

**LAS GALLINAS VALLEY
SANITARY DISTRICT**

**Actuarial Valuation of
Postemployment Healthcare Benefits
Valuation Date: July 1, 2011**



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February 16, 2012

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, 2011 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:

A handwritten signature in blue ink that reads "Douglas R. Tokerud".

Douglas R. Tokerud, F.S.A.

Member, American Academy of Actuaries

LAS GALLINAS VALLEY SANITARY DISTRICT

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Valuation Date: July 1, 2011

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.
- 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, 2011, 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.

We understand that the District adopted GASB 45 in the fiscal year ending June 30, 2010 and it is prefunding the obligation by joining the California Employees' Retiree Benefit Trust (CERBT) and annually contributing the full Annual Required Contribution (ARC) less benefits paid directly by the District.

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.

GASB 45 requires employers to recognize postemployment healthcare expense systematically over periods approximating employees' years of service. The **Actuarial Accrued Liability (AAL)** represents the estimated present value of future benefits that are associated with past service rendered by employees and retirees. The **Unfunded Actuarial Accrued Liability (UAAL)** is the excess of the Actuarial Accrued Liability over the **Actuarial Value of Assets**.

Table 3-1 illustrates the District's July 1, 2011 AAL. The valuation results are based on 7.61%, 7.06%, and 6.39% discount rates assuming that the District continues pre-funding its postemployment benefit program by contributing each year's Annual Required Contribution (ARC) to the California Employers' Retiree Benefit Trust (CERBT) and selects Asset Allocation Strategy 1 (7.61% discount rate), Asset Allocation Strategy 2 (7.06% discount rate) or Asset Allocation Strategy 3 (6.39% discount rate). This valuation was completed using the Entry Age Normal Actuarial Cost method and assuming a closed 30-year amortization of the Unfunded Actuarial Accrued Liability using the level percentage of payroll amortization method. We assumed that 2 years of amortization have occurred and 28 years remain.

**Table 3-1
Present Value of Future Benefit Cost Attributable to Past Service**

As of July 1, 2011

	----- Discount Rate -----		
	<u>7.61%</u>	<u>7.06%</u>	<u>6.39%</u>
Active Employees	\$857,721	\$938,111	\$1,042,407
Retirees and Surviving Spouses	<u>\$1,146,685</u>	<u>\$1,208,073</u>	<u>\$1,290,715</u>
Total AAL	\$2,004,406	\$2,146,184	\$2,333,122
Actuarial Value of Assets	<u>\$160,698</u>	<u>\$160,698</u>	<u>\$160,698</u>
UAAL	\$1,843,708	\$1,985,486	\$2,172,424

Projected Health Benefit Costs

Table 3-2 contains a ten-year projection of the District's cost to provide postemployment benefits to current and future retirees. The table illustrates the pay-as-you-go cost based on current and projected premium rates.

**Table 3-2
Projected Future Annual Cost
of Postemployment Medical Benefits**

<u>Estimated Year</u>	<u>Premium Rate Cost</u>
2011/12	\$74,236
2012/13	\$81,594
2013/14	\$90,494
2014/15	\$100,700
2015/16	\$110,604
2016/17	\$122,531
2017/18	\$135,345
2018/19	\$147,803
2019/20	\$162,390
2020/21	\$176,891

Health Benefit Costs Under GASB 45

The District's financial statements contain disclosure of information regarding funding, costs and provisions of the postemployment plans. The following Tables provide illustrations of the estimated liability and financial statement expense that will appear in the District's June 30, 2012 financial statement.

The Annual Required Contribution (ARC) consists of the Normal Cost plus the portion of the Unfunded Actuarial Accrued Liability that is to be amortized in the current period. We assumed level percent of payroll amortization over a closed 30-year period starting July 1, 2009.

The Normal Cost is that portion of the Actuarial Present Value of benefits and expenses which is allocated to a valuation year by an 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. In this valuation we used the Entry Age Normal method and an attribution period that runs from date of hire until retirement.

Table 3-3 illustrates the District's 2011/12 Annual OPEB Cost based on 7.61%, 7.06% and 6.39% discount rates.

