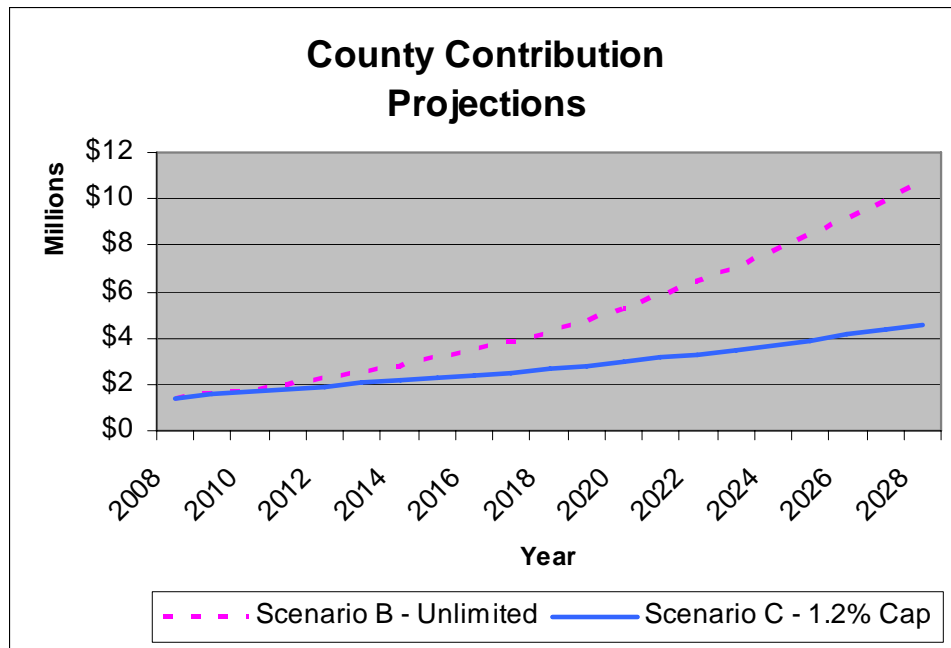
- Scenario A – the portion of costs currently attributable to the implicit subsidy (i.e., retiree premiums based on blended premiums).
- Scenario B – the portion of costs for the County contribution, assuming no payroll cap. The total includes the implicit subsidy.
- Scenario C – the portion of costs for the County contribution, assuming the 1.2% cap can be considered under GASB rules. The total includes the implicit subsidy. Considers population growth of 2.0% per year for payroll projections.

The ARC shown above is based on the Entry Age Normal with 20 year amortization of the unfunded AAL. These costs can be compared to the estimated pay-as-you-go funding amount – \$1.4 million for only the County contribution amount, or \$2.3 million if the implicit subsidy is included.

## Executive Summary (cont.)

### *Impact of Cap*

The graph below illustrates the impact of the County contribution cap on *current active and retired participants*. This graph is not intended to illustrate projected contributions for future new entrants. (For purposes of estimating the cap and how it would be allocated to current participants, the 2.0% population growth assumption was used.) Further, the implicit subsidy is not included in the amounts shown.



### **Summary of Results**

The remainder of this report summarizes what is referenced as Scenario B above, which assumes no payroll cap.

### *Actuarial Liability*

There are a few terms to understand related to the Plan's liabilities. The Present Value of Benefits (PVB) represents the actuarial present value of all future benefits expected to be paid to current employees and retirees. The Actuarial Accrued Liability (AAL) is the portion of the PVB attributable to past service. The Normal Cost is the portion of the PVB that is allocated to the current plan year for active employees.

## Executive Summary (cont.)

Each actuarial liability is a present value calculated by using a selected discount rate. As requested by the County, results in this report are shown using a 4.50% discount rate. The table below summarizes the liability results based on the 4.50% discount rate as of July 1, 2008:

	<b>4.5%</b>
Present Value of Benefits (PVB)	\$195,613,000
Actuarial Accrued Liability (AAL)	\$112,218,000
Normal Cost	\$6,834,000

Note: The AAL and normal cost shown above were calculated by spreading costs as a level percentage of pay. The costs could also be spread as level amounts, which would result in higher AAL and normal cost.

