LAS GALLINAS VALLEY SANITARY DISTRICT

Actuarial Valuation of

Postemployment Healthcare Benefits

Valuation Date: July 1, 2009

NICOLAY CONSULTING

NICOLAY CONSULTING GROUP

PENSION CONSULTANTS AND ACTUARIES

575 MARKET STREET
SUITE 2450
SAN FRANCISCO, CALIFORNIA 94105-2854

TEL: 415 512-5300
FAX: 415 512-5314

March 2, 2010

Mr. Mark R. Williams
General Manager
Las Gallinas Valley Sanitary District
300 Smith Ranch Road
San Rafael, CA 94903

Dear Mr. Williams:

Re: Actuarial Valuation of Postemployment Healthcare Plans

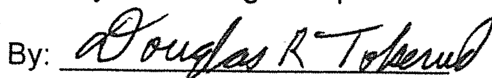
The Nicolay Consulting Group is pleased to present the results of the July 1, 2009 actuarial valuation of the Las Gallinas Valley Sanitary District postemployment healthcare plan. In preparing this report, we relied on employee data and plan information provided by the District. On the basis of that information, this report has been prepared in accordance with generally accepted actuarial principles and methods. It is our opinion that the actuarial assumptions used are reasonably related to the actual experience of the plan and to anticipated future experience.

The financial projections presented in this report are intended for internal use in evaluating the cost of the retiree medical program. Because future events frequently do not occur as expected, it should be recognized that there are usually differences between anticipated and actual results. These differences may be material, especially if there are significant changes in the employee or retiree population. Consequently, we can express no assurance that the projected values will occur. We recommend that the District obtain an updated actuarial valuation on a periodic basis. Questions about the report should be directed to Doug Tokerud at (415) 512-5300 x220.

I, the undersigned, meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

Sincerely,

Nicolay Consulting Group

By: 
Douglas R. Tokerud, F.S.A.
Member, American Academy of Actuaries

Las Gallinas Valley Sanitary District

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SECTION I
Glossary

- Accrual Accounting – A method of matching the cost of an employee's service, including long term obligations such as OPEB, to that employee's period of active service.
- Actuarial Accrued Liability (AAL) – The Actuarial Present Value of all postemployment benefits attributable to past service. Note: the AAL is sometimes referred to as the Past Service Liability.
- Actuarial Cost Method – A procedure for allocating the actuarial present value of benefits and expenses and for developing an actuarially equivalent allocation of such value to time periods, usually in the form of a Normal Cost and an Actuarial Accrued Liability.
- Actuarial Present Value – The value of an amount or series of amounts payable or receivable at various times. Each such amount or series of amounts is:

  a. adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, Social Security, marital status, etc.)

  b. multiplied by the probability of the occurrence of an event (such as survival, death, disability, termination of employment, etc.) on which the payment is conditioned, and

  c. discounted according to an assumed rate (or rates) of return to reflect the time value of money

- Actuarial Valuation – The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets and related Actuarial Present Values.
- Actuarial Value of Assets – The value of cash, investments and other property belonging to a plan. These are amounts that may be applied to fund the Actuarial Accrued Liability. Note: assets must be segregated and placed in a Trust in order to be considered OPEB assets
- Amortization Payment – That portion of the Annual OPEB cost which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

In the year that Statement 45 becomes effective an employer is allowed to commence amortization of the Unfunded Actuarial Accrued Liability, over a period not to exceed 30 years.

- Annual Other Postemployment Benefit Cost (OPEB) cost - An accrual-basis measure of the periodic cost of an employer's participation in a defined benefit OPEB plan. The annual OPEB cost is the amount that must be calculated and reported as an expense.

  When an employer has no net OPEB obligation (e.g., in the year of implementation) the annual OPEB cost is equal to the Annual Required Contribution (ARC).