Table 3-3			
Development of 2011/12 fiscal year Annual OPEB Cost			
	----- Discount Rate -----		
	<u>7.61%</u>	<u>7.06%</u>	<u>6.39%</u>
Total AAL	\$2,004,406	\$2,146,184	\$2,333,122
Actuarial Value of Assets	<u>\$160,698</u>	<u>\$160,698</u>	<u>\$160,698</u>
UAAL	\$1,843,708	\$1,985,486	\$2,172,424
Remaining Amortization Period	28 yrs.	28 yrs.	28 yrs.
Level percent of pay amortization factor (based on an assumed 3.25% annual payroll increase)	15.732	16.731	18.082
Annual Amortization of UAAL	\$117,195	\$118,670	\$120,141
Normal Cost	<u>\$58,762</u>	<u>\$65,429</u>	<u>\$76,158</u>
Annual Required Contribution	<u>\$175,957</u>	<u>\$184,099</u>	<u>\$196,299</u>
Interest on OPEB Obligation	\$0	\$0	\$0
Adjustment to ARC	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Annual OPEB Cost	<u>\$175,957</u>	<u>\$184,099</u>	<u>\$196,299</u>

Table 3-4a presents a five-year projection under the assumptions that the District contributes the full Annual Required Contributions (ARC), that the discount rate remains at 7.61% and that the Normal Cost component of the ARC increases 5% per year throughout the five year period.

Table 3-4a
Las Gallinas Valley Sanitary District
Five-year Projection of Annual OPEB Cost and Net OPEB Obligation
 Based on a 7.61% discount rate and
 assuming full Annual OPEB Cost funding

	2011/12	2012/13	2013/14	2014/15	2015/16
Actuarial Accrued Liability (AAL)	\$2,004,406	\$2,138,694	\$2,278,507	\$2,422,812	\$2,570,751
Actuarial Value of Assets at beginning of year	\$160,698	\$278,448	\$404,083	\$536,844	\$676,167
Unfunded Actuarial Accrued Liability (UAAL)	\$1,843,708	\$1,860,246	\$1,874,424	\$1,885,968	\$1,894,584
Remaining Amortization Period	28	27	26	25	24
Normal Cost	\$58,762	\$61,700	\$64,785	\$68,024	\$71,425
Amortization of UAAL	\$117,195	\$120,578	\$124,046	\$127,600	\$131,241
Annual Required Contribution (ARC)	\$175,957	\$182,278	\$188,831	\$195,624	\$202,666
Annual Required Contribution (ARC)	\$175,957	\$182,278	\$188,831	\$195,624	\$202,666
Interest on net OPEB Obligation	\$0	\$0	\$0	\$0	\$0
Adjustment to ARC	\$0	\$0	\$0	\$0	\$0
Annual OPEB Cost	\$175,957	\$182,278	\$188,831	\$195,624	\$202,666
District Contributions*	(\$175,957)	(\$182,278)	(\$188,831)	(\$195,624)	(\$202,666)
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
Projected pay-as-you-go cost	\$74,236	\$81,594	\$90,494	\$100,700	\$110,604

* Trust contributions plus benefits paid by District

Table 3-4b presents a five-year projection under the assumptions that the District contributes the full Annual Required Contributions (ARC), that the discount rate remains at 7.06% and that the Normal Cost component of the ARC increases 5% per year throughout the five year period.

Table 3-4b
Las Gallinas Valley Sanitary District
Five-year Projection of Annual OPEB Cost and Net OPEB Obligation
 Based on a 7.06% discount rate and
 assuming full Annual OPEB Cost funding

	2011/12	2012/13	2013/14	2014/15	2015/16
Actuarial Accrued Liability (AAL)	\$2,146,184	\$2,286,322	\$2,432,011	\$2,582,212	\$2,736,064
Actuarial Value of Assets at beginning of year	\$160,698	\$285,718	\$418,923	\$559,557	\$707,065
Unfunded Actuarial Accrued Liability (UAAL)	\$1,985,486	\$2,000,604	\$2,013,088	\$2,022,655	\$2,028,999
Remaining Amortization Period	28	27	26	25	24
Normal Cost	\$65,429	\$68,700	\$72,135	\$75,742	\$79,529
Amortization of UAAL	\$118,670	\$122,137	\$125,693	\$129,339	\$133,076
Annual Required Contribution (ARC)	\$184,099	\$190,837	\$197,828	\$205,081	\$212,605
Annual Required Contribution (ARC)	\$184,099	\$190,837	\$197,828	\$205,081	\$212,605
Interest on net OPEB Obligation	\$0	\$0	\$0	\$0	\$0
Adjustment to ARC	\$0	\$0	\$0	\$0	\$0
Annual OPEB Cost	\$184,099	\$190,837	\$197,828	\$205,081	\$212,605
District Contributions*	(\$184,099)	(\$190,837)	(\$197,828)	(\$205,081)	(\$212,605)
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
Projected pay-as-you-go cost	\$74,236	\$81,594	\$90,494	\$100,700	\$110,604

* Trust contributions plus benefits paid by District

Table 3-4c presents a five-year projection under the assumptions that the District contributes the full Annual Required Contributions (ARC), that the discount rate remains at 6.39% and that the Normal Cost component of the ARC increases 5% per year throughout the five year period.