### *Discount Rate Selection*

As illustrated above, the discount rate can have a considerable impact on the magnitude of the liabilities, with lower discount rates resulting in higher liabilities. As guidance in selecting an appropriate discount rate, GASB states that the discount rate should be based on the long-term yield of investments used to finance the benefits.

For example, if the County pre-funded the obligations with contributions equivalent to the ARC into a trust with a mix of asset classes, 7.5% may be an appropriate discount rate. However, for an unfunded plan or in the case where contributions are simply allocated to separate accounts, but still reside in general assets, it may be more appropriate to consider the return on general County assets. Since the Plan is currently unfunded, the liabilities shown in the report are based on a 4.50% discount rate, as requested by the County.

If the County wants to better understand the long term advantages and disadvantages to pre-funding in a trust, a study which projects cash flow, accrual amounts, and balance sheet obligations based on current and future participants should be performed.

### *Annual Required Contributions (ARC)*

The following table summarizes the ARC for the fiscal years ending June 30, 2008 and June 30, 2009:

	<b>2007-2008</b>	<b>2008-2009</b>
ARC	\$12,521,000	\$13,339,000

Note that the ARC for both fiscal years were calculated based on the July 1, 2008 valuation results that are detailed in this report.

## Executive Summary (cont.)

The County has selected use of 20 year amortization for calculation of the ARC. GASB allows amortization of unfunded liabilities up to a 30 year period. Funding over a longer period reduces annual costs but extends the funding period. The ARC can be compared to the estimated pay-as-you-go funding amount – \$1,417,000 for only the County contribution amount, or \$2,282,000 if the implicit subsidy is included.

The results shown are developed by spreading costs as a level percent of payroll (\$129.3 million), as compared to a level dollar amount. Funding as a percent of payroll reduces current costs but increases future costs as County payroll increases.

### Comparison to Prior Valuation

The following table compares certain results to the prior valuation. Both sets of results are shown without regard to the 1.2% of payroll cap:

	<u>July 1, 2008</u>	<u>July 1, 2006</u>
Actuarial Accrued Liability (AAL)	\$ 112,218,000	\$ 81,414,000
Annual Required Contribution (ARC) – 20 year	13,339,000	9,777,000

The 2008 liabilities and annual costs are considerably higher than those from the 2006 valuation. Factors impacting results included:

- AAL, by its nature, grows each year as all participants get closer to receiving benefits and active participants accrue additional benefits.
- The use of a lower discount rate, 4.5% in 2008 compared to 5.5% in 2006, increased costs and liabilities by approximately 15%-20%.

### Sensitivity to Healthcare Trend

The healthcare trend rate also has a significant effect on the amounts reported. To illustrate, increasing the healthcare trend rates by one percentage point each year would increase the accrual by approximately 27%.

\* \* \*

The report shows detailed results by participant status, based on a 4.5% discount rate.

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# I Actuarial Valuation Certificate

This report presents the results of the actuarial valuation for El Dorado County Post Retirement Medical Benefit Programs as of July 1, 2008 for development of the Annual Required Contribution and disclosure items under Governmental Accounting Standards Board (GASB) Statement 45.

This report was prepared using generally accepted actuarial practices and methods. The actuarial assumptions used in the calculations are individually reasonable and reasonable in aggregate.

Aon Consulting did not audit the employee data and financial information used in this valuation. On the basis of our review of this data, we believe that the information is sufficiently complete and reliable, and that it is appropriate for the purposes intended.

Actuarial computations under GASB 45 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of these accounting standards. Determinations for purposes other than meeting Employer financial accounting requirements may be different from these results. As required by GASB 45, this valuation assumes this will be an ongoing plan. However, this assumption does not imply any obligation by the employer to continue the plan.

This report is intended for the sole use of El Dorado County. It is intended only to supply information for the County to comply with the stated purpose of the report and may not be appropriate for other business purposes. Reliance on information contained in this report by anyone for other than the intended purposes, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including El Dorado County should base any representations or warranties in any business agreement on any statements or conclusions contained in this report without the written consent of Aon Consulting.

The actuaries whose signatures appear below are Members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein. The actuaries are available to answer any questions with regard to the matters enumerated in this report.

## I Actuarial Valuation Certificate (cont.)

Aon's relationship with the Plan and the Plan Sponsor is strictly professional. There are no aspects of the relationship that may impair or appear to impair the objectivity of our work.