  In subsequent years the Annual OPEB cost will include:

  - the ARC (equal to the Normal Cost plus one year's amortization of the Unfunded Actuarial Accrued Liability);
  - one year's interest on the net OPEB obligation at the beginning of the year using the valuation discount rate; and
  - an adjustment to the ARC. This adjustment is intended to provide a reasonable approximation of that portion of the ARC that consists of interest associated with past contribution deficiencies. GASB Statement No. 45 specifies that this adjustment should be equal to an amortization of the discounted present value of the net OPEB obligation at the beginning of the year. The amortization should be calculated using the same amortization method and period used in determining the ARC for that year. If the net OPEB obligation is positive the adjustment should be deducted from the ARC.
  - Note: As long as the net OPEB obligation is zero, there will not be any interest charge or adjustment to the ARC. However, if an employer does not contribute the full amount of the ARC, a net OPEB obligation will emerge.

- Annual required contributions of the employer (ARC) - The employer's periodic required contributions to a defined benefit OPEB plan, calculated in accordance with the parameters.

- Defined benefit OPEB plan - An OPEB plan having terms that specify the *benefits* to be provided at or after separation from employment. The benefits may be specified in dollars (for example, a flat dollar payment or an amount based on one or more factors, such as age, years of service, and compensation), or as a type or level of coverage (for example, prescription drugs or a percentage of healthcare insurance premiums).

- Defined contribution plan - A pension or OPEB plan having terms that (a) provide an individual account for each plan member and (b) specify how contributions to an active plan member's account are to be determined, rather than the income or other benefits the member or his beneficiaries are to receive at or after separation from employment. Those benefits will depend only on the amounts contributed to the member's account, earnings on investments of those contributions, and forfeitures of contributions made for other members that may be allocated to the member's account. For example, an employer may contribute a specified amount to each active member's postemployment healthcare account each month. At or after separation from employment, the balance of the account may be used by the member or on the member's behalf for the purchase of health insurance or other healthcare benefits.

- Employer's contributions - Contributions made in relation to the annual required contributions of the employer (ARC). An employer has made a contribution in relation to the ARC if the employer has (a) made payments of benefits directly to or on behalf of a retiree or beneficiary, (b) made premium payments to an insurer, or (c) irrevocably transferred assets to a trust, or an equivalent arrangement, in which plan assets are dedicated to providing benefits to retirees and their beneficiaries in accordance with the terms of the plan and are legally protected from creditors of the employer(s) or plan administrator.

- Entry Age Normal Actuarial Cost Method – An actuarial cost method under which the Actuarial Present Value of the Projected Benefits of each individual included in the valuation is allocated on a level basis over the earnings (used in this valuation) or service of the individual between entry age and assumed exit age(s). The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost.

- Healthcare cost trend rate - The rate of change in per capita health claims costs over time as a result of factors such as medical inflation, utilization of healthcare services, plan design, and technological developments.

- Investment return assumption (discount rate) - The rate used to adjust a series of future payments to reflect the time value of money.

- Net OPEB obligation - The cumulative difference since the effective date of GASB Statement 45 between annual OPEB cost and the employer's contributions to the plan, including the OPEB liability (asset) at transition, if any, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to OPEB-related debt.

  Most employers will have no net OPEB obligation at the beginning of the year in which Statement 45 is implemented.

If an employer contributes the annual OPEB cost to the plan each year, and there are no actuarial or investment gains or losses then the net OPEB Obligation will remain zero.