Table 3-4c
Las Gallinas Valley Sanitary District
Five-year Projection of Annual OPEB Cost and Net OPEB Obligation
 Based on a 6.39% discount rate and
 assuming full Annual OPEB Cost funding

	2011/12	2012/13	2013/14	2014/15	2015/16
Actuarial Accrued Liability (AAL)	\$2,333,122	\$2,481,795	\$2,636,187	\$2,795,263	\$2,958,175
Actuarial Value of Assets at beginning of year	\$160,698	\$296,869	\$441,747	\$594,589	\$754,861
Unfunded Actuarial Accrued Liability (UAAL)	\$2,172,424	\$2,184,926	\$2,194,440	\$2,200,674	\$2,203,314
Remaining Amortization Period	28	27	26	25	24
Normal Cost	\$76,158	\$79,966	\$83,964	\$88,162	\$92,570
Amortization of UAAL	\$120,141	\$123,696	\$127,344	\$131,087	\$134,925
Annual Required Contribution (ARC)	\$196,299	\$203,662	\$211,308	\$219,249	\$227,495
Annual Required Contribution (ARC)	\$196,299	\$203,662	\$211,308	\$219,249	\$227,495
Interest on net OPEB Obligation	\$0	\$0	\$0	\$0	\$0
Adjustment to ARC	\$0	\$0	\$0	\$0	\$0
Annual OPEB Cost	\$196,299	\$203,662	\$211,308	\$219,249	\$227,495
District Contributions*	(\$196,299)	(\$203,662)	(\$211,308)	(\$219,249)	(\$227,495)
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
Projected pay-as-you-go cost	\$74,236	\$81,594	\$90,494	\$100,700	\$110,604

* Trust contributions plus benefits paid by District

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 \$518.00 as of July 1, 2011 and may be used to cover the retiree and their spouse. So if the monthly premium for the retiree is less than \$518.00, 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 \$542 as of July 1, 2011. 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 \$542, 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 July 1, 2011 the contribution amounts are \$542 for an individual, \$1,030 for two party and \$1,326 for family coverage. If a retiree has between five and less than ten years of service, they receive the contractual minimum monthly payment of \$108 for 2011.

For all retirees the contractual minimum monthly payment, which is determined each year by CalPERS, is remitted directly to CalPERS. For 2011 it is \$108 and for 2012 it is \$112. This payment is included in the overall cap of coverage for each group. So if they are a Tier 1 retiree, for 2011 the District remits \$108 to CalPERS and pays a maximum of \$410 to the them.

The premium rates shown in Table 4-1 were used in this valuation.

Table 4-1				
2011 Bay Area Monthly CalPERS Premium Rates				
Plan	Younger than Age 65		Age 65 or Older	
	EE	EE+1	EE	EE+1
Blue Shield Access+	\$675.51	\$1,351.02	\$337.88	\$675.76
Kaiser	\$568.99	\$1,137.98	\$282.30	\$564.60
PERS Choice	\$563.40	\$1,126.80	\$375.88	\$751.76
2012 Bay Area Monthly CalPERS Premium Rates				
Plan	Younger than Age 65		Age 65 or Older	
	EE	EE+1	EE	EE+1
Blue Shield Access+	\$711.10	\$1,422.20	\$337.99	\$675.98
Kaiser	\$610.44	\$1,220.88	\$277.81	\$555.62
PERS Choice	\$574.15	\$1,148.30	\$383.44	\$766.88

Demographic Information

The District provided demographic information on all active and retired employees as of July 1, 2011. Tables 4-2 and 4-3 contain a summary of Age and Service based on Date of Hire.

Table 4-2

Active Employees Age and Service Table
as of July 1, 2011

Age	Years of Service						Total
	<5	5-9	10-14	15-19	20-24	25+	
20-24	0	0	0	0	0	0	0
25-29	2	0	0	0	0	0	2
30-34	0	1	0	0	0	0	1
35-39	0	1	0	0	0	0	1
40-44	0	1	0	0	0	0	1
45-49	2	0	1	1	1	0	5
50-54	1	2	0	1	0	0	4
55-59	0	1	1	0	1	1	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	5	6	2	2	2	1	18

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	0	2	2
65-69	3	2	5
70-74	1	3	4
75-79	2	0	2
80-84	1	0	1
85 & Older	0	0	0
Total	8	7	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, 2011. 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 <u>Beginning</u>	Estimated <u>Increase</u>
July 1, 2012	7.30%
July 1, 2013	7.20%
July 1, 2014	6.90%
July 1, 2015	6.60%
July 1, 2016	6.30%
July 1, 2017	6.00%
July 1, 2018	5.60%
July 1, 2019	5.40%
July 1, 2020	5.20%
July 1, 2021 and thereafter	5.00%

We assumed that the CalPERS minimum benefit (\$101.00 in 2011; \$112.00 in 2012) will increase 5% per year after 2012.