Respectfully submitted,



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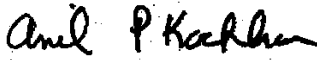


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December 9 2008

## II Plan Liabilities

The liabilities shown in this exhibit were calculated using a 4.5% discount rate as of the July 1, 2008 valuation date. These liabilities are utilized in the development of the Annual Required Contribution (ARC) under various alternatives shown in the following exhibit.

While GASB 45 allows the development of the ARC under various funding cost methods, this report shows the ARC under the Entry Age Normal cost method, which is based on the AAL liabilities.

The **Present Value of Benefits (PVB)** represents the actuarial present value of all benefits ever to be paid to current employees and retirees. The PVB follows:

	<b>County Contribution</b>	<b>Implicit Subsidy</b>	<b>Total</b>
<b>PVB</b>			
Retirees	\$ 31,557,000	\$ 12,190,000	\$ 43,747,000
Actives	123,913,000	27,953,000	151,866,000
<b>Total PVB</b>	155,470,000	40,143,000	195,613,000
PVB per Retiree	84,000	32,000	116,000
PVB per Active	66,000	15,000	80,000

## II Plan Liabilities (cont.)

The **Actuarial Accrued Liability (AAL)** is a portion of the PVB attributable to past service. For retirees and fully eligible active employees, the AAL is equal to the PVB. For other active employees, the AAL is the portion of the PVB deemed to be accrued to date. The **Normal Cost** is the portion of the PVB that is allocated to the current plan year for active employees.

The AAL in this report is based on the Entry Age Normal cost method and has been developed by spreading costs as a level percentage of payroll. Spreading costs as a level percent of payroll results in lower AAL (i.e. past service liability) and higher normal cost (i.e. future service liability) than if costs are spread as a level amount.

The AAL developed by spreading costs as a level percentage of payroll follows:

	<b>County Contribution</b>	<b>Implicit Subsidy</b>	<b>Total</b>
<b>AAL</b>			
Retirees	\$ 31,557,000	\$ 12,190,000	\$ 43,747,000
Actives	56,289,000	12,182,000	68,471,000
<b>Total AAL</b>	87,846,000	24,372,000	112,218,000
 <b>Normal Cost</b>	 5,373,000	 1,461,000	 6,834,000
 AAL per Retiree	 84,000	 32,000	 116,000
AAL per Active	30,000	6,000	36,000
 Normal Cost per Active	 2,800	 800	 3,600

### III Annual Required Contributions

The ARC amounts shown on this page are determined by amortizing future costs as a level percent of payroll. The level percent of payroll method will reduce current costs but increase future costs as County payroll increases over time.

The ARC amounts shown assume payments are made at the end of the year.

#### Entry Age Normal Cost Method

The Entry Age Normal method is also used to develop the County's pension costs. Under this method, the ARC is equal to the Normal Cost plus the amortization of the unfunded AAL over the selected period.

	<u>County Contribution</u>	<u>Implicit Subsidy</u>	<u>Total</u>
AAL	\$ 87,846,000	\$ 24,372,000	\$ 112,218,000
Assets	0	0	0
Unfunded AAL (UAAL)	87,846,000	24,372,000	112,218,000
Amortization of the UAAL	4,851,000	1,346,000	6,197,000
Normal Cost, end of year	5,615,000	1,527,000	7,142,000
ARC	10,466,000	2,873,000	13,339,000
% of pay	8.1%	2.2%	10.3%

The County has selected use of 20-year amortization for calculation of the ARC. GASB allows amortization of unfunded liabilities up to a 30-year period.

## IV Projected Benefit Payments

The following table shows the estimated projected net County benefit payments based on the current plan provisions, current plan participants, and the valuation assumptions used in this report. The payments would be equivalent to funding the liabilities on a pay-as-you-go basis.