- Normal Cost - That portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Another interpretation is that the Normal Cost is the present value of future benefits that are "earned" by employees for service rendered during the current year.
- OPEB assets - The amount recognized by an employer for contributions to an OPEB plan greater than OPEB expenses.
- OPEB expense - The amount recognized by an employer in each accounting period for contributions to an OPEB plan on the accrual basis of accounting.
- Other postemployment benefits (OPEB) - Postemployment benefits other than pension benefits. Other postemployment benefits (OPEB) include postemployment healthcare benefits, regardless of the type of plan that provides them, and all postemployment benefits provided separately from a pension plan, except benefits defined as special termination benefits.
- Plan assets - Resources, usually in the form of stocks, bonds, and other classes of investments, that have been segregated and restricted in a trust, or in an equivalent arrangement, in which (a) employer contributions to the plan are irrevocable, (b) assets are dedicated to providing benefits to retirees and their beneficiaries, and (c) assets are legally protected from creditors of the employer(s) or plan administrator, for the payment of benefits in accordance with the terms of the plan.
- Present Value – See Actuarial Present Value.
- Projected Unit Credit Cost Method – An actuarial cost method under which the projected benefits of each individual included in an Actuarial Valuation are separately calculated and allocated to each year service by a consistent formula.
- Substantive plan - The terms of an OPEB plan as understood by the employer(s) and plan members.
- Unfunded Actuarial Accrued Liability (UAAL) – The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.
- Valuation date – The date as of which the postretirement benefit obligation is determined.

SECTION II
Introduction

The Las Gallinas Valley Sanitary District provides lifetime postretirement medical coverage to employees who retire at age 50 or older with at least 5 years of continuous PERS covered service with the organization. Coverage is also extended to spouses and surviving spouses of retirees. The District contributes an amount equal to the CalPERS premium rate for the coverage that the employee has elected, subject to certain maximum limits that vary depending on the individual's hire date or retirement date. This report provides an estimate of the District's liability as of July 1, 2009, illustrations of the effect of the GASB 45 accounting rules and a ten-year projection of the pay-as-you-go cost of providing the benefits. **Section III** contains valuation results. **Section IV** describes the plan and presents a demographic summary. **Section V** lists the actuarial assumptions used to complete the valuation.

Accounting Requirements

In July 2004 the Governmental Accounting Standards Board issued **Statement 45**, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. This statement requires governmental entities to begin accounting for postemployment benefits on an accrual basis. Under the new accounting rules, public entities that sponsor postemployment benefits are required to account for the cost of those benefits using accrual accounting rather than the more common pay-as-you-go accounting. This means that each employee's benefit will "accrue" throughout their working lifetime and that employers will be required to show the annual accruals as a current year expense. The change from pay-as-you-go accounting to accrual accounting has had a significant effect on the financial statements and balance sheets of many public sector employers.

Employers must adopt Statement 45 no later than the plan year that begins after December 15, 2006, 2007 or 2008 depending on the annual revenues of the entity (entities with total annual revenues of $100 million or more will adopt no later than the first year listed above, entities with total annual revenues of $10 to $100 million no later than the second year and entities with total annual revenues of less than $10 million will adopt no later than the third year). We understand that the District is adopting GASB 45 in the fiscal year ending June 30, 2010.

The District has advised us of its decision to join the California Employees' Retiree Benefit Trust (CERBT) during the fiscal year ending June 30, 2010. We also understand that the District intends to contribute the full Annual Required Contribution (ARC) (less benefits paid directly by the District) in this year and in future years.

SECTION III
Valuation Results

Table 2-1 contains estimates of the present value of the cost of postemployment medical benefits for current retirees and employees who are expected to receive the benefit. The estimates in Table 2-1 are based on a 7.75% discount rate. This is the rate specified by CalPERS for employers who participate in the CERBT and fund the full ARC each year.

A primary goal of GASB 45 is to recognize postemployment healthcare expense systematically over periods approximating employees' years of service. The Actuarial Accrued Liability represents the estimated present value of future benefits that are associated with past service rendered by employees and retirees. The Unfunded Actuarial Accrued Liability is the excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of any Assets.

Table 3-1
Present Value of Future Postretirement Medical Benefits*
As of July 1, 2009
Discount Rate: 7.75%

	Number of Employees	Present Value
Actives	16	$ 365,002
Retirees and Surviving Spouses	15	1,100,850
Total Actuarial Accrued Liability	31	$ 1,465,852
Actuarial Value of Assets		0
Unfunded Actuarial Accrued Liability		$ 1,465,852

**attributable to prior service*

Table 3-3 presents a summary of the Actuarial Accrued Liability, Plan Assets and Annual Required Contribution.