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, 2011, the District's CERBT balance was \$160,698.

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

Sample rates are shown below. The rates in Table 5-2 match rates used in the most recent California PERS pension valuation of Public Agency Miscellaneous Employees.

<u>Service</u>	----- Entry Age -----						
	20	25	30	35	40	45	50
0	0.17420	0.16740	0.16060	0.15370	0.14680	0.14000	0.13320
1	0.15450	0.14770	0.14090	0.13390	0.12710	0.12030	0.11350
2	0.13480	0.12800	0.12120	0.11420	0.10740	0.10060	0.09380
3	0.11510	0.10830	0.10150	0.09450	0.08770	0.08090	0.07410
4	0.09540	0.08860	0.08180	0.07480	0.06800	0.06120	0.05430
5	0.08680	0.07900	0.07110	0.06320	0.05540	0.01160	0.00970
6	0.08290	0.07510	0.06700	0.05920	0.05140	0.01030	0.00840
7	0.07900	0.07100	0.06310	0.05520	0.04710	0.00900	0.00720
8	0.07490	0.06700	0.05910	0.05100	0.04300	0.00770	0.00600
9	0.07100	0.06290	0.05480	0.04690	0.03890	0.00660	0.00490
10	0.06680	0.05870	0.05070	0.04270	0.00710	0.00550	0.00380
15	0.05030	0.04240	0.03470	0.00320	0.00230	0.00140	0.00040
20	0.03700	0.02900	0.00210	0.00130	0.00050	0.00010	0.00010
25	0.02290	0.00110	0.00050	0.00010	0.00010	0.00010	0.00010
30	0.00050	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
35	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00000

Retirement Rates

We used the retirement rates in Table 5-3. These rates match Service Retirement rates used in the most recent California PERS Public Agency Miscellaneous 2.7%@55 pension valuation.

Table 5-3
PERS Public Agency Miscellaneous - Annual Rates of Retirement

Age	----- Years of Service -----						
	5	10	15	20	25	30	35
50	0.0275	0.0350	0.0425	0.0500	0.0575	0.0650	0.0725
51	0.0220	0.0280	0.0340	0.0400	0.0460	0.0520	0.0580
52	0.0220	0.0280	0.0340	0.0400	0.0460	0.0520	0.0580
53	0.0275	0.0350	0.0425	0.0500	0.0575	0.0650	0.0725
54	0.0440	0.0560	0.0680	0.0800	0.0920	0.1040	0.1160
55	0.0908	0.1155	0.1403	0.1650	0.1898	0.2145	0.2393
56	0.0605	0.0770	0.0935	0.1100	0.1265	0.1430	0.1595
57	0.0633	0.0805	0.0978	0.1150	0.1323	0.1495	0.1668
58	0.0743	0.0945	0.1148	0.1350	0.1553	0.1755	0.1958
59	0.0825	0.1050	0.1275	0.1500	0.1725	0.1950	0.2175
60	0.0880	0.1120	0.1360	0.1600	0.1840	0.2080	0.2320
61	0.0853	0.1085	0.1318	0.1550	0.1783	0.2015	0.2248
62	0.1238	0.1575	0.1913	0.2250	0.2588	0.2925	0.3263
63	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
64	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
65	0.1458	0.1855	0.2253	0.2650	0.3048	0.3445	0.3843
66	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
67	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
68	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
69	0.1073	0.1365	0.1658	0.1950	0.2243	0.2535	0.2828
70	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042	0.3394
71	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042	0.3394
72	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042	0.3394
73	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042	0.3394
74	0.1288	0.1638	0.1990	0.2340	0.2692	0.3042	0.3394
75	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

Mortality

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

<u>Age</u>	<u>Active Employees</u>		<u>Retired Employees</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	0.260%	0.176%	0.474%	0.243%
60	0.395%	0.266%	0.720%	0.431%
65	0.608%	0.419%	1.069%	0.775%
70	0.914%	0.649%	1.675%	1.244%
75			3.080%	2.070%
80			5.270%	3.749%
85			9.775%	7.005%
90			16.747%	12.404%

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.