<b>Year Ending June 30</b>	<b>Projected Distributions</b>		
	<b>County Contribution</b>	<b>Implicit Subsidy</b>	<b>Total</b>
2009	\$ 1,417,000	\$ 865,000	\$ 2,282,000
2010	1,599,000	988,000	2,587,000
2011	1,790,000	1,117,000	2,907,000
2012	2,012,000	1,162,000	3,174,000
2013	2,255,000	1,200,000	3,455,000
2014	2,536,000	1,300,000	3,836,000
2015	2,818,000	1,272,000	4,090,000
2016	3,149,000	1,309,000	4,458,000
2017	3,482,000	1,356,000	4,838,000
2018	3,871,000	1,466,000	5,337,000
2019	4,280,000	1,438,000	5,718,000
2020	4,731,000	1,438,000	6,169,000
2021	5,243,000	1,525,000	6,768,000
2022	5,812,000	1,626,000	7,438,000
2023	6,400,000	1,643,000	8,043,000
2024	7,027,000	1,669,000	8,696,000
2025	7,711,000	1,793,000	9,504,000
2026	8,404,000	1,930,000	10,334,000
2027	9,155,000	2,091,000	11,246,000
2028	9,962,000	2,078,000	12,040,000
2029	10,845,000	2,194,000	13,039,000
2030	11,726,000	2,378,000	14,104,000
2031	12,658,000	2,480,000	15,138,000
2032	13,617,000	2,579,000	16,196,000
2033	14,692,000	2,757,000	17,449,000
2034	15,785,000	2,726,000	18,511,000
2035	16,965,000	2,914,000	19,879,000
2036	18,350,000	2,985,000	21,335,000
2037	19,785,000	3,059,000	22,844,000
2038	21,308,000	3,191,000	24,499,000

## V GASB Reporting and Disclosure Information

GASB 45 requires certain items to be disclosed in the footnotes to the County's financial statements, including the following:

- Plan description
  - Name of plan and identification of the entity that administers plan
  - Brief description of the types of benefits
- Funding policy
  - Required contribution rates of plan members
  - Required contribution rates of employer

In addition, the tables below show required supplementary information to be shown with three years of historical information in the County's financial statements.

Information is shown assuming actual contributions will be equal to the expected benefit payments for the fiscal year. Amortization of the unfunded liability is based on an open 20 year period.

### *Development of Net OPEB Obligation (NOO) and Annual OPEB Cost (in thousands)*

Fiscal Year	Annual Required Contributions	Actual Contribution	NOO End of Year	Interest on Net OPEB Obligation	Adjustment to the Annual Required Contribution	Annual OPEB Cost	Interest Rate	Salary Scale	Amortization Factor
07/08	\$ 12,521	\$ 2,184	\$ 10,337	\$ 0	\$ 0	\$ 12,521	4.50%	3.50%	18.1
08/09	\$ 13,339	\$ 2,282	\$ 21,288	\$ 465	\$ (571)	\$ 13,233	4.50%	3.50%	18.1

### *Schedule of Funding Progress (in thousands)*

Type of Valuation	Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a Percent of Covered Payroll	Interest Rate	Salary Scale
Estimated	7/1/2008	\$ 0	\$ 102,983	\$ 102,983	0%	\$124,900	82.4%	4.50%	3.50%
Actual	7/1/2008	\$ 0	\$ 112,218	\$ 112,218	0%	\$129,300	86.8%	4.50%	3.50%

### *Schedule of Employer Contributions (in thousands)*

Fiscal Year Ending:	Annual OPEB Costs	Actual Contribution	Percentage Contribution	Net OPEB Obligation (Asset)
6/30/2008	\$ 12,521	\$ 2,184	17.4%	\$ 10,337
6/30/2009	\$ 13,339	\$ 2,282	17.1%	\$ 21,288

## VI Participant Information

### Retiree Age Distribution

Age	Number of Retirees
Under 50	5
50-54	19
55-59	86
60-64	120
65-69	73
70-74	32
75-79	25
80-84	13
85 & Up	3
Grand Total	376