Table 3-3
Development of Illustrative 2009/10 Annual OPEB Cost
OPEB Annual Required Contribution

	Discount Rate 7.75%
Actuarial Accrued Liability	$ 1,465,852
Actuarial Value of Assets	0
Unfunded Actuarial Accrued Liability	$ 1,465,852
Remaining Amortization Period	30 years
Level percent of pay amortization factor (based on an assumed 3.25% annual payroll increase)	16.042
Annual Level Percentage of Pay Amortization of Unfunded AAL	$ 91,376
Normal Cost (Entry Age Normal Method)	42,619
Annual Required Contribution (ARC)*	**$ 133,995**
Interest on Net OPEB Obligation	0
Adjustment to ARC	0
Annual OPEB Cost (*including benefits paid for retirees*)	**$ 133,995**

*This is a GASB 45 term. It is somewhat of a misnomer. There actually is no requirement to fund more than the pay-as-you-go cost each year. However, this is the contribution amount necessary in order to use the 7.75% discount rate. Also, whatever portions of the Annual OPEB Cost are not contributed each year need to be added as a liability on the entity's balance sheet.

NOTE: The above values are based on the assumption that Las Gallinas Valley Sanitary District will join the CalPERS Trust and fund the full Annual Required Contribution each year. 7.75% is the discount rate that CalPERS requires and is the expected long-term return they expect to earn on Trust assets. A lower discount rate will likely be appropriate if Las Gallinas Valley Sanitary District joins a different trust or establishes its own trust. This would result in calculated costs higher than those shown above.

Table 3-4 presents a five-year projection under the assumptions that the District contributes the full Annual Required Contributions (ARC), that the discount rate remains at 7.75% and that the Normal Cost component of the ARC increases 5% per year throughout the five year period.

Table 3-4

Las Gallinas Valley Sanitary District

Five-year Projection of Annual OPEB Cost and Net OPEB Obligation
Based on the Entry Age Normal Actuarial Cost method, a 7.75% discount rate and full ARC funding

	2009/10	2010/11	2011/12	2012/13	2013/14
Actuarial Accrued Liability (AAL)	**$ 1,465,852**	**$ 1,539,885**	**$ 1,616,389**	**$ 1,699,714**	**$ 1,787,986**
Actuarial Value of Assets at beginning of year	**0**	**56,900**	**117,770**	**187,152**	**263,378**
Unfunded Actuarial Accrued Liability (UAAL)	**$ 1,465,852**	**$ 1,482,985**	**$ 1,498,619**	**$ 1,512,562**	**$ 1,524,608**
Remaining Amortization Period	**30**	**29**	**28**	**27**	**26**
Normal Cost	$ 42,619	$ 44,750	$ 46,987	$ 49,337	$ 51,804
Amortization of UAAL	91,376	94,020	96,735	99,517	102,371
Annual Required Contribution (ARC)	$ 133,995	$ 138,770	$ 143,722	$ 148,854	$ 154,175
Annual Required Contribution (ARC)	$ 133,995	$ 138,770	$ 143,722	$ 148,854	$ 154,175
Interest on net OPEB Obligation	0	0	0	0	0
Adjustment to ARC	(0)	(0)	(0)	(0)	(0)
Annual OPEB Cost	$ 133,995	$ 138,770	$ 143,722	$ 148,854	$ 154,175
District Contributions *	(133,995)	(138,770)	(143,722)	(148,854)	(154,175)
Increase in net OPEB Obligation	$ 0	$ 0	$ 0	$ 0	$ 0
Net OPEB Obligation - Beginning of Year	**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 0**
Net OPEB Obligation - End of Year	**$ 0**	**$ 0**	**$ 0**	**$ 0**	**$ 0**

*Equals Trust contributions plus benefits paid by District

Note: the ARC adjustment is calculated by dividing the beginning of year net OPEB obligation by the same amortization factor used to amortize the Unfunded Actuarial Accrued Liability.