Average Age – 64.0

### Active Employee Age/Service Distribution

Age	Years of Employment								Total
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 and up	
<b>Under 20</b>	1	0	0	0	0	0	0	0	<b>1</b>
<b>20 – 24</b>	18	25	0	0	0	0	0	0	<b>43</b>
<b>25 – 29</b>	26	100	23	0	0	0	0	0	<b>149</b>
<b>30 – 34</b>	23	99	49	7	0	0	0	0	<b>178</b>
<b>35 – 39</b>	21	90	45	31	7	0	0	0	<b>194</b>
<b>40 – 44</b>	22	72	71	31	24	8	0	0	<b>228</b>
<b>45 – 49</b>	23	96	75	36	58	23	3	0	<b>314</b>
<b>50 – 54</b>	20	93	80	44	54	40	21	5	<b>357</b>
<b>55 – 59</b>	10	53	63	28	44	36	12	7	<b>253</b>
<b>60 – 64</b>	5	27	40	18	18	10	5	7	<b>130</b>
<b>65 – Up</b>	1	6	12	8	4	6	2	2	<b>41</b>
<b>TOTAL</b>	<b>170</b>	<b>661</b>	<b>458</b>	<b>203</b>	<b>209</b>	<b>123</b>	<b>43</b>	<b>21</b>	<b>1,888</b>

Average Attained Age – 46.0

Average Service – 8.4



## VI Participant Information (cont.)

### Participant Distribution Across Medical Plans

	<u>Blue Shield</u>	<u>Kaiser</u>	<u>PacifiCare</u>	<u>Opt-Out</u>	<u>Total</u>
<i>Retirees</i>					
Under Age 65	148	72	10	n/a	230
Over Age 65	103	43	n/a	n/a	146
Total	<u>251</u>	<u>115</u>	<u>10</u>	<u>n/a</u>	<u>376</u>
<i>Actives</i>					
Under Age 65	869	350	174	451	1,844
Over Age 65	25	7	N/A	12	44
Total	<u>894</u>	<u>357</u>	<u>174</u>	<u>463</u>	<u>1,888</u>

## VII Summary of Principal Plan Provisions

The following plan provisions are the basis for the calculations in this actuarial study.

### 1. Benefit Eligibility

Retirement from County employment aged 50 or above. The employee must be enrolled in the County's healthcare program during the month prior to retirement. The retirement date is the date the CalPERS annuity payments begin.

### 2. Benefits Provided

County Contribution Subsidy – The County subsidy is determined with reference to cumulative total years of service with the County (un-represented unit employees are able to include additional service completed with any other California city or county, up to a maximum of 50% of actual County service completed). The subsidy is based on the employee only Blue Shield plus dental rate and is delineated as follows:

<u>Years of Service</u>	<u>County Paid % of Employee Only Blue Shield Rate</u>
0 – 11	0%
12 – 14	33%
15 – 19	50%
20 +	67%

Subsidized Medical Program – The County provides retirees access to the same medical coverage as active participants. Prior to age 65, the retiree premiums are the same as active premiums and are developed by blending active and retiree costs. The actuarial assumptions exhibit provides details of the premium rates. After age 65, retiree premiums are based exclusively on retiree costs.

### 3. Benefit Plans Covered

Eligible retirees may elect coverage under any of the County's medical, dental, and vision plans.

<u>Pre-Medicare</u>	<u>Post-Medicare</u>
Blue Shield PPO	Blue Shield
Kaiser HMO	Senior Advantage
PacifiCare HMO	
Dental & Vision	Dental & Vision

### 4. Spousal coverage

Spouses are covered by the retiree paying the full spouse health plan rate. Surviving spouses can continue membership by paying the rates applicable to a single retiree; there is no County subsidy payable.

## VIII Actuarial Assumptions

### 1. Valuation Date

July 1, 2008

### 2. Actuarial Cost Method

The Entry Age Normal (EAN) cost method spreads plan costs for each participant from entry date (assuming the plan existed on the employee's hire date) to the expected retirement date. Under the EAN cost method, the plan's normal cost is developed as a level percentage of payroll spread over the participants' working lifetime. The AAL is the cumulative value, on the valuation date, of prior service costs. For retirees, the AAL is the present value of all projected benefits.

The ARC under this method equals the normal cost plus the amortization of the unfunded AAL based on the following:

- 20 year amortization period
- Level percentage of future payroll amounts.

The Plan costs are derived by making certain specific assumptions as to the rates of interest, mortality, turnover, and the like, which are assumed to hold for many years into the future. Actual experience may differ somewhat from the assumptions and the effect of such differences is spread over all periods. Due to these differences, the costs determined by the valuation must be regarded as estimates of the true Plan costs.