SECTION IV

Summary of Post Employment Medical Plan Provisions

The District provides lifetime postretirement medical coverage to employees who retire from the District at age 50 or older with at least 5 years of continuous PERS covered service.

Coverage may be extended to the spouse and dependents depending on the coverage in effect at retirement. Spousal coverage is only available if they were married to the retiree at the time of retirement from the District and if the retiree chose a dual retirement payout from PERS at the time of retirement.

The amount of medical retirement coverage is divided into three groups:

Group 1 retired prior to January 1, 2003. Their benefit is based on a monthly cap which is increased by 6% each year. The monthly cap is $461.02 as of January 1, 2009 and may be used to cover the retiree and their spouse. So if the monthly premium for the retiree is less than $461.02, any overage will be paid to them if they have a qualifying spouse on their plan.

Group 2 was employed prior to January 1, 2003 and not retired as of that date. They receive the One Party rate which was $478 as of January 1, 2009. This rate is set by the California Department of Personnel Administration. This benefit is only available for the retiree so that if their individual cost falls below the $478, they only receive a benefit for the actual cost.

Group 3 was hired after January 1, 2003. They are part of the states' statutory plan per Government Code Section 22893. They can receive coverage for themselves and their dependents. The maximum amount of coverage is 100% for the retiree and 90% for dependents. Retirees have to work for the District for five years and have at least 10 years of PERS service to reach the minimum benefit of 50% coverage. The percentage of employer contribution increases 5% each year until 20 years of PERS service is reached with 100% coverage for the retiree and 90% for dependents. As of January 1, 2009 the contribution amounts are $478 for an individual, $909 for two party and $1,167 for family coverage. If a retiree has between five and less than ten years of service, they receive the contractual minimum monthly payment of $101 for 2009.

For all retirees the contractual minimum monthly payment which is determined by CalPERS each year is remitted directly to CalPERS. For 2009 it is $101 and 2010 it is $105.

Demographic Information

The District provided demographic information on all active and retired employees as of July 1, 2009. Tables 4-2 and 4-3 contain a summary of Age and Service based on Date of Hire.

Table 4-2

Age and Service Table for Active Employees
as of July 1, 2009

Years of Service

Age	<5	5-9	10-14	15-19	20-24	25+	Total
20-24	0	0	0	0	0	0	**0**
25-29	1	0	0	0	0	0	**1**
30-34	1	1	0	0	0	0	**2**
35-39	0	1	1	0	0	0	**2**
40-44	1	0	0	0	0	0	**1**
45-49	3	0	1	0	1	0	**5**
50-54	1	0	0	0	0	0	**1**
55-59	2	0	0	0	2	0	**4**
60-64	0	0	0	0	0	0	**0**
65-69	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	**0**
Total	**9**	**2**	**2**	**0**	**3**	**0**	**16**

Table 4-3

Age and Gender Table for Retired Employees

Age	Female	Male	Total
50-54	0	0	**0**
55-59	1	0	**1**
60-64	2	3	**5**
65-69	2	3	**5**
70-74	0	1	**1**
75-79	2	0	**2**
80-84	0	1	**1**
85 & Older	0	0	**0**
Total	7	8	**15**

SECTION V
Actuarial Method and Assumptions

Methodology

The valuation process uses a mathematical model to project the number of retirees and dependents in each future year. The health care trend rate assumption is used to project per capita health care costs. The expected benefits payable in each future year are calculated based on the projected number of retirees and dependents and the projected per capita costs.

The present value of the future benefits is calculated by discounting the expected benefit payments back to the valuation date. The present value of future benefits is then attributed to periods of an individual's active employment.

The Entry Age Normal (EAN) attribution method was used to complete this valuation. It is one of six attribution methods allowed by GASB 45. Under the EAN method, the cost of the projected benefit for each employee is spread over that employee's period of service from the date of hire to the expected date of retirement as a level percentage of payroll. The Normal Cost for the plan in a given year is the sum of the costs of the present value of future benefits "earned" by each employee for that year of service. The amount that would have been accrued to that date is called the Actuarial Accrued Liability.

In order to project the organization's liabilities into the future, a number of economic, demographic, and baseline cost assumptions are necessary. Where possible, we used the assumptions that match those used by PERS in the District's most recent pension valuation.

We assumed that current District employees will continue with the same medical plan election after retirement as they now have, and that current retirees will continue under their current elections.

CalPERS has indicated that its medical program is a "community rated" plan as described in GASB 45. This means that all participating employers located in the same region pay the same premium rates even though older employees and early retirees generally have higher medical costs than younger employees. If CalPERS changes its present practice and at a future date decides to modify the premium structure so that it charges more on average for non-Medicare retirees than for active employees, then

higher costs would need to be allocated to retirees, and this could result in a substantial increase in the District's Actuarial Accrued Liability and Annual Required Contribution. This potential increase could also occur if there ever is a ruling that CalPERS should not be treated as a community rated plan.

Valuation Date

The valuation date is July 1, 2009. This date is the starting point from which current health premium costs are increased according to the assumed annual rates of health care cost trend. The organization's census is projected from the valuation date to the date of the final benefit payment for each employee and retiree on the census. After calculating future costs for the projected retiree and dependent population, all liabilities are discounted back to the valuation date to obtain the present value of future costs.

Economic Assumptions

Discount Rate

A discount rate is required to calculate the present value of future benefit payments which are used to determine financial statement expense. We used a 7.75% discount rate for this valuation. This rate is representative of the long term rate of return that CalPERS expects to earn on its CERBT investments.

Payroll Increases

District Payroll is assumed to increase 3.25% per year. This assumption is used to develop the amortization of the Accrued Actuarial Liability over the remaining 30 years and is used in the calculation of current year normal cost.

Health Care Trend

The rate of increase in per capita health care costs is commonly referred to as the *health care trend* rate. Although the term "health care inflation" is sometimes used synonymously with the trend rate, health care inflation is only one of several components of the trend rate. The analysis recognizes the following influences on health care trend: pure medical inflation, utilization changes, technological changes, regulatory requirements, Medicare cost shifting, and aging.

Based on our extensive experience with postemployment health plans, we selected the following annual trend rates for use in this valuation. These rates were used to project future increases in CalPERS premium rates.

Table 5-1
Annual Health Care Cost
Trend Rate Assumption

the Plan Year Beginning	Estimated Increase
July 1, 2009	8.00%
July 1, 2010	7.70%
July 1, 2011	7.40%
July 1, 2012	7.10%
July 1, 2013	6.80%
July 1, 2014	6.50%
July 1, 2015	6.20%
July 1, 2016	5.90%
July 1, 2017	5.60%
July 1, 2018	5.30%
July 1, 2019 and thereafter	5.00%

We assumed that the CalPERS minimum benefit ($101.00 on 2009 and $105.00 for 2010) will increase 5% per year after 2010.

Medical Coverage After Retirement

We assumed that each eligible employee will elect the same medical coverage after retirement as their currently elected plan.

Administrative Expenses

We assumed that there are no additional administrative fees other than those included in the premium rates.

Plan Assets

As of July 1, 2009, the District had not prefunded any of its postemployment healthcare obligation.

Demographic Assumptions

In estimating this obligation, a number of demographic assumptions are needed. Tables 5.2, 5.3 and 5.4 reflect the same assumptions as those used in the most recent CalPERS valuation.

Withdrawal

We selected withdrawal rates that were used in the most recent California PERS Public Agency Miscellaneous retirement plan valuations. Sample rates are shown below.