### 3. Discount Rate

4.50% - This is based on the assumption that benefits will be paid from general County assets earmarked for purposes of County Postretirement Benefits, and not invested in a separate trust.

## VIII Actuarial Assumptions (cont.)

### 4. Payroll Increases

3.50% - This is the annual rate at which total payroll is expected to increase (for a constant population) and is used in the cost method to calculate the ARC as a level percent of payroll.

### 5. Payroll Amount Used to Determine 1.2% Cap

For purposes of determining the cap on County contributions, total payroll of \$129.3 million was assumed for the 2008/09 fiscal year. For this purpose, the County considers components such as workers compensation, deferred compensation, flex pay, unemployment, long-term disability, and life insurance costs.

### 6. Long-Term CPI

2.5%

### 7. Mortality

Mortality rates developed in the CalPERS Experience Study were used in the valuation. Sample post-retirement rates are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
50	0.0025	0.0014
55	0.0043	0.0025
60	0.0072	0.0044
65	0.0130	0.0080
70	0.0214	0.0128
75	0.0372	0.0216
80	0.0626	0.0388
85	0.1020	0.0722
90	0.1738	0.1259
95	0.2592	0.2177
100	0.3472	0.3204

## VIII Actuarial Assumptions (cont.)

### 8. Turnover

Turnover rates developed in the CalPERS Experience Study were used in the valuation. The following sample rates are based on age and service:

#### Miscellaneous 2% @ 55

Entry Age	Years of Service					
	0-1	1-2	2-3	3-4	4-5	5-6
20	0.17600	0.15610	0.13620	0.11630	0.09640	0.07650
25	0.16910	0.14920	0.12930	0.10940	0.08950	0.06960
30	0.16220	0.14230	0.12240	0.10250	0.08260	0.06270
35	0.15530	0.13530	0.11540	0.09550	0.07560	0.05570
40	0.14830	0.12840	0.10850	0.08860	0.06870	0.04880
45	0.14140	0.12150	0.10160	0.08170	0.06180	0.01550
50	0.13450	0.11460	0.09470	0.07480	0.05490	0.01290
55	0.12750	0.10760	0.08770	0.06780	0.04790	0.01040
60	0.12060	0.10070	0.08080	0.06090	0.04100	0.00780

#### Safety 3% @ 50

Entry Age	Years of Service					
	0-1	1-2	2-3	3-4	4-5	5-6
20	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
25	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
30	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
35	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
40	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
45	0.12990	0.08160	0.03480	0.03310	0.03140	0.02970
50	0.12990	0.08160	0.03480	0.03310	0.03140	0.01100
55	0.12990	0.08160	0.03480	0.03310	0.03140	0.01100

## VIII Actuarial Assumptions (cont.)

### 9. Disability

Disability rates developed in the CalPERS Experience Study were used in the valuation. Sample rates are as follows:

<u>Age</u>	<u>Miscellaneous 2% @ 55</u>		<u>Safety 3% @ 50</u>
	<u>Male</u>	<u>Female</u>	<u>Unisex</u>
20	0.00010	0.00010	0.00070
25	0.00020	0.00020	0.00290
30	0.00020	0.00040	0.00580
35	0.00080	0.00100	0.00870
40	0.00150	0.00160	0.01160
45	0.00240	0.00230	0.01450
50	0.00370	0.00350	0.01750
55	0.00490	0.00410	0.05940
60	0.00550	0.00390	0.06010

### 10. Retirement Rates

Retirement rates developed in the CalPERS Experience Study were used in the valuation. Safety 3% @ 50 rates were used for Safety employees and Miscellaneous 2% @ 55 rates were used for all other employees. Sample rates are as follows:

<u>Age</u>	<u>Miscellaneous 2% @ 55</u>	<u>Age</u>	<u>Safety 3% @ 50</u>
50	0.01450	50	0.04350
51	0.01060	51	0.03850
52	0.01140	52	0.06140
53	0.01500	53	0.06890
54	0.01990	54	0.07100
55	0.04750	55	0.08980
56	0.03950	56	0.06870
57	0.04270	57	0.08030
58	0.04730	58	0.07910
59	0.05100	59	0.08200
60	0.07150	60	1.00000
61	0.07150		
62	0.12750		
63	0.12870		
64	0.09310		
65	0.17380		
66	0.10850		
67	0.11090		
68	0.08780		
69	0.10350		
70	0.12240		

## VIII Actuarial Assumptions (cont.)

### 11. Annual Healthcare Inflation (“Trend”)

Annual healthcare costs were assumed to increase as follows:

<u>Year</u>	<u>Annual Rate</u>
2008	8.5%
2009	8.0%
2010	7.5%
2011	7.0%
2012	6.5%
2013	6.0%
2014	5.5%
2015+	5.0%

### 12. Monthly Health Plan Rates for 2008/2009

	<u>Without Dental</u>	<u>With Dental</u>
<b>Pre-Medicare</b>		
<b>Blue Shield Plan</b>		
Retiree Only	\$608	\$657
Retiree + 1 Dependent	\$1,149	\$1,237
<b>Kaiser Permanente HMO Plan</b>		
Retiree Only	\$476	\$525
Retiree + 1 Dependent	\$951	\$1,038
<b>PacifiCare HMO Plan</b>		
Retiree Only	\$436	\$485
Retiree +1 Dependent	\$891	\$978
<b>Medicare Eligible</b>		
<b>Blue Shield Plan</b>		
One in Medicare A & B	\$489	\$538
Two in Medicare A & B	\$910	\$998
<b>Kaiser Senior Advantage – Medicare + Choice HMO</b>		
One in Medicare A & B	\$383	\$400
Two in Medicare A & B	\$764	\$798

Future contribution rates are assumed to increase by the healthcare trend assumption shown above.

## VIII Actuarial Assumptions (cont.)

### 13. Monthly County Contribution Subsidy for 2008/2009

The County's contribution toward the retiree's premium is a percentage (depending on service at retirement) of the single Blue Shield annual rates shown above, as follows:

	Before Age 65	Age 65 and Older
Level 1 (67%)	\$440.00	\$361.00
Level 2 (50%)	\$329.00	\$269.00
Level 3 (33%)	\$217.00	\$178.00

Future contribution rates are assumed to increase by the healthcare trend assumption shown above.

### 14. Base Year Claims

For the medical plan, expected medical claims for retirees are developed based on the plan costs shown above and the participant demographics of each plan. The expected monthly claims for retirees follow:

Age	Blue Shield		Kaiser		PacifiCare	
	Male	Female	Male	Female	Male	Female
40	\$515.53	\$478.90	\$368.07	\$341.92	\$374.11	\$347.53
45	\$640.23	\$519.75	\$457.11	\$371.09	\$464.61	\$377.18
50	\$819.95	\$603.55	\$585.06	\$430.92	\$594.66	\$437.99
55	\$963.88	\$709.93	\$688.18	\$506.87	\$699.48	\$515.19
60	\$1,150.33	\$847.26	\$821.30	\$604.42	\$834.78	\$614.85
65	\$486.67	\$358.45	\$401.26	\$295.54	n/a	n/a
70	\$564.19	\$415.54	\$465.16	\$342.61	n/a	n/a

### 15. Retiree Contributions

Retirees are required to pay the portion of the plan premium rate not paid by the County (shown in the medical plan cost section above). Future contribution rates are assumed to increase by the healthcare trend assumption shown above.

### 16. Plan Participation

90% of future eligible retirees are assumed to elect coverage in one of the County's health plans at retirement.



## VIII Actuarial Assumptions (cont.)

### 17. Plan Election

Current retirees are assumed to continue coverage in the plan in which they are enrolled. Based on the enrollment of current retired and active participants, future retirees are assumed to elect plan coverage as follows:

Such future retirees are expected to elect plan options according to the following probabilities:

	<u>Pre-65</u>	<u>Post-65</u>
Medical		
Blue Shield	55%	55%
Kaiser	35%	35%
Waive medical	10%	10%
Dental & Vision	80%	80%
Waive Dental & Vision	20%	20%

### 18. Spouse Assumption

Current marital status and actual spouses' dates of birth are used for both active and retired employees.

### 19. Participants Valued

Only current active and retired participants are valued. No future entrants are considered in this valuation.

Part-time employees are assumed to continue working at their current schedule.

### 20. Population Growth

For purposes of projecting the 1.2% cap on County contributions, a 2.0% annual growth in County employee population was assumed.