Table 5-2

Annual Withdrawal Rates

	Entry Age						
Service	**20**	**25**	**30**	**35**	**40**	**45**	**50**
0	0.17600	0.16910	0.16220	0.15525	0.14830	0.14140	0.13450
1	0.15610	0.14920	0.14230	0.13535	0.12840	0.12150	0.11460
2	0.13620	0.12930	0.12240	0.11545	0.10850	0.10160	0.09470
3	0.11630	0.10940	0.10250	0.09555	0.08860	0.08170	0.07480
4	0.09640	0.08950	0.08260	0.07565	0.06870	0.06180	0.05490
5	0.07650	0.06965	0.06270	0.05575	0.04880	0.03085	0.01290
6	0.07270	0.06580	0.05880	0.05190	0.04500	0.02810	0.01120
7	0.06890	0.06190	0.05500	0.04815	0.04110	0.02535	0.00960
8	0.06500	0.05805	0.05120	0.04425	0.03730	0.02265	0.00800
9	0.06120	0.05430	0.04730	0.04040	0.03350	0.02000	0.00650
10	0.05740	0.05045	0.04350	0.03660	0.00950	0.00730	0.00510
15	0.04460	0.03755	0.03070	0.00645	0.00460	0.00270	0.00080
20	0.03180	0.02490	0.00410	0.00250	0.00090	0.00055	0.00020
25	0.01900	0.00215	0.00090	0.00055	0.00020	0.00020	0.00020
30	0.00100	0.00060	0.00020	0.00020	0.00020	0.00020	0.00020
35	0.00020	0.00020	0.00020	0.00020	0.00020	0.00010	0.00000

Retirement Rates

We used the retirement rates that were used in the most recent California PERS 2.7% @55 retirement plan valuation. Selected rates are shown below.

Table 5-3

Annual Rates of Retirement

Age	Males	Females
50	5.0 %	7.0 %
51	2.0 %	5.0 %
52	3.0 %	5.0 %
53	3.0 %	6.0 %
54	4.0 %	6.0 %
55	9.0 %	10.0 %
56	7.0 %	8.0 %
57	8.0 %	7.0 %
58	8.0 %	10.0 %
59	10.0 %	9.0 %
60	17.0 %	13.0 %
61	16.0 %	11.0 %
62	28.0 %	23.0 %
63	23.0 %	20.0 %
64	16.0 %	14.0 %
65	27.0 %	27.0 %
66	15.0 %	16.0 %
67	13.0 %	16.0 %
68	13.0 %	12.0 %
69	10.0 %	14.0 %
70	100.0 %	100.0 %

Mortality

The mortality rates used in this valuation are the rates used in the most recent California PERS pension valuation. Annual mortality rates for selected ages are shown in Table 5-4.

Table 5-4
Sample Mortality Rates

	Active Employees		Retired Employees	
Age	Male	Female	Male	Female
55	0.248%	0.178%	0.429%	0.253%
60	0.344%	0.256%	0.721%	0.442%
65	0.480%	0.369%	1.302%	0.795%
70	0.671%	0.537%	2.135%	1.276%
75			3.716%	2.156%
80			6.256%	3.883%
85			10.195%	7.219%
90			17.379%	12.592%

Disability Retirement

Because of the low incidence of disability retirements we did not value disability retirement.

Health Plan Participation

We assumed that 100% of eligible retirees will enroll in postemployment medical plans and that active employees with a currently covered spouse will elect coverage of the same spouse after retirement.

Medicare Coverage

We assumed that all future retirees will be eligible for Medicare when they reach age 65. When this occurs, the premium rates decline significantly under all CalPERS medical plan choices, as can be seen in Table 4-1.

Spouse Age Difference

Males are assumed to be three years older than their spouses.

Surviving Spouse Coverage

Surviving spouses are allowed to remain insured after the death of a covered retiree. However, a surviving spouse cannot add a new spouse to the plan.